OBSTETRIC AND GYNAECOLOGIC

CASE RECORDS AND COMMENTARIES

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DAR ES SALAAM 1983

UNIVERSITY OF DAR ES SALAAM

FACULTY OF MEDICINE

THIS IS TO CERTIFY THAT THE CASES PRESENTED IN THIS BOOK WERE MANAGED BY DR HAMED MAIFUDH MUHAMMAD DURING HIS THREE YEARS OF RESIDENCY, UNDER MY DIRECT OR DELEGATED SUPERVISION

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OBSTETRIC AND GYNAECOLOGIC CASES

AND COMMENTARIES. A DISSERTATION

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TABLE OF CONTENTS

		PAGE
INTRODUCTION	.....	1 - 18
OBSTETRIC SECTION		
OB 1	THREE PREVIOUS CAESAREAN SECTION MANAGED BY CLASSICAL CAESAREAN SECTION	..... 19 - 27
OB 2	RETAINED PLACENTA MANAGED BY MANUAL REMOVAL	..... 28 - 35
OB 3	RUPTURED UTERUS MANAGED BY SUBTOTAL HYSTERECTOMY	..... 36 - 45
OB 4	PRE-ECLAMPSIA. INDUCTION OF LABOUR	..... 46 - 55
OB 5	ABO INCOMPATIBILITY, INTRAUTERINE FETAL DEATH - DELIVERY	..... 56 - 64
OB 6	BREECH PRESENTATION - LOWER SEGMENT CAESAREAN SECTION	..... 65 - 76
OB 7	FACE PRESENTATION - NORMAL DELIVERY	.... 77 - 84
OB 8	TRIAL OF LABOUR AND VENTOUSE IN A CASE PRIMIGRAVIDA	..... 85 - 96
OB 9	TRANSVERSE LIE - LOWER SEGMENT CAESAREAN SECTION	..... 97 - 105
OB 10	PAINLESS ANTEPARTUM HAEMORRHAGE	..... 106 - 115
LONG COMMENTARY		
CORRELATION BETWEEN BIRTH WEIGHT, GESTATIONAL AGE AND ASSESSMENT OF FETAL MATURITY BY CLINICAL PARAMETERS IN PRIMIGRAVIDA WOMEN	.....	116 - 136

TABLE OF CONTENTS

		PAGE
INTRODUCTION.....		1 - 18
OBSTETRIC SECTION		
OB 1	THREE PREVIOUS CAESARIAN SECTION MANAGED BY CLASSICAL CAESARIAN SECTION	19 - 27
OB 2	RETAINED PLACENTA MANAGED BY MANUAL REMOVAL	28 - 35
OB 3	RUPTURED UTERUS MANAGED BY SUBTOTAL HYSTERECTOMY	36 - 45
OB 4	PRE-EKLAMPSIA. INDUCTION OF LABOUR	46 - 55
OB 5	ARM PROLAPSE, INTRAUTERINE FETAL DEATH - DECAPITATION	56 - 64
OB 6	BROW PRESENTATION - LOWER SEGMENT CAESARIAN SECTION	65 - 76
OB 7	FACE PRESENTATION - FORCEPS DELIVERY	77 - 84
OB 8	TRIAL OF LABOUR AND STIMULATION IN A SHORT PRIMIGRAVIDA	85 - 96
OB 9	TRANSVERSE LIE - LOWER SEGMENT CAESARIAN SECTION	97 - 105
OB 10	PAINLESS ABRUPTIO PLACENTAE	106 - 115
LOCO COMMENTARY		
CORRELATION BETWEEN BUBBLE STABILITY TEST WITH WEIGHT OF THE NEWBORN AND ASSESSMENT OF FETAL MATURITY BY CLINICAL PARAMETERS IN PREGNANT WOMEN		116 - 136

GENERAL INTRODUCTION

Muhimbili Medical Centre is incorporated in the Faculty of Medicine of the University of Dar es Salaam. The main objectives of the centre are:-

(a) to provide services to the people of Dar es Salaam and the surrounding regions as well as consultants services to the rest of the country. It has the largest laboratory and the only radiotherapy facilities in the country.

(b) teaching undergraduates and postgraduate doctors, pharmacists, Dentists, Nurses and Paramedical Cadres.

(c) to conduct research commensurate with such an Institute of Higher learning.

The Muhimbili Medical Centre carters for a number of major disciplines, namely Medicine, Surgery, Paediatrics, Psychiatry, Orthopaedic and Trauma, Obstetrics and Gynaecology.

The department of Obstetrics and Gynaecology consists of four firms A,B,C and D. Each with at least two consultants/specialists. Each Firm works independantly with its own outpatient clinics, beds, operation schedules, and emergency duties conducted on different days of the week. There are 73 gynaecological beds and 296 obstetric beds - 115 at Ocean Road Hospital and 181 at New Maternity block. However the number of patients treated is about two to three times the number of beds, the excess number being floor cases.

OBSTETRIC SERVICES:

The department of Obstetrics and Gynaecology provides the following services:-

1. Antenatal services for high risk pregnancies at Muhimbili Medical Centre.
2. Intrapartum services for uncomplicated deliveries at Ocean Road Hospital.
3. Intrapartum care for the high risk and abnormal deliveries at the New Maternity Block.
4. Post natal services for those who had difficult deliveries.

ANTENATAL SERVICES:

The antenatal clinic at the Muhimbili Maternity Unit is conducted 4 days in a week by four firms. Each firm is manned by Residents and Consultants supported by midwives. The bulk of the patients attended are referred cases from the peripheral clinics and other institutions. However some paying patients are also attended at the New Maternity Block. In the peripheral clinics the midwives conduct antenatal care. They have special guidlines to help them Pic-up high risk cases, for referral.

INDICATIONS FOR REFERRALS:

OBSTETRIC HISTORY:

Previous caesarian section

Instrumental delivery

Manual removal of the placenta

Third degree tear of the perineum

Recurrent Pregnancy Wastage

Antepartum haemorrhage

Postpartum haemorrhage

Cardiac diseases, Diabetes Mallitus

EPH - Gestosis, Pregnancy with Pre-existing

hypertension, Eclampsia

Parity of eight or more Preterm rupture of membranes.

PHYSICAL FINDINGS:

Height below 142 cm in Primagravida

Musculo-skeletal deformities

Twins, Polyhydramnios, Breech

Anaemia of pregnancy

Abnormal lies

Intra uterine fetal deaths, Rhesus negative.

PAST GYNAECOLOGICAL OPERATIONS:

Repair of vaginal fistula

Repair of third degree tear of the perineum

Repair of genital prolapse

Myomectomy.

PERSONAL CHARACTERISTIC OF THE WOMEN:

Age 35 years and above

Age under 16 years.

COMPLICATIONS OF LABOUR:

Foetal distress

Poor progress of labour

Premature labour.

FIRST ANTENATAL ATTENDANCE:

Initially the examining doctor takes a detailed history, medical, surgical, obstetrical family and social histories. Physical examination is then carried out. A number of investigations are made including haemoglobin estimation, urine for glucose, protein and culture to screen for bacteriuria. Blood for grouping and rhesus determination and serology tests for syphilis are also done during the first visit. All the findings are recorded in a special antenatal card. A plan for the patients antenatal care is made.

SUBSEQUENT ANTENATAL VISITS:

Usually the pregnant mother attends the clinic monthly till the 28th week, then fortnightly till the 36th week, then once a week until delivery. The frequency of the visits may be altered when the necessity to do so arises. During each attendance the patient is examined for evidence of anaemic, oedema weight gain. Blood pressure, foetal lie, fundal height growth and fetal heart sound are also recorded midstream urine is also examined for protein.

Three doses of Tetanus Toxoid are given to the mother at 28, 32, and 36 weeks of gestation. Routine haematinics and antimalarials are given. Tablet Ferrous Sulphate 200mg twice daily, Tablet Folic Acid 5mg once daily, and Tablet Chloroquine 400mg weekly. Once the indication for referral has been rectified the patient is advised to continue antenatal care at her original clinic. Other ancilliary services which are utilised in obstetrics are echoscopy and radiological examination.

ANTENATAL ADMISSIONS:

Patients with complications during pregnancy requiring admission are hospitalized in wards 38 or 39 and for 8 those who need intensive care are admitted to ward 35.

ANTENATAL ADMISSIONS - 1ST JUNE 1979 - 30TH JUNE 1980:

			Percentage of Total
1.	Anaemia	5909	51%
2.	EPH - Gestosis	1835	15.9%
3.	False labour	2659	23.0%
4.	Pyrexia of unknown origin including malaria	190	1.3%
5.	Prolonged pregnancy	131	1.1%
6.	Premature rupture of membranes	110	1.0%
7.	Antepartum haemorrhage	89	0.8%
8.	Bad Obstetric history	113	1.0%
9.	Previous caesarian sections .. or elective caesarian sections	96	0.8%
10.	Multiple Pregnancy	93	0.8%
11.	Intra uterine fetal death	57	0.5%
12.	Malpresentations	33	0.3%
13.	Miscellaneous	297	2.6%
	Totals	11552	100%

ADMISSIONS TO THE INTENSIVE CARE UNIT 1979 - 80:

CONDITIONS:	NO		%
EPH - Gestosis	282	-	56.7%
Eclampsia	110	-	22.1%
Hypertension with Pregnancy	12	-	2.4%
Severe anaemia	30	-	6.0%
Epilepsy	2	-	0.4%
Meningitis	9	-	1.8%
Congestive Cardiac Failure	12	-	2.4%
Diabetes Mellitus	3	-	0.6%
Puerperal Psychosis	3	-	0.6%
Alcoholic coma	2	-	0.4%
Ruptured Uterus	2	-	(0.4%)
Abruption Placentae	5	-	1.0%
Amniotic fluid embolism	1	-	0.2%
Mitral stenosis with Hemiplegia	1	-	0.2%
Status Asthmaticus	2	-	0.4%
Pelvic tumour	1	-	0.2%
Bad Obstetric History	1	-	0.2%
Pneumonia	2	-	0.4%
Abortion with Hypertension	2	-	0.4%
Total	497	-	100%

INTRAPARTUM CARE:

Normal deliveries are conducted at Ocean Road Hospital which is manned by interns and a resident. Complications which arise during the intrapartun period are promptly referred to Muhimbili Maternity Unit for further management.

ADMISSION:

The patient is admitted by a nurse-midwife who fills the initial part of the partogram after taking history and preliminary physical examination. In the labour ward the doctor incharge reviews the history and undertakes a detailed examination including clinical pelvic assessment as per partogram. At this juncture a specific plan of the management of labour is outlined. The partogram used in the labour ward was devised by Friedman and modified by Philliport, then modified by the department especially in the drawings of the Alert lines and Action Lines drawn at 3 hours and 7 hours positions respectively. A copy is attached. Patients in the first stage of labour are nursed on bed in the left lateral position during the second stage they are placed in the dorsal position. An episiotomy is usually done when indicated.

The third stage of labour is managed actively and the placenta is delivered by controlled cord traction. The placenta and membranes are checked for completeness and presence or absence of abnormalities. The weight of the placenta is recorded and the amount of blood loss is recorded in the partogram.

OBSTETRIC ANALGESIA AND SEDATION:

Inhalation analgesia and Epidural are not used due to lack of facilities and manpower shortage. Pethilorphan intramascular injection is commonly used in labour.

RESUSCITATION OF THE NEW BORN AND POST PARTUM CARE:

There is a trolley for resuscitation of the new born in the labour ward. It consists of infants laryngoscope, plastic endotracheal tubes, suction tube, ambu bag, oxygen, Nalorphine, vitamin K, adrenaline, sodium bicarbonate. The state of the baby is evaluated according to the apgar score system.

After resuscitation the baby is examined for any congenital malformations. It is weighed and handed over to the mother. The new borns are sent to the Neonatal Unit after instrumental or operative deliveries and in cases of low apgar scores.

THE MOTHER:

The birth canal is inspected for any tears. Any episiotomy is repaired immediately after delivery on at least within one to two hours. The uterus is squeesed to expel any clots. Post delivery blood pressure is recorded and the patient is transferred to an adjacent room for rest and observation for 24 hours.

Patients who had uncomplicated deliveries are discharged after the B.C.G. vaccinations for their babies. Those who had complicated deliveries are observed in the Post-natal wards. There are two Post natal wards at Mbimbili Maternity Unit, one for septic cases and one for clean cases.

POST NATAL CARE:

Patients who had normal deliveries attend their nearest Maternal and Child Health Clinic after six weeks. Those who had complicated deliveries are requested to attend Muhimbili Maternity Centre Post natal Clinic.

SOME COMMON OBSTETRIC PROCEDURES:

VAGINAL EXAMINATION IN LABOUR:

This is done at admission to the labour ward and at least 4 hourly to assess the progress of labour.

PROCEDURE:

The hands are thoroughly scrubbed using water and soap. A sterile glove is put on the right/left hand. The patient in the dorsal position with the thighs obducted and the perineum well exposed the vulva is swabbed as follows:- A sterile swab soaked in savlon solution 1:20 is picked by the right hand and handed to the left hand. The right side of the labia is swabbed once antero-posteriorly and the same is done on the left labia. The labia are then separated using the left hand and the vaginal introitus is then swabbed antero-posteriorly using a fresh swab. While still separating the labia the index and the middle fingers of the right hand are dipped into Chlorhexidine Cream and the two fingers are gently introduced into the vagina.

BONY PELVIS ASSESSMENT:

The fingers are gently but firmly pressed onwards towards the sacral promontory. The distance of the diagonal conjugate is thus estimated from a previous knowledge of the length from the tip of the middle finger to the index metacarpophalangeal joint of the examiners hand.

An attempt is now made to push the head into the pelvis on top of the fingers lying along the diagonal conjugate. The thumb of the examiner's hand is swept over the front of symphysis pubis and feels for overlap. If the head can be pushed down to the level of the ischial spines, brim disproportion can be excluded. If it cannot the degree of overlap is noted.

If the parietal bone is just above the anterior surface of the symphysis pybis it is noted as first degree overlap. However if the head is felt by the thumb to overhang the symphysis pubis, first degree overlap is diagnosed and the possibility of vaginal delivery in such a case is unlikely.

The fingers are then moved from the sacral promontory downwards so that the sacral curve is determined. The bispinious diameter is estimated by determining the prominence of the ischial spines. The subpubic earch is assessed by the ability to accomodate the backs of two fingers. The intertuberous diameter is assessed by the ability to accommodate the knuckles of the clenched fist between them.

URETHRAL CATHETERIZATION:

The hands are scrubbed and sterile gloves worn on both hands. The patient is placed in a dorsal position with the thighs wide apart. The labia are cleaned as detailed earlier. The urethral meatus is swabbed after separating the labia. A sterile urethral catheter is held and dipped into hibitane cream and gently introduced into the urethra. Slight pressure is applied suprapubically to ensure complete emptying. The colour and amount of urine is noted.

URINE TESTING FOR PROTEINURIA:

This is done by using albustix reagent strip. The strip is made of cellulose impregnated with Tetramethylphenol buffered to an acid PH. In the presence of protein the yellow test area twins green. The albustix is dipped into fresh uncentrifuged urine. The colour change is compared to the scale on the bottle containing strips. The amount of protein is expressed as follows:-

Trace	=	5 - 20 mg/100 mls
1+	=	30 mg/100 mls
2+	=	100 mg/100 ml
3+	=	300 mg/100 ml
4+	=	1000 mg/100 ml

URINE TESTING FOR GLYCOSURIA:

Clinistix reagent strips are used. The impregnated part is dipped into freshly passed urine. The presence of glucose is indicated by colour change into blue. This is not a quantitative test.

The clinistix are impregnated with glucose oxidose peroxidoses and ontholoidine. In the presence of glucose oxidose glucose is converted into gluconic acid and hydrogen peroxide. In the presence of per oxidose hydrogen per oxide converts onthotolidine to the blue oxidised form hence the blue colour.

REPAIR OF EPISIOTOMY:

The J shaped posterolateral episiotomy is commonly employed when indicated. It is done aseptically.

The perineum is infiltrated with 1% lignocaine. As soon as the presenting part distends the perineum two fingers are inserted into the vagina and the episiotomy is performed between two fingers using Mayos Scissors. Bleeding vessels are ligated using catgut No. 2/o.

The repair is done in 3 layers. The vaginal skin is first repaired with continous chromic catgut No. 0 starting from the apex of the incision towards the forchette. The deep tissues, perineal muscles are approximated with interrupted sutures No. 0 chromicised catgut. The perineal skin is repaired with continous chromic catgut sutures No. 0.

CAESARIAN SECTION:

It is performed both as an elective procedure and as an emergency operation. Patients for elective caesarian section operation are prepared like for any abdominal gynaecological operation. Patients on trial of scar are kept on intravenous infusions. Abdomen is cleaned and shaved and blood is taken for Cross-matching.

ANAESTHESIA FOR CAESARIAN SECTION:

Once the patient arrives in theatre the anaesthetist assesses the patients fitness for anaesthesia.

INDUCTION OF ANAESTHESIA:

The premedicated patient is induced with freshly prepared thiopentove sodium 250mg intravenously.

MUSCLE RELEXATION:

A short acting muscle relexant, suxamethonium bromide 40mg, is given intravenously and then the patient is given oxygen through an ambu bag. An endotracheal tube is then inserted.

MAINTENANCE OF ANAESTHESIA:

Until the delivery of the fetus the patient is given oxygen and nitrious oxide. After the baby has been delivered and the first layer of the myometrium has been repaired ether is added to the system.

REVERSOL OF ANAESTHESIA:

At the end of the operation atropine sulphate 0.6mg and neostigmine 1 - 2mg are given intravenously. Bronchial secretions are sucked out and the endotracheal tube removed, the patient is then taken to the recovery room and when fully conscious, the cough and swallowing reflexes have returned, she is wheeled back to the ward.

TECHNIQUE OF THE OPERATION:

At Muhimbili Medical Centre the lower segment transverse caesarian section technique is employed. For the details see obstetric case on brow presentation.

opening and closure of the abdomen are carried out as described in Gynaecological Procedures.

GYNAECOLOGICAL SERVICES:

OUT PATIENTS:

There are four outpatient clinics in a week, one day for each firm. There is also an infertility clinic once a week. These clinics are run by Consultants, Specialists and Residents. Patients are given regular appointments. Those who require hospitalisation for operation are usually worked up prior to admission.

Cytological screening for cancer of cervix is not done as a routine procedure due to lack of adequate facilities. However it is done in suspected cases. Patients with gynaecological malignancies needing radiotherapy are referred to this hospital from all over the country.

IN PATIENTS:

There are two gynaecological wards. The patients are admitted on appointment or as emergencies through the casualty.

Evacuation of the uterus for incomplete abortions is usually done in the side room of the gynaecological ward (converted as a minor theatre) under Pethidine 100mg intravenously and Valium 10mg intravenously. Septic abortions are done in the major theatre under general anaesthesia.

PREOPERATIVE PREPARATIONS FOR LAPARATOMY:

The patient is examined and thoroughly prepared for surgery and anaesthesia. She gives her written consent on the day before the operation and in cases of sterilisations husbands written consent is also requested. The abdomen, vulva, and perineum are washed with soap and shaved. In the morning she wears a clean theatre gown. A sticking identification tag is put on her arm. The urine is checked for protein and glucose. Blood pressure, pulse, temperature and hemoglobin are checked and recorded.

ANAESTHESIA:

Atropine sulphate 0.6mg is given subcutaneously as a premedication. However in most cases it is given just before induction. Induction is similar to that described in the operation procedures in obstetrics.

Muscle relaxation is achieved by the administration of Pancuronium bromide (Pavlon") 6mg intravenously - a long acting muscle relexant and a positive pressure ventilation is necessary. Maintenance and reversal is similar to that described in the operation procedure in obstetrics. Unlike the general anaesthesia used for caesarian section, in gynaecological operations ether is used in addition to oxygen and nitrous oxide.

PREPARATION OF OPERATION SITE:

For abdominal operations the patient is placed in the dorsal position and the head of the table is tilted to a Trendelen burg position.

The lithotomy position is used for vulva/vagina procedures. In high vesico-vaginal fistulae the knee - chest position is used.

The site and its neighbour hood is cleaned first with hibitane 1% or savlon solution, then with Flavin in spirit 1:1000 or Iodine skin preparation. The patient is then draped with sterile theatre towels leaving only the incision (operation) site.

PROCEDURE FOR OPENING AND CLOSING THE ABDOMEN:

A midline suburbilical median incision is most commonly used. The incision is deepened through subcutaneous fat layer exposing the rectus sheath which is incised longitudinally by curved Mayo's Scissors. Bleeding vessels were ligated with plain catgut No. 2/0. The medial edge of the rectus in view is separated from the adjacent tissues to expose the extraperitoneal fat and the peritoneum.

The peritoneum is tented with two spencer Well's forceps and incised between these forceps taking caution to avoid injury to the underlying intestines. The incision is then extended with curved May o's Scissors.

After completion of the procedure, haemostasis is ascertained. The abdominal cavity is mopped and swab and instrument count confirmed before closure of the abdomen. The upper, middle and lower ends of the peritoneal incision are picked with artery forceps. The peritoneum is closed using continous chromic catgut suture No. 3 on a round body needle everting the edges.

The rectus sheath is closed with continous chromic suture No. 1 on trochar needle. The subcutaneous fat layer in obese patients is approximated with interrupted plain catgut No. 0. The skin is closed with interrupted silk sutures No. 0 on a cutting needle.

OBSTETRIC CASE NO. I

THREE PREVIOUS CAESARIAN SECTIONS

CEPHALOPELVIC DISPROPORTION

CLASSICAL CAESARIAN SECTION WITH BILATERAL TUBAL LIGATION

PATIENT:	MRS. R. A.	AGE:	30 YEARS
IN-PATIENT NO:	232/82		
RESIDENCE:	KIGOGO		DAR ES SALAAM
DATE OF ADMISSION:			21/7/1982
DATE OF OPERATION:			21/7/1982
DATE OF DISCHARGE:			29/7/1982

S U M M A R Y:

The patient booked at Tabatia maternal and child health clinic from where she was referred to Muhimbili Medical Centre for specialist antenatal care. She was admitted from home due to labour pains and was assessed in the labour suite where it was confirmed. The patient was delivered of a full term healthy baby by classical caesarian section and bilateral tubal ligation was done. Her postoperative period was uneventful.

OBSTETRIC HISTORY:

The patient booked at a peripheral clinic at 28 weeks of gestation. During her second visit four weeks later she was referred to Muhimbili Medical Centre for further management. She paid three more visits at the antenatal clinic. Her last menstrual period was in October, but forgot the exact date. She also did not remember the day when she first felt fetal movements. Her expected date of delivery was in July 1981. The hemoglobin was found to be 60%.

The patient was getting fersolate and folic acid routinely together with prophylactic antimalarial.

PAST OBSTETRIC HISTORY:

Her first delivery was by caesarian section due to cephalopelvic disproportion in 1974. The baby died two months later. In 1976, she had a repeat caesarian section, the child is alive and well. Her tertiary caesarian section was in 1978. She claimed that her postoperative periods were without complications.

GYNAECOLOGICAL HISTORY:

Her menarche was at 12 years and the menses were of 5 days every 30 days, normal flow with no dysmenorrhoea. Her last normal menstrual period was in October but could not recollect the exact date. She never used contraceptive pills. The patient gave no history of gynaecological problems.

PAST MEDICAL AND SURGICAL HISTORY:

She was operated three times for abdominal delivery of the babies, otherwise not contributory.

SOCIAL AND FAMILY HISTORY:

She was a housewife, illiterate married to a peasant. There was no family history of twins, diabetes or hypertension. She neither drank alcoholic beverages non smoked cigarretes.

PHYSICAL EXAMINATION:

Her general condition was good. She was satisfactorily nourished, not pale and with neither lymphodenopathy nor peripheral edema. Her height was 137cm. The breasts were active, nipples not retracted and there were no lumps. Her weight was 66.5Kg (prior to admission).

CARDIOVASCULAR AND RESPIRATORY SYSTEM:

Pulse rate was 72 per minute regular and good volume and the blood pressure was 120/70mm mercury. The heart was normal. The respiratory system was normal.

ABDOMINAL EXAMINATION:

The abdomen was uniformly distended. There was a median subumbilical scar with no keloid formation. The fundal height was 36 weeks. The lie was longitudinal and presentation was cephalic. The fetal heart was 152 per minute regular. Uterine contractions were occuring every 10 minutes and lasting about 30 seconds. The liver, spleen and kidney were not palpable. The renal angles were nontender.

VAGINAL EXAMINATION:

A vaginal examination was done in the manner described in the introduction. External genitalia were normal and there were no vaginal discharge or bleeding. There was no palpable boggy mass in the lateral, posterior and anterior fornices.

The cervix was about 70% effaced and 3cm dilated. The membranes were intact and there was no cord presentation. The presenting part was above the brim. The sacral promontory was easily reached equivelent to 8.5cm of diagonal conjugate and sacral curve was normal. The ischial spines were prominent and the subpubic angle was accommodating two fingers with difficultyless than 85°. Intertuberosity distance accommodated 3½ knuckles equivalent to 7cm. Attempts were made to engage the head but in vain.

PLAN OF MANAGEMENT:

1. Review of initial investigations

a) Haemoglobin was 9.5g per 100ml. Her blood group and rhesus determination were not documented during the antenatal period. There was no definite plan of how and when to deliver her;

b) Urgent blood grouping and cross-matching was done and two units of blood equivalent to 1000ml were requested.

c) She was then planned for emergency caesarian section.

PREOPERATIVE PREPARATION:

1. The patient consent was sought and obtained
2. Urine was negative for glucose and proteins
3. The abdomen was cleaned with soap and shaved and then the patient was transferred to the operating theatre.

In theatre the foetal heart rate was checked again before the patient was placed on the operating table. The midwife scrubbed and with the patient in the modified dorsal position, she aseptically catheterised her. The abdomen was cleaned with antiseptic solution and draped in sterile surgical towels.

A N A E S T H E S I A:

She was premedicated with atropine 0.6mg and anaesthesia was induced with 300mg of sodium thiopentone intravenously and scoline 150mg by the same parenteral route. It was maintained with nitrous oxide, oxygen and a small dose of ether was added after delivery of the baby.

P R O C E D U R E:

Via the excised subumbilical median scar the abdomen was opened up. Though scarred tissue with complete distortion of normal anatomical layers was encountered. High bladder attachment with varicosities and dense adhesions were found on the anterior uterine wall. The lateral aspects of the uterus were almost completely sealed by dense adhesion bands. It was not possible to insinuate abdominal packs into the paracolic gutters.

No attempt was made to dissect the bladder caudally instead an area was cleared on the anterior uterine wall corresponding to the upper segment and incised longitudinally. The incision was carefully deepened so as not to traumatise the baby. When liquor started to gush out the right hand was inserted with the palm facing upwards.

The foetal head was in occipito-posterior position. It was lifted after being anteriorly rotated and the baby was extracted and placed on her mothers thigh and the mouth and nostrils were cleaned dry. The cord was clamped at two places and divided between the clamps. The baby cried immediately and it was handed over by an assistant to the midwife. An intravenous injection of ergometrine was given as soon as the baby was extracted. The placenta was removed by cord traction together with the membranes. The corners and cut edges of the incised uterine wall were held with Green armytage forceps for adequate exposure and haemostasis. The uterus was sutured in three layers with No. I catgut. Haemostasis was achieved.

Now it was possible to visualise the fallopian tubes and pomeroy's method of ligation was employed bilaterally with plain catgut. As there was no demarcation anatomically between the peritoneum and rectus sheath the tough scarred tissue was repaired in two layers with No. I catgut using continous suture and the skin was closed with No. I silk. The wound dressed with sterile gauze and strapped. The uterus was then gently squeezed to expel clots. The vagina was cleaned of clots with the help of stick swabs. Blood loss was estimated to be 700ml.

PLACENTA AND MEMBRANES:

Weight: 500 grams.

POSTOPERATIVE CARE AND PUERPERIUM:

Her blood pressure at the end of the operation was 120/80 and the pulse was 90 per minute regular good volume.

She was taken to the ward after recovery from anaesthesia. Her blood pressure, pulse and respiration were monitored hourly for the first 6 hours then 4 hourly for 24 hours. Temperature was checked twice daily. She remained afebrile and normotensive.

During the first 24 hours postoperatively the patient was transfused 2.5 litres of 5% dextrose and 500ml of normal saline. Blood was not available to transfuse her. She received 100mg of pethidine intramascularly at 8 hourly interval for a total of 3 doses. Her urinary output was satisfactory. Intravenous fluids were discontinued after 24 hours and the patient was gradually ambulated. She got procaine penicillin fortified injections and oral metronidazole (from 2nd postoperative day) together with fersolate 200mg thrice daily and folic acid 5mg daily. The patient recovered without complications, the wound healed by primary intention. By the 8th postoperative all the stitches were removed and the patient was discharged from the hospital with her healthy baby after receiving a jab of BCG vaccination. Her haemoglobin during the discharge day was 9.5g/de and was advised to continue haematinics for one month.

POSTNATAL CLINIC:

The patient turned up for her appointment at postnatal clinic 6 weeks later. She had no complaints and was breast feeding her baby. Her abdominal scar had healed well. She was not pale. The uterus was not palpable per abdomen.

VAGINAL EXAMINATION:

External genitalia were normal. On speculum examination the cervix looked healthy, no pathological discharge. Bimanually the uterus was of normal size, anteverted of limited mobility, adnexa and fornices were free. She was discharged and advised to attend maternal and child health clinic for proper care of her baby.

COMMENTARY:

This patient had three lower segment caesarian sections starting right from her first obstetric career due to cephalopelvic disproportion. This patient was correctly referred from the peripheral clinic as a case of high risk pregnancy but her antenatal management was unsatisfactory. No definite plan for elective delivery of this patient was charted and there was no evidence that any attempt was made to correct her anaemia during the antenatal period. As a result the patient was admitted as an emergency case from home already in labour.

On opening up the abdomen a quick decision was taken to resort to classical caesarian section. This choice of operation was prompted by the presence of gross adhesions which walled off the lower segment, the high bladder attachment with varicosities at the uterovesical junction. Incising uterovesical peritoneum and dissecting the bladder off the lower segment would have been unjustifiably time consuming and bloody and the chances of damaging the bladder were high. Moreover induction delivery interval would have been very much pnolonged with subsequent depression of the baby.

Though the risk of more blood spill into the peritoneal cavity in classical operation are high since the uterus is incised in a thicker more vascular portion (Bowman et al), nevertheless in this particular case groping into the lower segment would have reaped no benefit at all on the surgeon. Taking into consideration the preponderance of opinion in the world literature that the classical scar is more likely to rupture in a subsequent pregnancy than is the lower segment scar, bilateral tubal ligation was done.

Surprisingly dense adhesions were encountered in this patient who claimed uneventful recovery in her previous post-operative periods though documentary evidence is lacking. Probably in one of the lower segment caesarian section an incision was extended into the upper segment and could not be entirely peritonealized thus favouring raw surfaces and oozing areas with subsequent adhesions.

Nowadays the classical caesarian section has been replaced by the lower segment section and present day training implies that it is outmoded. Definitely there are many advantages in the lower segment caesarian section namely smaller incidence of subsequent rupture of the uterine scar, fewer postoperative bowel adhesions and lower maternal morbidity. However there is a definite place for classical caesarian section even in modern obstetric practice provided proper indications are adhered to and necessary precautions are undertaken to safeguard uterine rupture in a subsequent pregnancy.

REFERENCES:

1. Curtis B. Bowman et al Obs/Gynaecology Vol. 12 No. 4 1958 PP473.

2. Munro Kerr Operative Obstetrics Ninth Edition.

RETAINED PLACENTA

MANUAL REMOVAL UNDER GENERAL ANAESTHESIA

NAME: MRS. M.A. AGE: 15 YEARS

INPATIENT NUMBER: 5435/82

RESIDENCE: TEMEKE DAR ES SALAAM

DATE OF ADMISSION: 3/7/82

DATE OF DISCHARGE: 6/7/82

SUMMARY:

The patient was admitted to the New Maternity Unit due to labour pains and history of anaemia in pregnancy. She was in the second stage labour and had spontaneous vaginal delivery of a preterm baby weighing 2200 gm. Her third stage of labour was complicated with retained placenta. Manual removal of the placenta was done successfully under general anaesthesia. The patient was discharged in a satisfactory condition three days later. Her baby died two days after delivery in a neonatal unit.

OBSTETRIC HISTORY:

She was a primagravida. Her first looking at Temeke M.C.H. Clinic was at 7 months gestation. Her last normal menstrual period was on 26/10/81 and the expected date of delivery was on 3/8/82. From her first antenatal visit, she was referred to Muhimbili Medical Centre due to anaemia.

She was hospitalized for two weeks in an antenatal ward where her haemoglobin was found to be 6gl/dl. and the anaemia of iron deficiency type other investigations were:-

a. Serological test for syphilis - VDRL was negative.

b. Urine was negative for glucose and protein.

c. Weight was 55 kg.

She was given parenteral imferon and blood transfusion. She was discharged from the ward when her haemoglobin reached 9gz/dl and instructed to take folic acid tablets 5 mg daily. Continued antenatal attendance was emphasised on her. She only turned up again when labour pains started.

There was no history of antepartum haemorrhage or liquor draining. On admission she recalled to be in labour for 8 hours.

GYNAECOLOGICAL HISTORY:

Her menarche was at 13 years. The cycles were of 5 days in every 30 days, regular, normal flow, slightly painful. She had never used contraceptive pills and was never subjected to any gynaecological operation.

FAMILY AND SOCIAL HISTORY:

There was no family history of diabetes mellitus, hypertensive diseases or tuberculosis. A housewife, she neither smoked cigarettes nor drank alcohol.

PAST MEDICAL AND SURGICAL HISTORY:

Apart from her anaemia in pregnancy, there was nothing significant.

PHYSICAL EXAMINATION:

She was in pain. Her nutritional status was satisfactory. She was neither pale nor jaundiced. The axillary temperature was 36.7^{0} Centigrade. There was no ankle edema. The breasts were active and there were no intramammary lumps.

RESPIRATORY SYSTEM:

No abnormality was detected.

CARDIOVASCULAR SYSTEM:

Her pulse was 88 beats per minute regular and of good volume. Her blood pressure was 100/60 mm Hg. The heart was normal.

ABDOMINAL EXAMINATION:

The abdomen was symmetrically enlarged. The uterine size was equivalent to 36 weeks of gestation consistent with the period of amenorrhoea. The fetus was in longitudinal lie, cephalic presentation. She had strong uterine contractions lasting about 45 seconds and occuring 4 times every 10 minutes. The foetal heart rate was 144 beats per minute regular and was better auscultated below the umbilicus to the right from the midline. The liver, spleen and kidneys were not palpable. The patient was bearing down.

VAGINAL EXAMINATION:

This was done systematically as described in the introduction. The vulva and vagina were normal. The cervix was full dilated with bulging membranes. After ascertaining the absence of cord presentation an artificial rupture of the membranes was done with Kocher's amniotomy forceps.

About 200 millilitres of non-meconium stained liquor gushed out. The head was in the left occipito anterior position with slight moulding but no caput formation. Four fifth of the head was in the pelvic cavity.

Bearing down efforts were encouraged and within 30 minutes, she had a spontaneous vaginal delivery of a male baby weighing 2200 gm apgar score 10 at one minute. A mediolateral episiotomy was done during crowning of the head and 0.25 mg of intravenous ergometrine maleate was given with the birth of the anterior shoulder. After the birth of the baby the umbilical cord was divided between clamps.

The uterus contracted. Controlled cord traction was employed to deliver the placenta. This attempt failed, however there was no bleeding. The bladder was catheterised, as described in the introduction, and about 40 mls of clear urine was obtained. A gentle rub was applied on the fundus uteri to ascertain uterine contractility and then a second attempt to deliver the placenta by controlled cord traction was made but invain. There was still no evidence of vaginal bleeding.

A diagnosis of retained placenta was made, and the patient was prepared for manual removal under general anaesthesia.

PREPARATION:

An intravenous dextrose/saline infusion was started to keep the vein patent 2000 mls of cross-matched blood were requested. The patient gave her consent to the procedure and was promptly shaved as described in the introduction.

Her pulse was 90 beats per minute regular good volume and the blood pressure was 120/80 mm Hg. She was then transferred to the operating theatre.

ANAESTHESIA:

The patient was premedicated and anaesthetised in the manner detailed in the introductinn. She was then put on lithotomy position, cleaned and draped with sterile gowns and catheterised. 250 millilitres of clear urine was obtained.

VAGINAL EXAMINATION AND MANUAL REMOVAL OF THE PLACENTA:

Apart from the repaired episiotomy the external genitalia were normal. The cord clamped with an artery forceps at the distal end was protruding through the introitus. There were no tears or blood clots in the vagina. The cervix was 8 centimetres dilated.

After scrubbing the gloved right hand in the shape of a cone was insinuated into the vagina while the left hand separated the labia. The external hand was introduced into the uterine cavity up to about 6 centimetres above the wrist. Then the plane of cleavage was sought and with the fingers kept together the placenta was detached in toto, patiently resisting all temptations of removing it piecemeal especially in areas where difficulty was encountered and morbid adherence was suspected. When convinced that the whole placenta was detached, it was delivered by cord traction while retaining the hand inside the uterus so as to avoid re-inserting it for final exploration of its cavity thus minimising the chances of infection.

During the whole procedure 30 units of syntocinon in a 1000 ml of 5% dextrose drip was infused intravenously. Blood loss was estimated to be about 200 millilitres. The uterus was well contracted. The patient recovered well from anaesthesia. Her blood pressure was 130/90 mm Hg, pulse 100 beats per minute regular and of good volume. The patient was transferred to postnatal ward where 1500 millilitres of blood was transfused. The baby was sent to a neonatal unit for care. The blood pressure remained normal and the pulse was 80 beats per minute from the second postoperative day. There was only slight bleeding in the following 48 hours. The baby died on the second post operative day on the third postoperative day her haemoglobin was checked and found to be 10 gm minoes per decilitre. The patient was then discharged and she was asked to come to the postnatal clinic 6 weeks later.

The patient was lost for follow up.

COMMENTARY:

Postpartum haemorrhage with subsequent collapse due to retained placenta is one of the gravest complications of the third stage of labour. Placenta is said to be retained when not expelled within 30 minutes of the birth of the baby mismanagement of the third stage is the main aetiological factor in retention of the placenta. This includes fiddling with the uterus or overzealous massage of the uterus resulting in an hour glass constriction leading to arrest of the placenta in the active contractile portion of the uterus.

Other conditions associated with retention of the placenta are ineffective uterine contraction and anatomic defect in the uterus, absence of normal decidua with direct attachment of chorionic villi to the myometrium. In the rare cases of placenta accreta haemorrhage is not characteristic. It is more frequent in pregnancies which terminate prematurely than in those of full term. In this patient taking into consideration the delivery of a preterm baby and the impression of a suspect morbid adherence entertained during the manual removal the aetiological factor in this particular case could well have been an adherent placenta. There are two forms of adherent placenta, one in which the placenta can be stripped off and the other, placenta accreta, in which the placenta is absolutely and can only be removed by tearing it off in pieces. The former in the one implied to be the probable cause.

With the active management of the third stage of labour, there should be no delay in delivering the placenta. Indeed in cases of haemorrhage not a single minute should be wasted in removing the placenta. The acceptable limit of 30 minutes should not be exceeded even with absence of haemorrhage because there is nothing to be gained. The modern approach in cases of placenta accreta is to perform hysterectomy. Though in a society like our being barren and infertile is tantamount to a social outcast, Gamal's experience in which a second pregnancy occurred when the placenta accreta was left in situ to take care of itself should serve as food for thought.

Apart from postpartum haemorrhage and shock, infection is another serious complication of retained placenta. This commonly follows when there is delay in removing the placenta. This patient was not given antibiotics as the placenta was removed within two hours.

Hospital delivery was strongly emphasised in future for this patient as complications of the third stage tend to recur in subsequent pregnancies.

REFERENCES:

1. IAN DONALD PRACTICAL OBSTETRIC PROBLEMS' FIFTH EDITION
   PP. 770 - 71.

2. MURRO KERR'S OPERATIVE OBSTETRICS NINTH EDITION
   PP. 749 - 50.

PREVIOUS CAESARIAN SECTION

RUPTURED UTERUS

RUPTURED BLADDER

REPAIR OF THE BLADDER

SUBTOTAL HYSTERECTOMY

PATIENT: MRS. H.A. AGE: 25 YEARS

INPATIENT NO. 42/80

RESIDENCE: MTONI DAR ES SALAAM

DATE OF ADMISSION: 10/1/81

DATE OF OPERATION: 11/1/81

DATE OF DISCHARGE: 29/1/81

<u>SUMMARY</u>:

This patient attended on antenatal clinic from 20 weeks of gestation. She laboured at home for 12 hours before admission. The patient was found to have ruptured uterus and ruptured bladder. Subtotal hysterectomy and repair of the bladder were done after extracting the fresh stillborn. Apart from the complications during the first 24 hours postoperatively, her recovery was uneventful. She was discharged continent after 19 days of hospitalization.

<u>OBSTETRIC HISTORY</u>:

Gravida 4 para 1 + 2 abortions. She originally booked at a peripheral clinic but was advised to attend our consultant antenatal clinic right from the start.

Her first visit corresponded with five months old gestation. Her last normal menstrual period started on 5/4/80 and her expected date of delivery 11/1/81. She had made in all five antenatal visits. She was normotensive and had no proteinuria. She had never had any episode of vaginal bleeding during this pregnancy. Her latest haemoglobin estimation was 82%. She was booked for elective caesarian section but did not turn up. (Advised by relatives not to come for another operation). Blood group "O" RH(+). This patient had been in labour at home for quite sometimes and her membranes had ruptured soon after the onset of labour. There she developed severe persistent lower abdominal pain and vaginal bleeding appeared for the first time. There was also haematuria. She denied history of ingestion of local herbs to improve her performance of labour.

PAST OBSTETRIC HISTORY:

She was para 1 with two abortions and no living child. Her first pregnancy terminated in ab abortion at 4 months in 1978. She was not evacuated. A second abortion occurred in the same year at 3 months pregnancy and was evacuated at a district hospital. In both incidents her post abortal recovery was uneventful. In 1979 a caesarian section was done due to cephalopelvic disproportion and alive full term baby was delivered. She could not remember the birth weight. The baby died from gastroenteritis three months later. She developed a septic wound during the postoperative period.

GYNAECOLOGICAL HISTORY:

Her menarche was at 12 years. Her menstruation was 5 days, regular and moderate flow every four weeks. There was no history of dysmenorrhoea. She had no complaints of dyspareunia. She never used contraceptive pills.

PAST MEDICAL AND SURGICAL HISTORY:

Not contributory apart from the previous caesarian section.

FAMILY AND SOCIAL HISTORY:

Housewife. There is no history of twins, diabetes mellitus or hypertension the family. She is a teetotoler and does not smoke cigarettes.

PHYSICAL EXAMINATION:

She was anxious looking, inpain, moderately pale and dehydrated. There was no clinical evidence of jaundice and her axillary temperature was 37^{0} centigrade. Her height was 142 centimetres. (According to the antenatal card)
The breasts were active. There were no intramammary lumps. The respiratory system was normal.

CARDIOVASCULAR SYSTEM:

Her pulse was 120 per minute regular good volume and the blood pressure was 130/80 mm mercury. The heart was normal. The respiratory system was unremarkable.

ABDOMINAL EXAMINATION:

The abdomen was distended and its contour was abnormal with deep depression just below the umbilicus and the fundus grossly tilted to the left lateral side. Fetal parts could be palpated easily at the suprapubic area. Palpation was very tender. Liver, spleen and kidneys were not palpable.
There were no fetal heart sounds. The bowel sounds were distant.

VAGINAL EXAMINATION:

This was done a septically as described earlier in the introduction. Dark blood was trickling from the vaginal introitus. The cervix was fully dilated. The presenting part was cephalic four-fifth above the pelvic brim. There was moulding ++.
The presenting part was easily displaced cephalod and no resistance was felt. This manor brought a gush of blood and heavily meconium stained liquor.
Catheterisation revealed copious amount of bright red blood.

DIAGNOSIS:

The impression of ruptured scarred gravid uterus and ruptured bladder was made. An urgent laparotomy was to be carried out and immediate resuscitative measures were instituted.

PREPARATION:

1. Blood was taken for grouping and cross-matching and a request was made for 4000 mls of blood urgently
2. An intravenous infusion of 5% dextrose was set using an 18 gauge needle. The infusion was run fast.

3. Crystalline Penicillin 3 mega units and Chloramphenicol 500mg were given intravenously in a separate bolus form. They were to continue 6 hourly.
4. A stat dose of morphia 15 mg intramascularly was given
5. A Ryle's tube was passed and intermittent gastric aspiration was started.
6. Injection atropine was given 0.6 mg subcutaneously.

By the time the patient reached the theatre blood was still not forthcoming. Two units of un-cross-matched group "O" RH(+) blood were snatched from the blood bank and transfusion was commenced without any hesitation.

ANAESTHESIA:

General anaesthesia was given as described in the introduction.

PROCEDURE AND FINDINGS:

The abdomen was cleaned and draped with sterile towels. It was opened through median subumbilical incision.

FINDINGS:

a. There was haemoperitoneum with an admixture of meconium.
b. Bowels were distended
c. A posterior tear almost detaching the uterus from the scar.
d. The uterovesicol peritoneal reflection was intact and fetal small parts together with the heard were felt through it.
e. The lateral walls were not ruptured.
f. The bladder was torn and the lower segment ruptured anteriorly in an inverted L- shape—— extending caudolly sparing the vagina. (This was discovered after opening up the utero-vesicol peritoneum).

g. Both tubes and ovaries were healthy. The assistant sucked out the spilled liquor and blood from the peritoneal cavity. Wet tailed abdominal packs anchored on artery forceps were insinuated into the paracoli gutters and the intestines were also gently packed away. The anterior lower segment tear was extended transversely and a dead male baby weighing 3.1 kg was extracted together with the placenta.

A self retaining retractor was applied. Due to the extent of the tear that almost autoamputated the uterus a quick decision was taken to do subtotal hysterectomy. Vesible bleeding points were tied off. Kochers clamps were placed over the ovarian ligament and the fallopian tube and the tissues between the clamps were divided and the stumps were doubly ligated with No. 2 chromic catgut. A similar procedure was carried out with the round ligament but double ligation was not employed. The same procedure was repeated on the other side.

The uterine vessels were identified on the lateral borders of the uterus. They were clamped with Kochers forceps close to the uterus and divided between clamps. The inferior stumps on either side were doubly ligated with No 2 chromic catgut. Now the part of the lower segment which remained intact was divided between clamps.

Oozing from the bladder was minimised by pressing abdominal pack at the site of the tear. Now the bladder was dissected off the uterine stump and the defect was clearly visualised. It was repaired in two layers and Haemostasis was achieved satisfactorily. A continous suture across the pelvis with catgut No 0 closed both the visceral peritoneum and the stump of the uterus in a single layer. Abdominal packs were removed. Further mopping up of the blood and liquor was done Blood loss was about 1200 ml. The self retaining retractor was removed and the abdomen was closed as described in the introduction. She recovered from anaesthesia without complications and was then transferred to the ward.

POSTOPERATIVE MANAGEMENT:

1. Pulse, blood pressure and respiration were monitored hourly for the first 24 hours. Then 4 hourly for the following 24 hours. Soon on reaching the ward her blood pressure started to fall and it was recorded to be 80/60 mmHg and the patient was pale and her pulse was 120 per minute regular rather feeble. The intravenous fluid was not running as the needle was out of the vein. 500 ml of plasmagel was pumped in rapidly via the jugular vein. This was followed by normal saline one litre. Her blood pressure improved to 120/70 mmHg. Intravenous fluids were discontinued via the jugular vein and reestablished on the forearm vein. The patient was checked and there was no evidence of haemoperitoneum.

Apart from this shortlived complication her condition remained satisfactory.

She received 3 more pints of Group "O" rhesus $_D$ positive blood during the 48 hours postoperatively. Fluid input and output were recorded accurately. Her urinary output was good. It was free from blood stain on the fourth postoperative day and continous catheter drainage was maintained.

She had a ryle's tube which was removed after 48 hours when the bowel sounds appeared and the patient passed flatus. The intravenous infusion was discontinued on the same day. Pethidine 100 mg was given 6 hourly intramuscularly 4 doses. Antibiotics were continued to be given as prescribed pre-operatively for the first 48 hours. Then the patient received Capsule Chloramphenicol 500 mg 6 hourly for 6 more days together with injection Penicillin 1.2 mega units once daily for the same period. From the second postoperative day she also received tablets of nitrofurantoin 200 mg three times daily till the catheter was removed two weeks later. She remained continent of urine.

She made a satisfactory recovery but remained anaemic (haemoglobin on the fourth postoperative day was 50%). Skin sutures were removed on the ninth day and the wound healed aseptically. Prior to her discharge from the hospital on 29/1/81, a total dose of inferon was given.

The extent and impact of the operation were explained to her. She was advised to attend postnatal clinic after 6 weeks.

FOLLOW UP:

She turned up at the postnatal clinic as scheduled. She had no complaints, and was continent of urine. Her Haemoglobin was 75%.

COMMENTARY:

Rupture of the gravid uterus is a serious obstetric emergency. It carries a high incidence of fetal and maternal mortality. This gross obstetrical complication is still common in developing countries as a sequela of obstructed labour. From 1st July 1979 to 30th June 1980 there were 26 cases of ruptured uterus which constituted 0.2% of total deliveries at Muhimbili Medical Centre (1.93 ruptures per 1000 deliveries). This compares well with figures from other developing countries. Nasah et al in a review of 70 cases of ruptured uterus in Cameroon found an incidence of 1.9 ruptures per 1,000 deliveries.(1)

This was a case of a lower segment scar rupture with bladder involvement. During her past postoperative period the wound was infected and this possibly contributed to a weak scar. This patient laboured at home and attended the hospital only when complications started. One cannot rule out over enthusiastic fundal pressure as exercised by birth attendants in an attempt to deliver her vaginally and "save" her from another operative delivery. This could explain the extent of the rupture.

Though the diagnosis was not difficult to make in this case the severity of the trauma incurred was not reflected on the patient's general condition. She was not in shock. Probably the tamponade effect of the fetus contained by the intact utero-vesical peritoneum and the non-involvement of the uterine arteries played a major role in saving her from instant collapse.

The choice of the operation was influenced by severity of the rupture as there was almost autoamputation with posterior rupture as well. It was easier to do subtotal hysterectomy than do a repair operation. Total hysterectomy was not done as this would have very much prolonged the operation time and jeopardise the safety of the patient.

This another young patient with no living child lost her uterus and the baby. This once again emphasize the importance of health education in the field of prevention. Though this patient attended antenatal clinic, its impact was not seen on her. She was an easy prey to the misguided advice given by the relatives at home. Thus there is a need to direct health education not only to the patient per se but to the society as a whole where she belongs.

REFERENCE:

1. B.T. HASAH - Review of 70 cases of ruptured uterus in Cameroun. Tropical Doctor, July 1978 Vol. 8 No. 3.

E.P.H. GESTOSIS
INDUCTION WITH SYNTOCHION
NORMAL DELIVERY
PATIENT: MRS. M.K. AGE: 26 YEARS
ANTENATAL CARD NO. 1267/81
RESIDENCE: MSURAHATI DAR ES SALAAM
DATE OF ADMISSION: 18/7/81
DATE OF INDUCTION: 24/8/81
DATE OF DELIVERY: 24/8/81
DATE OF DISCHARGE: 19/9/81

SUMMARY:

The patient first presented with signs of E.P.H. Gestosis when she was 34 weeks pregnant. After three weeks of conservative management, labour was induced with syntocinon and delivered vaginally an apgar score 10 baby. Her recovery during the puerperium was without complications.

OBSTETRIC HISTORY:

She was gravida 3 para 2. The patient initially attended at a peripheral clinic when she was 6 months pregnant, She paid two more visits at the clinic. During her fourth visit she was referred to Muhimbili Medical Centre for admission due to an elevated blood pressure and proteinuria. Her last menstrual period was in November but could not tell the exact date. Her expected date of delivery was in August. She had no episode of vaginal bleeding or liquor leakage since conception. Her latest haemoglobin estimation prior to referral was 7%. She was getting tablets fersolate and folic acid 5mg daily together with prophylactic antimalarial drugs.

PAST OBSTETRIC HISTORY:

Her first Pregnancy ended up in a normal delivery in 1977 at Ocean Road Maternity Wing. Her second delivery was again uneventful at Ocean Road Hospital in 1979. Both babies were females, and the patient did not remember their birth weights. Her previous pregnancies were not complicated by E.P.H. - Gestosis or other obstetrical problems.

GYNAECOLOGICAL HISTORY:

Her menarche was at 14 years. The menses were of 3 days every 28 days, moderate flow, slightly painful. She never used contraceptive pills or intrauterine devices.

PAST MEDICAL AND SURGICAL HISTORY:

There was no history of renal diseases or visual disturbances or persistent headache in the past. She was never hospitalized for any medical or surgical problem.

SOCIAL AND FAMILY HISTORY:

Re-married in 1980 after being divorced by the first husband. Completed primary education and was unemployed. There was no family history of twins, diabetes mellitus or hypertension. She neither drank alcohol nor smoked cigarretes. She denied contact with tuberculosis patients.

PHYSICAL EXAMINATION:

Her height was 156cm and she weighed 56 kilogrammes. The patient was well nourished, not pale. She was neither jaundiced, nor dyspnoeic. There was no lymphadenopathy. She had pitting ankle edema. The thyroid gland was not enlarged. The breasts were active. The nipples were not retracted and there were no intramammary lumps.

CARDIOVASCULAR SYSTEM:

The pulse rate was 80 per minute regular, good volume and the blood pressure was 160/100mm of mercury. There were no murmurs but the second heart sound was accentuated. The respiratory system was normal.

ABDOMINAL EXAMINATION:

The abdomen was uniformly distended. No tenderness was elicited on superficial palpation. The liver, spleen, and kidneys were not palpable. The renal angles were non tender. The fundal height corresponded to 34 weeks gestation (difficult to correlate with her uncertain dates). The lie was longitudinal and the presentation was cephalic. The head was high above the brim. No contractions were felt during palpation. The foetal heart was 144 per minute regular.

VAGINAL INSPECTION:

The vulva looked normal. Speculum and digital examinations were not done at this juncture.

PLAN OF MANAGEMENT:

Review of previous investigations and physical findings.

In all she paid four antenatal visits at the peripheral clinic. Haemoglobin estimation was done only once on the eve of her referral and the reading was 75%. Urine for protein - three times was negative and the fourth times was 1(+). The blood pressure readings at three consecutive visits were within normal range and at the time of referral it was elevated 150/110mmHg. Weight was measured twice in an interval of about 8 weeks and the netgain was 2kg. The initial fundal height assessment was documented as equivalent to 24 weeks of gestation.

MANAGEMENT ON ADMISSION:

Special attention was given to:-

(1) Bed rest - advised to lie on left lateral position

(2) 4 hourly blood pressure measurement chart

(3) Daily urine for protein

(4) Twice weekly weight chart.

INVESTIGATION AND RESULTS:

(1) Midstream urine for routine and culture and sensitivity:-

Glucose - Negative

Protein - +

Culture - No Pathogens were isolated

(2) Serum Urea and Creatinine:-

Urea - 13mg/100ml

Creatinine 1mg/100 ml.

(3) Haemoglobin - 11gl/100ml

Her blood was Group A Rhesus D. Positive.

PROGRESS IN THE WARD:

She remained in satisfactory condition. Her ankle edema disappeared. During her period of hospitalisation, she gained two more kilogrammes. The blood pressure inspite of bed rest did not improve to a satisfactory level. It ranged from 150mmHg diastolic. In her final days in the ward the hypertension became persistently severe. At this juncture she was put on antihypertensive medication namely methyldopa 250mg four times daily. Within a few days the blood pressure settled to 150/95mmHg. Her urine analysis for protein had a plus one on and off.

As the fetus was deemed term by clinical assessment namely extrapolation from fundal height assessments during the antenatal period coupled with the assessment in the ward. A decision was taken to do the shake test. Amniocentesis was performed (for the details of amniocentesis and shake test see the long commentary in obstetrics). The liquor was non meconium stained and the shake test was positive. A vaginal examination was also done to assess the state of the cervix which was found to be ripe and favourable. Induction was planned the next day. The patient got enema in the evening on the eve of induction day.

INDUCTION OF LABOUR - 24/8/81 - 9 a.m.

PHYSICAL EXAMINATION:

Her general condition was satisfactory, afebrile with no pitting edema. Blood pressure was 150/90mmHg. The pulse rate was 80 per minute regular, good volume. There was no evidence of hyperreflexia.

There were no uterine contractions. The fetal lie was longitudinal and the presenting part was cephalic. The fetal heart rate was 152 beats per minute, regular.

VAGINAL EXAMINATION:

This was done in the manner described in the introduction. The vulva and vagina were normal. The cervix was soft and almost fully effaced. The os was 2cm dilated. The membranes were intact. The presenting part was at the brim, free. There was no cord presentation. Clinical pelvic assessment was found to be adequate for this baby. (For the details see pelvic assessment in the introduction as outlined in the partogram). Artificial rupture of the membranes was done using Kocher's amniotomy forceps. The Liquor was non meconium stained. After rupturing the forewater, the finger was not immediately removed so as not to allow a gush of amniotic fluid to escape thus preventing cord accidents. Then fetal heart was again auscultated after the artificial rupture of the membranes and it was 144 beats per minute regular.

Immediately a gravity fed intravenous drip with 5% dextrose 500ml together with 5 units of syntocinon was started at 20 drops per minute and the rate was to be doubled at quarter hourly interval to the maximum of 60 drops per minute. (In this particular dilution 20 drops per minute would correspond to 10 mu/minute). Once strong contractions were established syntocinon infusion was to be maintained. During the induction period, monitoring of the mother and fetus was strictly as per partogram. (See introduction on intrapartum care).

ASSESSMENT OF PROGRESS - 4 HOURS LATER:

The pulse was 88 per minute regular good volume. The blood pressure was 150/100mmHg. Contractions were well established and strong. The presenting part was 4/5 above the brim. The fetal heart was 144 per minute regular. Urine still had a plus one (+) of proteinuria and acetone was negative. The cervix was 5cm dilated. The oxytocin concentration was not increased as a good response was obtained with the initial concentration. The rate was reduced to 45 drops per minute and good contractions were maintained at this rate. The patient was given an intramascular lytic cocktail composed of Pethidine 100mg, Largactil 50mg and Phenergen 50mg.

DELIVERY:

3 hours later prior to the second 4 hourly punctuated vaginal examination the patient started to bear down. The cervix was found to be fully dilated and the presenting part was 3/5 above the brim and there was no evidence of fetal distress.

As efforts were made to assemble the ventouse apparatus and soon after infiltration of the perineum with lignocain, the presenting part was crowning. An episiotomy was done and spontaneous vaginal delivery was accomplished.

At 4.20 p.m. a female baby with apgar score 10 at one minute was born. It had no overt congenital malformation and weighed 3000gms. The mother was given injection syntometrine intramuscularly immediately after the birth of the baby. The placenta was delivered by controlled cord traction and it was complete and weighed 600gms. An immediate repair of the episiotomy was carried out. Total duration of labour was 7 hours 30 minutes. The first stage lasted for 7 hours. The second stage was 20 minutes and the third stage 10 minutes. The blood loss was about 170ml.

The post delivery blood pressure was 160/100mmHg. The pulse was 90 per minute regular good volume. Another injection of lytic cocktail was given intramascularly. The blood pressure was monitored 4 hourly together with her urine which showed persistent (+) proteinuria.

After 12 hours her blood pressure had settled to 140/90mmHg. By the third post operative day, the blood pressure was 130/80 and the urine was trace for protein. She was discharged on the 4th post delivery day together with her baby both in good general condition.

FOLLOW UP:

She did not turn up to the postnatal clinic.

COMMENTARY:

The management of E.P.H. - Gestosis is still a challenging problem in obstetric practice. From July 1979 to June 1980 15.9% of all admission at New Maternity in Muhimbili Medical Centre were for E.P.H. - Gestosis. There was a reduction in comparison to 1976 when 22.1% of all antenatal admission were for EPH - Gestosis. At the centre there is an obstetric intensive care unit where eclamptic and severe EPH - Gestosis form the bulk of the patients.

The condition of this patient did not necessitate admission to an intensive care unit, though her hospitalisation was justified on the basis of her high blood pressure and persistent proteinuria.

The diagnosis of EPH-Gestosis was very much facilitated by the earlier blood pressure readings during her antenatal attendance which revealed normal values. The management was more or less conventional and involved hospital admission bed rest, assessment of fetal growth and appropriately timed induction of labour. Lack of facilities was a major constraint in limiting the monitoring capacity. Sedatives such as barbiturate were not given to this patient as they do not have any beneficial effects on the control of blood pressure and the only justification for giving them would appear to be in the prevention of convulsions and they are not particularly effective in this capacity.(1)

The failure to control her blood pressure and the proteinuria inspite of bed rest necessitated the use of antihypertensive drugs. The elevation of the blood pressure expedited the planned induction which was done after getting the greenlight from the positive shake test. This simple test proved quite helpful in an environment where sophisticated gadgets are not available. The "ripe" cervix also contributed to the easy inducibility of labour in this patient and the main factor was probably the degree of cervical dilatation which is the most valuable of all the parameters in the Bishop score.(2)

Syntocinon was given at the same time as the amniotomy which is nowadays the acceptable policy. Thus the induction delivery interval was safely reduced and indirectly contributed to the enhancement of the efficiency of the understaffed maternity unit. The rate of syntocinon infusion was later reduced. There is a difference between the amount of syntocinon required to induce labour and the amount required to maintain labour.(3)

To date EPH-Gestosis is still a "disease of theories" and so prevention still lacks specific guidline. However early detection of the underlying syndrome is of great importance in planning a rational management of these patients.

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SHOULDER PRESENTATION WITH ARM PROLAPSE

INTRAUTERINE FETAL DEATH

DESTRUCTIVE OPERATION - DECAPITATION

PATIENT: MRS. M.A. AGE: 27 YEARS

INPATIENT NO.39376

RESIDENCE: KARIAKOO

DATE OF ADMISSION: 30/6/81

DATE OF OPERATION: 1/7/81

DATE OF DISCHARGE: 12/7/81

SUMMARY:

The patient had been booked at a peripheral clinic at 20 weeks of gestation. She had made in all three antenatal visits. The patient was admitted from home due to labour pains. After assessment in the labour ward, she was found to be in labour with an intrauterine fetal death and arm prolapse. Decapitation was done and the patient had an essentially uncomplicated recovery.

OBSTETRIC HISTORY:

Her first attendance at an antenatal clinic was at 5 months pregnancy. She paid two more visits at monthly intervals. Her last normal menstrual period was in mid november 1980, and did not recollect the exact date. Her expected date of delivery was in the end of 1981.

The latest haemoglobin estimation was 78%. There was no proteinuria and her blood pressure readings were within normal range. She was getting antimalarial prophylactic tablets together with iron and folic acid supplements. She did not turn up for the next appointment at a peripheral clinic.

PAST OBSTETRIC HISTORY:

Her obstetric career was characterised by three uncomplicated pregnancies which culminated in full term normal vaginal deliveries. They were punctuated by two years spacing:- the first was in 1974, the second in 1976 and the last born child was in 1978, all are alive and well.

GYNAECOLOGICAL HISTORY:

Her menarche was at 14 years. The menses were of 4 days every 26 days, normal flow. There was no dysmenorrhoea. She had no complaints of dyspareunia. She never used contraceptive pills. There was no history of gynaecological operations.

PAST MEDICAL AND SURGICAL HISTORY:

Not contributory.

SOCIAL AND FAMILY HISTORY:

Housewife. She neither smokes cigarettes nor drinks alcohol. There is no history of diabetes mellitus, hypertension and twins in the family.

PHYSICAL EXAMINATION:

She was in pain, clinically not anaemic, afebrile and with no ankle edema. Her height was 152 centimetres. The breasts were active and there were no intramammary lumps. The nipples were not retracted.

CARDIOVASCULAR SYSTEM:

The pulse rate was 86 beats per minute regular good volume. The blood pressure was 100/70 mm Hg. The heart was normal. The respiratory system was normal.

ABDOMINAL EXAMINATION:

On inspection the shape of the abdomen was abnormal namely the fundus was low and higher one side than the other the uterus was spread across the abdomen. On pelvic and fundal palpation neither head nor breech was felt at either area. The head was felt at left iliac fossa.

The contractions were strong. The fetal heart was not heard. The liver and spleen were not palpable. The renal angles were not tender.

VAGINAL EXAMINATION:

This was performed in accordance with the procedure outlined in the introduction. External genitalia were normal. Through the introitus the rather edematous and cyanosed hand was protruding. It was identified as a right hand by shaking hands with it.

The cervix was fully dilated. Heavy and thick meconium stained liquor was leaking through the cervix.

Bony pelvic assessment ruled out contracted pelvis:- the sacral promontory was tipped at 11.5 centimetres, the sacral curve was normal, the ischial spines were not prominent and the subpubic arch accommodated two fingers easily. Intertuberous distance at the outlet was more than 4 knuckles.

DIAGNOSIS:

The diagnosis of obstructed labour due to transverse lie and arm prolapse was made basing on the abdominal and vaginal findings.

PLAN OF MANAGEMENT:

A decision to decapitate the fetus in the theatre was taken. Internal podalic version was not attempted.

PRE - OPERATIVE PREPARATION:

1. The patient consented to the operation
2. Urine was negative for glucose but had a trace of protein
3. The pubic hairs were shaved
4. An intravenous infusion of 5% dextrose was started and the patient was given a stat dose of Pethidine 100 mg intramascularly and was then transferred to the operating theatre. An urgent request for 1500 ml of blood was forwarded to the blood bank.

ANAESTHESIA:

She was premedicated with atropine 0.6mg subcutaneously and anaesthesia was induced with 300 mg of sodium thiopentone intravenously and scoline 150mg by the same route. Anaesthesia was maintained with nitrous oxide, oxygen and ether.

PROCEDURE:

The patient was placed in the lithotomy position, the perineum was cleaned and was then catheterised aseptically as described in the introduction. Three hundred ml of clear urine was obtained.

A preliminary examination was done to determine the exact position of the fetal neck and it was found that the decapitation saw could readily be passed from the front of the fetal neck. Then the assistant applied firm traction on the prolapsed arm and this brought down the neck even further. The wire saw of the Giglitype was passed above the neck and the other hand identified the saw from the other side drew it down thus bringing the saw into position.

While the assistant was still applying firm traction on the prolapsed hand, the operator keeping the ends of the Giglis saw close together initiated a series of firm strokes which easily severed the neck. The trunk was delivered by traction on the arm which has hitherto been held by the assistant. At this juncture the head escaped into the uterine cavity. The stump was identified and grasped with volsellum forceps and by traction on it the head was delivered without difficulty. The placenta and membranes were delivered by cord traction after an intravenous ergometrine 0.25 mg was given.

The patient developed postpartum haemorrhage soon after delivery of the placenta 40 units of syntocinon were immediately added into the drip and the infusion was allowed to run as fast as possible. The uterus contracted well and the bleeding stopped. Blood loss was estimated to be 800 millilitres. Finally the uterus was explored digitally to rule out rupture and the cervix and vagina were also examined to rule out tears and lacerations.

THE BABY:

Premature with 2.2 kg body weight and of female sex.

POST OPERATIVE MANAGEMENT:

Her blood pressure at the end of the procedure was 130/90, pulse was 100 beats per minute regular good volume. Her recovery from anaesthesia was uneventful. The blood pressure, pulse and respiration were monitored hourly for the first 6 hours then 4 hourly for 24 hours. The nurses were requested to keep a close watch on vaginal bleeding and urgently report it. An urgent and persistent appeal was made to the blood bank and finally 1000 millilitres of blood were obtained, group "O" rhesus positive serial No.6520 and 6512 were transfused.

On the first postoperative day the patient also received 2500 ml of 5% dextrose and 500 ml of normal saline. Her output and temperature were also monitored. She was put on injection chloramphenicol 500 mg intravenously for the first 24 hours and then capsules chloramphenicol 500 mg four times daily for 6 days.

A course of penicillin starting with intravenous crystalline penicillin 2 mega units 6 hourly 4 doses followed by procaine penicillin fortified 1.2 mega units intramascularly for 6 days.

The postoperative period was uneventful. There was no evidence of puerperal sepsis or secondary postpartum haemorrhage. There was no complaint of urinary incontinence and speculum examination on the day of discharge showed no evidence of bladder damage. She was discharged with the haemoglobin of 9.5 gn per decilitre.

FOLLOW UP:

The patient was seen 6 weeks later at postnatal clinic. She presented with no complaint on examination, clinically she was not pale. Her gait was normal. Her breast were not engorged and was advised not express them.

VAGINAL EXAMINATION:

The vulva was normal. On speculum examination the cervix appeared healthy, there were no pathological discharges. She was discharged from the clinic and was advised to attend antenatal clinic when pregnant.

COMMENTARY:

Destructive operations have for their object the diminution of the bulk of the child, inorder to permit of its more easy passage through the partionent canal. Destructive operations imply craniotomy, decapitation, eviscoration and cleidotomy.

Decapitation consists in severing the head from the trunk followed by the extraction of the trunk and then of the head. In this case the patient presented with transverse lie and arm prolapse. Contracted pelvis, placenta praevia and subseptus uterus are some of the factors which favour oblique or transverse lie. In this patient the probable aetiological factor was prematurity.

Though destructive operations are of historical interest in modern obstetrics of the developed world, they have a definite role in the management of some categories of patients in the obstetric practice of the developing world. In Muhimbili Medical Centre during the 1979 - 1980 period, 12 destructive operations were performed at a rate of almost one per month.

In this particular patient decapitation was indicated because of the arm prolapse in a dead fetus so as to obviate dissemination of infection. The potentialities of developing severe infection in case of caesarian section were very high as the membranes ruptured spontaneously 14 hours ago, let alone the presence of a dead fetus. Another factor which further favoured decapitation was the presence of obstructed labour and though the cervix was fully dilated the temptation to do internal podalic version was strongly resisted for fear of rupturing the uterus. Because Version cannot be performed without distending the lower uterine segment.

If this is already thinned by the effects of obstruction additional stretching during version will almost certainly rupture it" (Lawson).

A vigorous antibiotic cover was instituted so as to cover acrobes and anaerobes which commonly ocuse puerperal and post abortal sepsis in our environment. Continous catheter drainage was not employed here as it was assumed that shoulder impaction could not lead to ischaemic necrosis characteristic in vertex presentation when the bony parts of the head compress the bladder.

Detection and rectification of abnormal lies and presentations could be accomplished during the antenatal period where also proper plan to effect the mode of delivery could be charted where failures are encountered. As evidenced in this case, this patients attendance to the antenatal clinic was in a very haphazard manner.

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BROW PRESENTATION

LOWER SEGMENT CAESARIAN SECTION

PATIENT: MRS. C.S. AGE: 18 YEARS

INPATIENT: NO. 4962/82

RESIDENCE: TANDIKA, DAR ES SALAAM

DATE OF ADMISSION: 30/6/81

DATE OF DISCHARGE: 8/7/81

SUMMARY

This patient was admitted from a peripheral clinic due to malpresentation. She was found to have brow presentation and the baby was delivered by caesarian section. The post operative period elapsed without complications.

OBSTETRIC HISTORY

She never attended antenatal clinic during her pregnancy. However, she went to a district hospital when the labour pains started after the spontaneous rupture of membranes. The patient spent 6 hours in the labour ward of the district hospital. She was then referred to Muhimbili Medical Centre as a case of cephalopelvic disproportion for further management.

This was her first pregnancy. She did not remember the first day of her lost normal menstrual period. On direct interrogation, she denied having had any episode of vaginal bleeding or swelling of the feet throughout her gestational period.

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GYNAECOLOGICAL HISTORY

Menstrustion commenced at age 13; the periods were regular and slightly painful. Her menses lasted 5 days and the cycle was 28 days. There was no dyspareunia. She had never used any kind of contraceptive measure. She gave no history of gynaecological problems.

PAST MEDICAL AND SURGICAL HISTORY

They were not contributory.

SOCIAL AND FAMILY HISTORY

Housewife. A class 4 school leaver. There was no family history of twins and diabetes mellitus. She neither drank alcohol non smoked cigarretes.

PHYSICAL EXAMINATION

Her height was 154cm. The patient was satisfactorily nourished, moderately pale. Her axillary temperature was 37° centigrade. Shw was anicteric and not dehydrated there was not peripheral edema.

The nipples were not retracted and the breasts were active; there were no ~~intramammary~~ lumps.

CARDIOVASCULAR SYSTEM:

Her pulse rate was 90 per minute regular good volume. The blood pressure was 110/70 mm of mercury. The heart was normal.

THE RESPIRATORY SYSTEM:

There was no overt clinical abnormality.

ABDOMINAL EXAMINATION:

The abdomen was uniformly distended. The liver and spleen were not palpable. The renal angles were not tender. The fundal height was equivalent to 38 weeks. The lie was longitudinal and the presentation was cephalic. At the brim an obvious overlap was evident. The contractions were strong. The foetal heart was 142 per minute regular.

VAGINAL EXAMINATION:

This was conducted in the manner described in the introduction. The vulva was normal. There was no abnormal vaginal discharge. The cervix was fully effaced and 7 centimetres dilated. The presenting part was fixed at the brim and the root of the nose and supraorbital ridges were easily identified by palpation. It was not possible to feel the fontanelles. There was moderate moulding. The caput formation was not yet so advanced as to mask the land marks which helped in establishing the diagnosis. Liquor was non-meconium stained.

PELVIC ASSESSMENT

The sacral promontory was just reached which corresponded to a length of 10cm. The sacral curve was normal. The ischial spines were not prominent. The subpubic angle was accommodating two fingers without difficulty which corresponded to an angle of 85°. The intertuberous diameter was 4½ knuckles, equivolent to 8.5 centimetres. This clinical pelvic assessment created an impression of an inlet contraction. Solely on the vaginal findings the diagnosis of brow presentation in the first stage of labour was made.

PLAN OF MANAGEMENT

An immediate decision was taken to do caesarian section.

INVESTIGATIONS AND PRE-OPERATIVE PREPARATION

1. Haemoglobin was 9 gm per 100 ml
2. Urine was negative for both protein and glucose. A midstream specimen was sent for microscopy and culture (The results were obtained three days later:- The culture yielded no growth and the microscopical examination revealed no abnormality).

3. Urgent blood grouping and gross matching was done and three units of blood were requested.

4. Blood was also taken for VDRL. (The test was negative).

5. Her consent for the operation was sought and obtained.

6. The pubic hairs were shaved and the abdomen was cleaned with soap and water.

7. An intravenous infusion of 5% dextrose was started as noon as the decision to operate on the patient was taken.

8. Ampicillin 500mg intravenously was given as a stat dose.

The patient was then transferred to the main operating theatre.

The foetal heart was again re-checked before the patient was placed on the operating table. The midwife scrubbed and with the patient in the dorsal position, she aseptically catheterised her. The abdomen was cleaned with antiseptic solution and draped in sterile surgical towels.

ANAESTHESIA

General anaesthesia was given as described earlier (Obstetric case No. 1 and in the introduction).

PROCEDURE

Via the subumbilical median incision the abdomen was opened as detailed in the introduction. Dry toiled abdominal gauze pack attached to small artery forceps were carefully insinuated into the lateral pouches anterior to the broad ligaments. There was no dextroritation of the uterus. The lower segment was identified by picking the loose peritoneum where it caused to be intimately applied to the uterine well. The loose visceral peritoneum was lifted up with dissecting forceps and incised transversely with scissors in a curved direction convexity downwards as far lateral as the round ligaments. This was facilitated by the use of the Doyen retraction which the assistant moved from side to side. The lower peritoneal flap was stripped downwards. together with the incorporated bladden. The upper peritoneal flap was also dissected upwards. Swab on a stick blunt dissection was used in both cases.

The Doyen's retractor was adjusted to include the bladder. A stay suture was inserted in midline and with the assistant exerting traction on it a small transverse incision with the knife was made on the lower segment just above the suture.

The fingers inserted through the incision elevated the uterine wall and this facilitated the safe lateral extension of the incision laterally with curved scissions, concavity directed upwards. Then the index fingers were used to stretch the incision even further. The assistant was sucking out the spilled liquor.

The fingers of the left hand were slipped infront of the presenting part and disimpacted it. The head was flexed as much as possible and rotated occiput anteriorly during its delivery. At this juncture the anaesthetist injected 0.25mg of ergometrine intravenously. The shoulders were carefully delivered and the featus was completely extracted and placed on the mother's thigh as the pulsation slowed down the cord was clamped at two places and divided between the clamps. The crying baby was handed over by an assistant to the waiting midwife.

The corners of the incised lower segment were held with Green-Armytage forceps. The placenta at this juncture separeted and it was delivered by cord traction complete with membranes. The uterus was repaired in two layers by continous suture with No. 1 chromic catgut carefully avoiding the decidua in the process Traction on the stay suture was of great help in approximating the edges of the wound.

The peritoneum was repaired with No. O chromic catgut. Haemostasis was achieved. The abdominal packs were removed from the flanks and after the final inspection, the abdomen was closed as detailed in the introduction.

After closure of the skin the uterine fundus was gently but firmly pressed downwards and blood clots were expelled. A dry dressing was placed over the wound. Finally the vagina was cleaned of clots with the help of swabs on a stick. Blood loss was estimated to be 800 ml.

THE BABY

Weight 2850gm

Sex Female

Apgar score 7

Further clinical examination did not reveal any overt congenital malformations.

PLACENT AND MEMBRANES

Weight: 380 grams

POST OPERATIVE CARE AND PUERPERIUM

Her blood pressure at the end of the operation was 140/80mm of mercury and the pulse was 100 per minute regular good volume.

She was transferred to the ward after an uneventful recovery from anaesthesia.

Her general condition, -, blood pressure and pulse were monitored hourly for the first 6 hours then 4 hourly for 24 hours. Temperature was recorded 12 hourly. She remained afebrile and normotensive. During the first 24 hours post operatively the patient was transfused three units of blood equivalent to 1.5 litres. In addition she recieved 1000ml of 5% dextrose. Intramascular injection of pethidine 100mg at 8 hourly interval for a total of 3 doses was prescribed. Ampicillin 500mg 6 hourly intravenously was continued for the first 24 hours and then capsule 500 mg orally q.i.d. were given for one more day and then stopped completely. Her urinary output was 1000ml during the first 24 hours post operatively.

From the second post operative day, she passed flatus and was ambulant. Throughout the post operative period the patient was getting haemotinics - Fersolate 200mg three times daily and folic acid 5mg daily. By the 8th post operative day all the stitches were removed and the wound healed by primary intention. She was breast feeding successfully.

Prior to discharge the patient was given a lengthy talk on the importance of antenatal attendance.

She was then discharged from the hospital with her healthy baby and a haemoglobin of 10gm/dl. She was advised to continue taking haematinics for one month.

POST NATAL CLINIC

She turned up at postnatal clinic 8 weeks later. Lactation was well established and the baby was well. She was afebrile and not pole. No abnormality was detected on abdominal and vaginal examination. The uterus was well involuted and mobile.

COMMENTARY

Brow presentation which is an attitude between the vertex and face is the most unfavourable of all cranial presentations. It is more infrequent but more challenging of the various abnormalities of presentation. The incidence varies from 1:3500 (1) and 1: 2337 (2). Of the many postutaled aetilogical factors such as multiparity, prematurity, congenital malformation of the fetus, cephalopelvic disproprtion emerges as the predominant and common causative factor. This has also been stressed by Helman in a review of the experience of John Hopkins Hospital (3).

This patient with her height of 144° centimetres and the diagonal conjugate of 10 centimetres had a clear evidence of contracted pelvis which probably contributed to her malpresentation. The diagnosis was clear cut in this case only because it was not a neglected brow with consequent co-put succedaneum which would have masked the necessary diagnostic land marks. In the neglected cases some advocate the use of intranatal radiography to clarify the diagnosis.

In the management of this patient caesarian section was regarded as the treatment of choice. The presence of an element of disproportion forestelled any attempt aiming at manipulative correction. There was no hope of spontaneous correction which is said to occur in a few cases (4) as the head was arrested at the prim. In such a case allowing labour to drift on would have been catastrophic to the featus and desastrous to the mother.

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FACE PRESENTATION

SUCCESSFUL FORCEPS DELIVERY

PATIENT: MRS. H.A. AGE: 26 YEARS

INPATIENT NO.1445

RESIDENCE: TEMEKE DAR ES SALAAM

DATE OF ADMISSION: 11/12/82

DATE OF DELIVERY: 11/12/82

DATE OF DISCHARGE: 15/12/82

SUMMARY:

The patient was referred from a peripheral clinic with with diagnosis of breech presentation in labour. On examination she was found to be in the second stage of labour with face presentation and fetal distress. She was delivered successfully by forceps.

OBSTETRIC HISTORY:

Gravida 5 para 4 with one living child born in 1974. The patient attended antenatal clinic. Her first attendance was at five months gestation. She paid a total of five visits. The first day of her last normal menstrual period was on 15th March 1982. Her expected date of delivery was on 22nd of December 1982. Her height was 158 centimetres and her latest weight was 60 kgs. The latest haemoglobin estimation was 10 grammes per 100 mls of blood.

There was no proteinuria and her blood pressure measurements were within normal range. At her final antenatal attendance prior to the onset of labour, the fundal height corresponded to 34 weeks of gestation and was consistent with the period of amenorrhoea. The lie was longitudinal and the presenting part was cephalic. The fetal heart was heard and it was regular. Three weeks later, she started to have labour pains. She went to her clinic where the diagnosis of breech presentation in the second stage of labour was made and was promptly referred to the New Maternity Block for further management.

PAST OBSTETRIC HISTORY:

Her first pregnancy was in 1974. She had a full term spontaneous vaginal delivery at a district hospital. In 1976 she had another similar delivery. The baby died at the age of 4 months due to fever. In 1978 and 1980 she had full term normal deliveries at Ocean Road Hospital. Both infants died of gastroenteritis at 6 and 9 months respectively. Her pregnancies and puerperium were uneventful.

GYNAECOLOGICAL HISTORY:

Menstruation commenced at age 13. The menses were of 6 days every 30 days, normal flow not painful. She never used contraceptive pills. There was no history of gynaecological operations.

PAST MEDICAL AND SURGICAL HISTORY:

Not contributory

SOCIAL AND FAMILY HISTORY:

Housewife. She is a tectotaler and non - smoker. There is no family history of diabetes mellitus, twins or hypertension.

PHYSICAL EXAMINATION:

She was in pain and bearing down. She was not pale. Her axillary temperature was 37^{o} centigrade. There was no lymphadenopathy. The breast were active and there were no intramammary lumps. The nipples were not retracted.

THE RESPIRATORY SYSTEM:

No abnormality was detected clinically.

THE CARDIOVASCULAR SYSTEM:

The pulse was 90 beats per minute regular of good volume. The blood pressure was 130/90 mmHg. The heart was normal.

ABDOMINAL EXAMINATION:

The abdomen was evenly enlarged. The fundal height was equivalent to 38 weeks of pregnancy, longitudinal lie. The presenting part was not felt at the brim. The uterus relaxed well between the moderate contractions. The liver and spleen were not palpable. The fetal heart was 90 beats per minute regular, heard below the umbilicus.

VAGINAL EXAMINATION:

This was done as detailed in the introduction. The vulva was normal. Thick meconium was escaping via the introitus. The cervix was fully dilated.

The face was presenting as evidenced by palpation of the alveolar processes and the anterior nares, the chin was directed forward. The level of the presenting part was 0/5. The subpubic arch accommodated two fingers easily, the intertuberous diameter was four and half knuckles.

DIAGNOSIS:

In view of the aforementioned findings the diagnosis of face presentation, mento anterior position in the second stage of labour with fetal distress was made.

PLAN OF MANAGEMENT:

An immediate decision was taken to expedite delivery by forceps.

PROCEDURE:

The cervix was fully dilated and the position was already established, the patient was catheterised aseptically as described in the introduction. With the patient in the lithotomy position the perineum was infiltrated with lignocaine. Wrigleys forceps blades were locked and held infront of the perineum to identify the blades.

Then the left blade held over the pubes by the left hand was gently introduced to the left side of the patient being guided by the first two fingers of the right hand. The second - right blade was introduced with the left hand serving as the guide.

Special care was taken not to injure the face and to see that the blades lie over the sides of the head and were not pushed too far back. The two blades when brought together locked easily.

Traction synchronous with the uterine contraction was then applied to bring the chin below and then round the symphysis. As the head began to distend the perineum an episiotomy - mediolate was performed. The blades were removed after delivery of the head. As the anterior shoulder was delivered the patient received 0.25 mg of ergometrine. The baby was delivered with two minutes of the application of the forceps. Immediately after delivery the airway was cleared with a mucus extractor. The umbilical cord was cut between the two clamps and ligated. A male baby was born weighing 3000 grammes with apgar score 4 at one minute. The newborn was rushed to the resuscitating table.

THIRD STAGE:

The placenta was delivered 3 minutes later by controlled cord traction. The placenta and membranes were complete and without overt abnormality. Blood loss was about 200 ml. The third stage lasted about 5 minutes. The episiotomy was repaired as described in the introduction. The uterus was then gently squeezed and the patient was cleaned.

THE BABY:

With the baby on the resuscitation table suction was continued 10ml of 8.4 per cent sodium bicarbonate was given via the umbilical vein and kondrion 1mg intramascularly was also given. Oxygen was also administered. At five minutes the score was 7. There was neck retraction, the face was congested and bruised, the eye lids and lips were edematous. The baby was transferred to a neonatal unit for further care. No other abnormality was detected on further clinical examination.

POST PARTUM CARE:

Fifteen minutes after delivery the blood pressure was 130/80 mmHg. The pulse was 88 beats per minute regular of good volume. The patient was transferred to a postnatal ward.

The baby was well at the time of discharge 6 days later. The mother was breast feeding her. She was discharged in good condition with her baby. Her haemoglobin was 10gm/dl. The patient was asked to take tablets ferrous sulphate 600mg daily for six weeks and was given an appointment for follow up in a postnatal clinic.

FOLLOW UP:

She was never seen again.

COMMENTARY:

The incidence of face presentation is generally stated to be about 1 in 500 births and the presentation is associated with minor degrees of pelvic contraction.(1) Most likely this was a case of secondary face presentation.

This patient was a multiparous with previous uneventful full term deliveries, so the likelihood of disproportion was slim though the possibility was entertained. However as the head was not at all palpable at the brim and clinical assessment of the outlet ruled contraction, disproportion was clinically ruled out. In multiparous patients malpositions are not uncommon and variable degree of deflexion to one of extreme extension do occur in the vertex during the course of labour.

The fetal distress was obviously due to the prolonged second stage. In this particular case forceps was the most suitable method of expediting delivery. The fetus was in distress, the cervix was fully dilated and the presenting part was well down in the pelvic cavity and the position was the most favourable one in face presentation the mento-anterior. This was literally a lift out procedure. Though this was a good case to illustrate the value of forceps in tropical obstetrics, great care should be taken in their use. In fact they have a very limited place due to the prevalence of cephalopelvic disproportion. There is no place for high forceps delivery in modern obstetrics. The temptation to use forceps to relieve obstruction should be strongly resisted as the result may well be posterior uterine rupture or colporrhexis both caused by the "boot - scraper effect".(2) However when the indications are there and the conditions have been fulfilled especially in cases where ventouse extraction can not be employed forceps delivery should be used.

Hence the importance teaching the use of forceps in the training programme for the young obstetricians.

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YOUNG SHORT PRIMAGRAVIDA
TRIAL OF LABOUR AND SYNTOCINON
SUCCESSFUL VAGINAL DELIVERY WITH VENTOUSE EXTRACTION
PATIENT: MRS T.N. AGE: 17 YEARS
INPATIENT NO: 3596
RESIDENCE: MBAGALA
DATE OF ADMISSION: 24/9/82
DATE OF DISCHARGE: 26/9/82

SUMMARY

The patient initially booked at a peripheral clinic from where she was advised to deliver at Muhimbili Hospital on account of possible cephalo-pelvic disproportion. She was admitted from home due to labour pains and was put on trial of labour and syntocinon and delivered of a full term healthy baby by ventouse extraction.

OBSTETRIC HISTORY

Her first booking at a peripheral antenatal clinic was at 32 weeks of gestational age on 20th of August. She attended antenatal clinic again about a fortnight later on 3rd of September 1982. No information could be obtained regarding her last menstrual period or first day of quickening. There was no history of vaginal bleeding since conception. She had only one injection of Tetanus Toxoid at 32 weeks of gestation.

PAST OBSTETRIC HISTORY - PRIMAGRAVIDA

GYNAECOLOGICAL HISTORY

Her menarche was at 14 years. The menses were of 6 days every 28 days, normal flow moderately painful. She had initially episodes of a menorrhoea followed by heavy menses with the passage of clots. She neither used contraceptive pills nor intrauterine contraceptive device. There was no history of gynaecological operations.

PAST MEDICAL AND SURGICAL HISTORY

This was her first admission to the hospital. Had no contact with tuberculous patients. She denied any history of any major medical illness or surgical disease.

FAMILY AND SOCIAL HISTORY

There was no family history of twins or diabetes mellitus. History of hypertension could not be ascertained. She was a house wife. She neither smoked cigarretes nor drank alcohol.

PHYSICAL EXAMINATION

Her general condition was satisfactory. There was no pallor. She had neither jaundice nor lymphoadenopathy and lower limbs were devoid of ankle edema. The axillary temperature was 36.5 centigrade. The breasts were active and there were no intrammamary lumps. Her height was 138 centimetres and the weight was 60 kg.

The respiratory system was normal.

THE CARDIOVASCULAR SYSTEM

The pulse was 80 per minute regular good volume and the blood pressure was 110/70 mm of mercury. The heart was normal.

ABDOMINAL EXAMINATION:

The abdomen was enlarged corresponding to 36 weeks of gestation. The fetus of medium size was in longitudinal lie and the presentation was cephalic and the head was free and above the pelvic brim. The uterus was contractile but contractions characteristic of labour were not elicited. The foetal heart was 140 per minute regular. The liver, spleen and kidneys were not palpable. The renal angles were non-tender.

VAGINAL EXAMINATION

This procedure was carried out in the manner described in the introduction. The initial vaginal examination was done at 8 a.m. The vulva and perineum looked normal. There was mucus at vaginal introitus. The cervix was partially thinned and taken up and the os was less than 1cm dilated. The membranes were intact the fetus presented with the vertex and the head was above the pelvic brim.

PELVIC ASSESSMENT

The sacral promontory was easily reached corresponded to a length of digonal conjegate 10.5 cm on actual measurement. The sacral curve was normal. The ischial spines were not prominent. The subpubic angle was accommodating two fingers without difficulty thus corresponding approximately to an angle of 85° thus ruling out a narrow subpubic angle. The intertuberous diameter was 4 knuckles corresponding to 8cm. The impression was of a contracted pelvic in let in a primagravida in latent phase of labour.

PLAN OF MANAGEMENT

A decision was taken to give her the trial of labour and syntocinon and manage her actively from the onset of active phase of labour.

REVIEW OF INITIAL INVESTIGATIONS

1. Her latest haemoglobin estimation was 11.4gr/dl.
2. Urine for protein was negative. There was no glycosuria and no ketonuria.
3. Her blood group "O" RH-D positive
4. VDRL test was negative

Sheke test was done and the result showed that bubble stability was positive in 1:1 and 1:2 dilution indicative of lung maturity.

LABOUR AND ITS OUTCOME

The patient was re-admitted into the labour suite at 7 p.m. with complaints of labour pains and mucoid blood stained vaginal discharge.

Uterine palpation showed that the patient was experiencing weak contractions, lasting less than 20 seconds and occurring once in every 10 minutes. The fetal head was still above the pelvic brim. The fetal heart was heard 150 beats per minute regular. A second vaginal examination was done this time to evaluate the cervix. It was fully effaced; 3cm dilated and bulging membranes were felt. Artificial rupture of the membranes was done, using a Kocher's sterile forceps after ascertaining the absence of cord presentation. Non meconium stained liquor was coming out slowly as the fingers were not abruptly removed so as to present a sudden gush of amniotic fluid thus minimising the chance of cord prolapse after amniotomy as the head was still high. The position was diagnosed as right occipito anterior. Using Muller-Kerr method of head fitting it was not possible to make it engage.

SUBSEQUENT CARE

Soon after the second vaginal examination the fetal heart was auscultated and found to be within normal parameters. The fetal heart rate and rhythm, colour of the liquor, descent of the fetal head, strength and frequences of uterine contractions were checked and recorded hourly. Temperature, blood pressure and cervical dilatation were recorded 4 hourly.

A third vaginal examination was done at 11 p.m. and there was no progress interms of cervical dilatation (still 3cm) though the level of the head was now 4/5 above the pelvic brim and there was no moulding. The liquor was non-meconium stained. Glancing at the partogram revealed that contractions were still of mild strength though of doubled frequency in comparison to the previous assessment. It was decided to augment labour with syntocinon 5I.U. in a 5% dextrose of 500ml to run at 20 drops per minute and the rate was to be doubled at quarter hourly interval until a good uterine response was reached. At the same time the patient was given an intramascular injection of pethilomphan 200mg. After an elapse of an hour the uterine contractions improved but they were still not good interms of strength and frequency.

At this juncture syntocinon was stepped up to a total of 7.5 units. With the completion of the 500ml of 5% dextrose, the patient was having moderate contractions. The head was three fifth above the brim, fetal heart was 130 per minute regular. There was no evidence of meconium staining.

A second bottle of 5% dextrose 500ml was set up and 10 units of syntocinon was added into it. The response was good. Within 20 minutes the patient was getting 4 contractions every 10 minutes lasting 45 seconds. The next vaginal examination was done at 2a.m. the cervix was fully dilated, the level of the head was only two fifths above the pelvic brim and the patient was bearing down.

DELIVERY

The patient was moved on a high bed still with the syntocinon drip, placed in lithotomy position and the vulva and perineum were cleaned. The doctor in attendence had scrubbed his hands and one rubber gloves. The rigid perineum was infiltrated with 1% Lignocaine (10ml). The patient was catheterised and the catheter was removed. The vacuum apparatus was assembled, a cup was used and applied to the lower most part of the presenting head. The pressure was increased slowly - 0.4kg per square centimetre every two minutes to 0.8kg per square centimetre. Simultaneously the area around the cup was checked to rule out the involvement of vaginal tissue.

The direction of the pull was initially downwards. Traction was applied intermittently syncronous with the uterine contractions and the direction was changed as the head descended through the birth canal. With crowning of the head a mediolateral episiotomy was done and the baby was easily delivered. The ventrouse was released soon after the head had been delivered. A male baby weighing 2700 grammes was born with apgar score 8 at one minute and at 5 minutes the score was 10. Immediately after delivery airway was cleared with mucus extractor. The umbilical cord was cut between clamps and ligated. The second stage lasted.

THIRD STAGE OF LABOUR

The syntocinon drip was run fast soon after delivery of the baby. 0.25mg ergometrine was given intremoscularly, and the placenta was delivered by cord traction. The placenta and membranes were complete and without abnormality blood loss was about 140ml. The third stage lasted 5 minutes. The episiotomy was repaired in the normal mammer as described in the introduction. During the repair of the episiotomy/the patient lost a furtner 40ml. The uterus was then gently squeezed and the patient was cleaned.

THE BABY:

No overt external abnormality was detected. Respiration was normal and the heart sounds were normal. The baby had chignon but there were no signs of brain damage and the Moro and grasp reflexes were normal. The external genitalia were normal and the anus was patient. The baby was transferred to a neonatal unit for rest and further observation.

The baby was well at the time of discharge 4 days later. B.C.G. vaccination was given. The mother was breast feeding her. She was discharged in good condition with her baby. Her haemoglobin was 10.5g/dl, her temperature was normal and had no foul smelling vaginal discharge.

FOLLOW UP:

The patient was well when she turned up for follow up 6 weeks later. Lactation was well established. Menstruation had not commenced and the patient had not resumed sexual intercourse. The abdomen was soft and non-tender. There were no palpable masses, lochial discharge had ceased for quite sometimes. The baby was well and active. The mother was advised to attend maternal and child health clinic.

COMMENTARY

This patient who was a young and short primagravida carried in her bosom the potentialities of severe obstetrical hazards. Her tender age and characteristic erratic antenatal attendance predisposed her to many preventable complications. She attended an antenatal clinic only twice and booked rather late. This tally well with the observation concerning the adolescent age groups namely poor antenatal care (1).

In our environment dystocia in labour is anticipated in patient below 146cm in height. Her height was well below this acceptable minimum and this was further compounded by the obvious pelvis inlet contraction noted during the clinical pelvic assessment. Nevertheless elective caesarian section was not at all envisaged as the functional capacity of the pelvis was assumed to be an unknown entity in primagravidae and the diagnosis of disproportion could only be made after ensuring adequate uterine action (4). In addition the stigmata of a scarred uterus with consequent potential of limitation of obstetric career in a young african girl weighed heavily in favour of trial of labour and syntocinon. Thus it was decided to manage her labour actively and a close and continous monitoring of unfolding events was taken to avert disaster.

As soon as the patient was found to be in active phase of labour, artificial rupture of membranes was done and as subsequent assessment showed that contractions were not satisfactory and there was no progress in terms of descent and cervical dilatation, augmentation of labour with meticulous titration of the syntocinon dose was initiated using the gravity run infusion drip. The dose was stepped up to 10 units (in 500ml of 5% Dextrose) of syntocinon reaching the maximum rate of 60 drops per minute (5 units in 500ml = 5000m.u. therefore 1ml which is equivalent to 20 drops is equal to 10 m.u.).

Within 5 hours of augmentation of labour the cervix became fully dilated. It is well documented that there is a definite improvement in fetal conditions when the second stage is hastened(5).

At this crucial moment a careful assessment of the situation with the aim of selecting the appropriate method of delivery was done. The judgement was to be based on the level of the fetal head in relation to the pelvic brim, the degree of moulding and the condition of the fetus. In this particular patient the head level was two fifth above the pelvic brim, moulding was moderate (+) and there was no fetal distress. These findings justified a trial of vacuum extraction(6) albeit a successful one. Trial of labour and syntocinon when properly used could save many primagravidae from unnecessary social and obstetrical handicaps.

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TRANSVERSE LIE IN LABOUR

LOWER SEGMENT CAESARIAN SECTION

PATIENT: MRS. K.J. AGE: 24 YEARS

INPATIENT NO.

RESIDENCE: CHANG'OMBE DAR ES SALAAM

DATE OF ADMISSION: 20/3/82

DATE OF OPERATION: 20/3/82

DATE OF DISCHARGE: 29/3/82

SUMMARY:

The patient was admitted from a peripheral clinic due to transverse lie in labour. The diagnosis of the abnormal lie was confirmed and labour was terminated by a lower segment caesarian section on the same day of admission. The postoperative period was uneventful.

OBSTETRIC HISTORY:

She was gravida 5 para 4 with three living children. This patient attended the antenatal clinic only twice prior to the onset of labour. The first visit was at 24 weeks of gestation and the second one was at 32 weeks of pregnancy. The first day of her last normal menstrual period was on 20/6/81 and she was expected to deliver on 27/3/82. She did not remember the time of onset of fetal movements.

There was no episode of vaginal bleeding in this pregnancy. The two antenatal visits were uneventful. The fundal height corresponded to the dates. The lie was longitudinal and the presentation in both cases was cephalic. The blood pressure was within normal range. The latest haemoglobin estimation was 9.5gm/dl. There was no glycosuria or proteinuria. Her latest weight was 55kg.

PAST OBSTETRIC HISTORY:

Her first, second and third pregnancy were in 1974, 1976 and 1978 respectively. The fourth pregnancy was in 1980. They were all full term normal deliveries. The first and second one were unsupervised and the deliveries were at home. The third and fourth pregnancy were full term hospital deliveries. Her antenatal attendance in these two pregnancies was in a very haphazard manner. She could not remember the weight of her babies. In all pregnancies there was no history of antepartum or postpartum haemorrhage. There was no evidence of PIH - Gestosis. The puerperium was uneventful. The last born child died aged one year after contracting measles.

GYNAECOLOGICAL HISTORY:

Her menarche was at 13 years. Her periods were regular slightly painful, lasting four days every thirty days. She neither used contraceptive pills nor intrauterine contraceptive devices. There was no history of gynaecological problems or operations.

PAST MEDICAL AND SURGICAL HISTORY:

There was nothing contributory.

SOCIAL AND FAMILY HISTORY:

She was a peasant, illiterate married for 9 years. There was no history of diabetes mellitus, hypertension nor twins in the family. She did not smoke cigarettes. Occasionally, she took alcoholic beverages.

PHYSICAL EXAMINATION:

Her general condition was satisfactory. Her height was 148 centimetres. She was not pale. The axillary temperature was 37^{0} Centigrade. There was neither lymphodenopathy nor peripheral edema.

The breasts were active, the nipples were not retracted. There were no intramammary lumps.

THE RESPIRATORY SYSTEM:

There was no overt clinical abnormality.

CARDIOVASCULAR SYSTEM:

Her pulse rate was 88 beats per minute regular of good volume. The blood pressure was 130/80 mmHg. The heart was normal.

ABDOMINAL EXAMINATION:

On inspection the uterus was broader than normal. The fundal height was less than 36 weeks. The foetal head was palpable in the left iliac fossa. Uterine contractions were mild, one contraction every 10 minutes and lasting for 20 seconds.

The liver, spleen and kidneys were not palpable. The renal areas were not tender. The foetal heart was 144 beats per minute regular.

VAGINAL EXAMINATION:

This was done as detailed in the introduction. The external genitalia were normal and there were no vaginal bleeding or pathological discharge. There were no palpable boggy masses in the fourdices. The cervix was fully effaced and 3 centimetres dilated. No presenting part was felt. The membranes were intact. The diagnosis of transverse lie in active phase of the first stage of labour was made.

PLAN OF MANAGEMENT:

An immediate decision was taken to do lower segment caesarian section.

INVESTIGATIONS AND PRE-OPERATIVE PREPARATION:

1. Plain abdominal X-ray taken on admission confirmed, a transverse lie, singleton with no skeletal malformation.
2. Haemoglobin was 9gm/dl.
3. Urine was negative for both protein and glucose.
4. Blood was taken for urgent grouping and cross-matching and 1500 mls of blood were requested.
5. Blood was also taken for VDRL.
6. Her consent for the operation was sought and obtained.
7. The pubic hairs were shaved and the abdomen was cleaned with soap and water.

8. An intravenous infusion of 5% dextrose was started as soon as the decision to operate was taken.

The patient was then transferred to the main operating theatre. The foetal heart was again rechecked before the patient was placed on the operating table. The midwife scrubbed and aseptically catheterised the patient whose abdomen was cleaned with antiseptic solution and draped in sterile surgical towels.

PREMEDICATION AND ANAESTHESIA:

These were given as detailed in the introduction.

PROCEDURE:

Via the subumbilical median incision the abdomen was opened as explained in the introduction. Dry tailed abdominal gauze packs attached to small artery forceps were insinuated into the lateral pouches anterior to the broad ligaments.

Identification and incision on the lower segment were carried out as described earlier in a case of Brow Presentation. As the lower segment was incised and the membranes ruptured the fetal arm presented. This was corrected by replacing the arm in the uterus and then a foot was identified and brought down and the baby was delivered as in breech extraction. Procedures of cord division, delivery of the placenta and repair of the uterus were conducted as described in the aforementioned case of lower segment caesarian section.

Haemostasis was achieved. The abdominal packs were removed from the flanks and after the final inspection the abdomen was closed as detailed in the introduction.

After closure of the skin the uterine fundus was gently but firmly pressed downwards and blood clots were expelled. A dry dressing was placed over the wound and strapped. Finally the vagina was cleaned of clots with the help of swabs on a stick. Blood loss was estimated to be 700 mls.

THE BABY:

Weight ..... 3000 grammes

Sex .... Male

Apgar Score... 7 at one minute 10 at 5 minutes.

There were no overt congenital malformation.

POST OPERATIVE CARE AND PUERPERIUM:

Her recovery from anaesthesia was uneventful following which, she was transferred to the postnatal ward.

Her blood pressure and pulse were monitored hourly for the first 6 hours then 4 hourly for 24 hours. Temperature was recorded 12 hourly. She remained afebrile and normotensive. During the first 24 hours postoperatively she was transfused 1000 mls of fresh blood. In addition she received 1500 mls of 5% dextrose. A fluid balance chart was kept for 24 hours. She was given Pethidine 100 mg 6 hourly for 24 hours to alleviate postoperative pain.

Crystalline Penicillin one mega unit was given intravenously for the first 24 hours and then Procaine Penicillin fortified 1.2 m.u. intramascularly for the following six days.

From the second postoperative day, she passed flatus and was ambulant. The urinary output was good. The stitches were removed on the 8th postoperative day. The wound healed by primary intention. Her haemoglobin was checked and found to be 9gm/dl. She was breast feeding her baby. The patient was given a lengthy talk on the importance of antenatal attendance, hospital delivery and family planning. She was then discharged from the hospital with her healthy baby and advised to take ferrous sulphate tablets 600 mg daily for 6 weeks. She was given an appointment to a postnatal clinic after 6 weeks.

POST NATAL VISIT:

The mother and her infant attended the postnatal clinic 6 weeks later. She was not pale. The abdominal wound had healed normally. Lactation was well established and the baby was active and breast feeding.

On vaginal examination no abnormality was detected on the external genitalia. The cervix was firm and the cervical os was closed. The uterus was of normal size, anteverted and mobile. The adnexa were normal. The haemoglobin was 11gm/dl. and the patient was advised to attend the antenatal clinic as early as possible when, she conceives.

COMMENTARY:

During the year 1979/80 malpresentation constituted 0.3% of all antenatal admissions at Muhimbili Medical Centre. The overall incidence is said to be 1 in 150 births, if premature births are included.(1)

Possible causative factors in transverse lie are multiparity, hydramnios, arcuate or subseptus uterus, presence of placenta praevia and on the part of the child plural pregnancy, prematurity and intrauterine death are also included. In this particular patient probably multiparity with laxity of abdominal muscle played an aetiological role.

All cases of oblique lie are a great hazard to the mother and the child. The likelihood of premature rupture of membranes with resultant arm and cord prolapse is very high. This could lead to obstructed labour and subsequent uterine rupture especially in multiparous if treatment is delayed. This patient presented with transverse lie in labour and caesarian section was correctly embarked upon. Some advocate external version, followed by rupture of membranes and inorder to ensure continuity of vertex presentation a doctor is directed to sit at the patient's bed side and manually maintain the fetal head in position and if this fails and caesarian section is not favoured internal version is advocated.(2) These other options were not feasible.

During delivery no problems were encountered. Because of her poor antenatal attendance nothing had been done to rectify her malpresentation before the onset of labour. Specialist antenatal care and supervised trial of uterine scar were emphasised on the patient.

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PAINLESS ABRUPTIC PLACENTAE

SPONTANEOUS RUPTURE OF MEMBRANES

NORMAL DELIVERY

PATIENT: MRS. B.K. AGE: 23 YEARS

INPATIENT NO: 172/82

RESIDENCE: MABIBO DAR ES SALAAM

DATE OF ADMISSION: 21/7/82

DATE OF DISCHARGE: 25/7/82

SUMMARY

The patient was referred from a peripheral clinic as a case of fetal distress. On further examination the diagnosis of abruptic placentae was made. She delivered a fresh still born following spontaenous rupture of the membranes and augmentation of labour with syntocinon.

OBSTETRIC HISTORY

Gravida 2 para 1. This patient attended the antenatal clinic in a relatively satisfactory manner. Her first attendance was at 4 months gestation. She paid regular visits at the clinic. In all she attended six times. She had no proteinuria and her blood pressure readings did not reveal any abnormality.

She was breast feeding since the birth of her first born and her menses never recurred. She was screened for asymptomatic bacteriurie and syphilis. Both were negative. At the peripheral clinic, malarial prophylactic medication were given together with iron and folic acid supplements as described in the introduction. Her last visit was at 36 weeks of gestation when a booster dose of tetanus toxoid was given. Three days later the patient started to have labour pains. She went to the clinic where the diagnosis of fetal distress was made and an urgent transfer to the consultant's hospital was effected.

PAST OBSTETRIC HISTORY

She had a spontaneous vaginal delivery of a full term male baby in June 1981. She could not recollect the weight of the baby.

GYNAECOLOGICAL HISTORY:

Her menarche was at 13 years. The menses were of 5 days every 30 days, moderately painful. Resumed coitus 4 months after her delivery. She had no dyspareunia. She neither used contraceptive pills nor intrauterine contraceptive divices. There was no history of any gynaecological operation.

PAST MEDICAL AND SURGICAL HISTORY

There was nothing significant.

FAMILY AND SOCIAL HISTORY

There was no family history of diabetes mellitus or twins. She could not tell with certainty about hypertension in the family. She was a housewife with secondary school education. She neither smoked cigarretes nor drank alcohol.

PHYSICAL EXAMINATION

Her height was 150 centimetres. She was anxious, moderately pale not in agonizing pain. She was anicteric and had no ankle edema. Her axillary temperature was 36.5° centigrade. Her thyroid gland was not enlarged.

The breasts were active and the nipples were not retracted. There were no intramammary lumps.

THE RESPIRATORY SYSTEM

No obvious clinical abnormality was detected during the examination.

CARDIOVASCULAR SYSTEM

The pulse rate was 100 per minute regular good volume. The blood pressure was 130/90 mm of mercury. The heart was normal.

ABDOMINAL EXAMINATION

The abdomen was evenly enlarged and non-tender. The fundal height was equivalent to 36 weeks pregnant. The lie was longitudinal. The fetus presented by the vertex and was engaged. The uterus relaxed well between contractions and was non-tender. The fetal heart was not heard.

The liver and spleen were not palpable and the renal angles were non-tender.

VAGINAL EXAMINATION

This was done as outlined in the introduction. The external genitalia were normal. The vagina appeared healthy. The cervix was full effaced and the dilatation was 6 centimetres. The membranes were intact. There was no cord presentation. The position of the fetus was left occipito anterior. The level was 4/5. During the examination the fetal membranes ruptured spontaneously with the passage of copious amounts of dark blood stained amniotic fluid.

The sacral promontory was not reached. The sacral curve was normal. The ischial spineses were not prominent and the pubpubic arch accommodated two fingers easily. The intertuberous distance at the outlet was four and half knuckles (i.e. 8 centimetres).

DIAGNOSIS

A provisional diagnosis of intra-uterine fetal death with presumptive abruptio placentae was made.

MANAGEMENT

The plan was to expedite delivery and to forestall the anticipated ensuring shock. To correct the anaemia. It was decided also immediately to make baseline assessments of the patients coagulation factors.

INVESTIGATIONS

1. Bed side clothing time was 6 minutes
2. Platelets count was 150,000 per cubic millimetre (Results were later communicated by phone)
3. Fibrinogen level was 400 mg%
4. Haemoglobin was 55%
5. Serum urea 13mg/100ml
6. Serum creatinine 1mg/100ml
7. Urine for protein +
8. Urine for glucose was negative

Blood was taken for grouping and cross matching and an urgent request for 4 pints was made. A normal saline drip was set using an 18 gauge needle. The patient was sedated with 15mg of morphia intramascularly. An indwelling catheter was inserted to monitor the urinary output.

Labour was augmented with syntocinon 5units in 500 millilitres of 5% dextrose. The starting infusion rate was 20 drops per minute, to be increased at quarter hourly interval by 20 drops till the rate of 60 drops per minute was reached and good uterine contraction were obtained.

PROGRESS OF LABOUR

Progress of labour was satisfactory. Within two hours, the patient received 1 litre of Normal saline, two points of blood and 500ml of 5% dextrose with the syntocinon. Her pulse rate was 90 per minute regular good volume. The blood pressure was 140/90 mm of mercury. The contractions were strong. The cervix was 9cm dilated. The presenting part was 3/5 in the pelvis. The urinary output since the insertion of the indwelling catheter was 100ml. Proteinuria +.

Within the next half an hour the second stage of labour was reached. She was instructed to bear down with each contraction. As the head was crowrning a "J" shoped episiotomy was performed and the patient delivered a fresh still born baby.

Injection ergometrine 0.25mg was given intravenously with the delivery of the anterior shoulder. The placenta was delivered by cord traction within 2 minutes. There was a substantially large retroplacentol clot. The placenta had an area of infarction at one of the edges. The placenta which weighed 430gms was complete together with the membranes.

THE BABY

Apgar score was 0

Sex: [illegible]

Weight [illegible]gm

There was no overt congenital abnormality

THE MOTHER

The post delivery general condition was satisfactory. The blood pressure was 130/90mm Hg. Her pulse was 92 per minute regular good volume. Vaginal bleeding was minimal. The episitotomy was immediately repaired as described in the introduction. The uterus was well contracted.

After 24 hours, in all she had received 3 pints of blood. She remained afebrile. Her urinary output was satisfactory. The uterus was well contracted. There was no episode of abnormal vaginal bleeding. She was then transferred to the postnatal ward. The indwelling catheter was removed and the patient was started on tablets nitrofurantoin 200mg three times daily for 10 days. She was discharged 4 days later in good general condition with a haemoglobin of 9.5g/dl. Lactation was not established and was advised not to express her breasts.

FOLLOW UP

She defaulted.

COMMENTARY

Abruptio placentae is a gross complication of pregnancy. At Muhimbili Medical Centre 1.1% of all deliveries between 1st July 1979 to 30th June 1980 were complicated by abruptio placentae.

It is usually associated with very high perinatal mortality. The incidence of painless abruptio placentae was not specified. It is quite an uncommon occurrence. Painless abruptio placentae is said to occur in cases of posteriorly inserted fundal placenta and this condition is characterised by vaginal bleeding associated with backache(1). Backache may be related to the extravasation of blood into the posterior uterine musculature and serosa(2).

The diagnosis could be very intriguing unless ultrasound is utilized to locate the placenta. In this patient the diagnosis of abruptio placentae was initially based on the accidental discovery of the blood stained amniotic fluid and this was later substantisted by the presence of the retroplacental clot. In this particular case there was no evidence to correlate the common coincidental factor of preeclampsia with the abruptio placentae.

Syntocinon was used to hasten the delivery and to forestall any chance of uterine atony developing in the post partan period. It is well documented that the prolongation of delivery interval in abruptio placentae is associated with very high incidence of hypofilrinogenaemia and renal failure, especially in the presence of dead fetus. Liberal blood transfusion is the mainstay of combating shock in abruptio placentae. The use of fresh whole blood is ideal as it contains all clothing factors and has adequate 2, 3 DPG levels in comparison to the old stored blood which has low levels of 2, 3 DPG.

Delivery must be expedited and the use of syntocinon should be quickly resorted not with standing the objection of equating its use to "flogging a tired horse"

Some caution augmentation of labour on the pretext that labour progresses spontaneously when the membranes are ruptured and that syntocinon is difficult totitrate when the uterus is tense and tender and contractions cannot be gauged (3) (The patient belonged to a different clinical entity). It appears from the investigations which depicted the coagulation profile, that the parameters are normal. However coagulopathy is a dynamic process and it could well be that she was at the cross-road between the accelerated coagulation and the established coagulopathy. In a situation like this clothing time, clothing factors and fibrinogen levels are within normal range whereas fibrinogen monomers and fibrinogen degredation products are elevated (4) (In our setting facilities for screening these factors are lacking).

Due to the limitation of our knowledge of the primary cause of initial placental separation to date no specific recommendations can be made as far as the prophylactic measures are concerned.

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CORRELATION BETWEEN BUBBLE STABILITY TEST WITH WEIGHT OF THE NEWBORN AND ASSESSMENT OF FETAL MATURITY BY CLINICAL PARAMETER IN PREGNANT WOMEN

SUMMARY:

The Bubble stability test was done on 120 amniotic fluid specimens collected via the suprapubic approach without prior localisation of the placenta from the patients scheduled for elective caesarian section and induction of labour. An analysis of the use of the Bubble Stability Test in the 120 cases is presented. Complications encountered during the amniocentesis are also analysed.

The results showed that when an obstetrician evaluates the fundal height of the pregnant woman and considers the fetus to be term by palpation coupled with any other parameter from the history or physical findings the chances of getting positive shake test are 60%. The analysis also revealed that when the shake test is positive the chances of getting a baby weighing 2.5 kg are 59.1%. It has been established that amniocentesis without prior infiltration of the skin with local anaesthetic agents is quite tolerable in 91% of cases.

INTRODUCTION:

Elective termination of pregnancy in many pathological conditions is of vital importance in preventing intrauterine death and in increasing the survival rate of the newborns.

Wether in normal or abnormal conditions delivering a preterm baby is least desired due to the well known hazards of the premature baby. In developed countries due to sophisticated management in ultra-modern neonatal units, the survival rate of premature babies has undergone tremendous improvement. This is diametrically opposed to the conditions in the developing countries where perinatal mortality is very high and prematurity is top most on the list of most important causes of perinatal death. While in developed countries there is a steady drop of the rate of perinatal death,(1) the trend of events in the developing countries is unfortunately disappointing. In Tanzania at Muhimbili Medical Centre the perinatal mortality rate in 1976 was 44.7 per 1000 total births; in 1978 52 per 1000 total birth and in 1980 42.9 per 1000 total birth, thus there is no marked improvement.(2)
A number of parameters have been worked out to determine fetal maturity and the obstetrician to date has a large arsenal at his disposal but almost all of them require highly skilled manpower, ultra-modern laboratories expensive and time consuming techniques. A developing country cannot afford to equip its hospitals with such sophisticated and expensive gadgets. Yet we are faced with conditions which force us to terminate pregnancy. Delay especially in high risk pregnancies for instance EPH - Gestosis and others could lead to a sharp increase in pregnancy wastage. Some acute obstetric complications necessitate immediate delivery in the maternal interest.

other complicated pregnancies are allowed to continue until the risk of neonatal death from prematurity no longer exceeds that of intrauterine fetal death from placental insufficiency. The processes of growth of the fetus in size and weight and its functional development are not the same. How salvegable the fetus is after delivery depends on functional development, the most essential factor being the ability of the lungs to expand and maintain adequate ventilation.(3) The appearance of the surfactant indicates that functional pulmonary development has begun and this actually makes extrauterine survival a possibility.

Gluck et al were the first to show that components of the surface active material are phospholipids mainly lecithin which increase with advancing gestation.(4)

The bubble stability test is a rapid and simple bed side test for the estimation of pulmonary surfactant in amniotic fluid. The rational of this test is based on the ability of pulmonary surfactant to form highly stable surface films that can support the structure of a foam for relatively long periods, as other substances in amniotic fluid such as proteins, bile salts, or salts of free fatty acids, can also form a stable foam, these are excluded from the surface films by the nonfoaming competitive ethanol.(5)

In this study the shake test was done and the results are correlated with the clinical parameters for assessing fetal maturity in vogue at Ilishabili Medical Centre. The weights and apgar scores of the newborns were followed up.

SPECIFIC OBJECTIVES:

(1) To do the bubble stability test on all patients who are scheduled for induction of labour or elective caesarian section.

(2) To note down the fundal heights of these patients as assessed by the obstetricians and senior residents in obstetrics.

(3) To follow up the weights of the babies born after the amniocentesis and shake test.

(4) To correlate the results of the foam test with the fundal heights and weights of the newborns.

(5) To analyse the complications encountered during the amniocentesis.

MATERIAL AND METHODS: - (5, 6, 7, 8, 9)

All pregnant women who were scheduled for elective caesarian section or induction of labour for variety of reasons at the New Maternity Block - Ahmadu Bello Medical Centre. Patients with concurrent infections and those whose presenting parts were engaged were not included in the study. Amniocentesis was done on selected patients. Those with antepartum haemorrhage, preterm rupture of membranes and rhesus negative were excluded from the series.

TECHNIQUE AND PROCEDURE:

The patients were made fully aware of what was being done and what they were likely to experience during the procedure. Their consent were sought and obtained.

Immediately prior to the amniocentesis the patients were requested to empty their bladders. Placental sites were not ascertained prior to the procedure.

With the patient lying supine, the abdomen was gently palpated and the site for puncture selected. A sepsis was observed and sterile amniocentesis trays were used. The transabdominal suprapubic midline technique was adhered to during the amniocentesis. Fetal hearts were auscultated before and after the procedure.

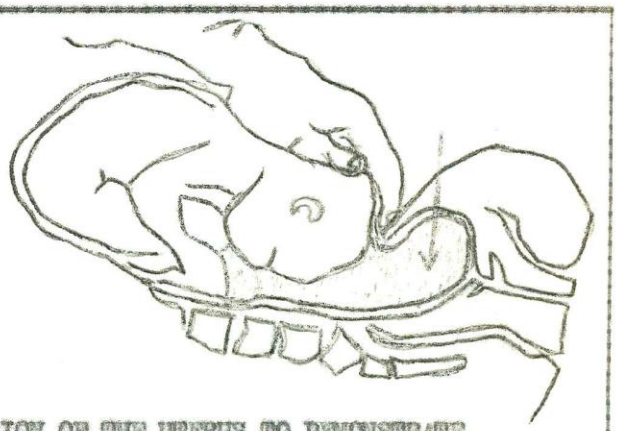
Initially a test was done to detect that an ample pool of liquor could be created between the presenting part and the internal os of the cervix. The presenting part is lifted out by the hand. If the lower abdominal wall retains its contour - Liquor is adequate (Liquor flows around the head to fill the space previously occupied by the head). If the abdominal wall contour becomes indrawn excessively as the head is lifted up - liquor is diminished. Also useful to examine the patient vaginally while lifting the head abdominally you get a three dimensional impression of the size of the liquor pool and the likelihood of inserting the needle too near the cervix is avoided but this extramanoeuvre was not done.

Then the site of amniocentesis was prepared as for laparatomy (spirit was used for cleaning). The author washed his hands with soap and water and put on sterile gloves. The presenting part was lifted as far up as possible into the abdomen and held steady. Then a needle (No.21 or 20) and a syringe (2cc or 5cc) were taken.

TARGET AREA:- 4 centimetres wide just below the presenting part, midline in this narrow rectangle. Ideal spot is just below the presenting part.

LINE OF APPROACH:- The needle must be perpendicular to the uterus at the line of entry so as to traverse minimum of myometrium.

The needle inserted in one movement and the liquor was with drawn, while the head was kept out of the way. 2 mls of Liquor had been collected the syringe was disconnected from the needle before withdrawing it from the abdomen and then the needle was withdrawn. This markedly reduced the incidence of contamination of the amniotic fluid with blood. (When the needle and syring are removed together, elimination of the negative pressure inside the syringe is far from complete and blood is drawn into the syringe from the myometrium) upon completion of the procedure the site of the puncture was swabbed with a spirit gauge and the fetal heart auscultated.



A SAGITTAL SECTION OF THE UTERUS TO DEMONSTRATE THE TECHNIQUE USED FOR AMNIOCENTESIS

THE BUBBLE STABILITY TEST:

Immediately on obtaining the fresh liquor not contaminated by blood or meconium, 1ml was placed in a clean test tube and one ml of 95% ethanol was added, a parafin gauze then placed on top of the test tube which was shaken vigorously for 15 seconds after which it was placed vertically. In a second test tube 0.5ml of the amniotic fluid was placed and to it was added 0.5ml of 0.9% saline then one millilitre of 95% ethanol was added. Parafin gauze was placed on top of the tube which was then shaken vigorously for 15 seconds.

The results were read after fifteen minutes.

INTERPRETATION OF THE RESULTS

The first test tube	The second test tube	Fetal Status
1:1 dilution	1:2 dilution	
Complete ring of bubbles	Completering of bubbles	MATURE
Completering of bubbles	No completering of bubbles	Intermediate maturity
No completering of bubbles	No completering of bubbles	IMMATURE

PRECAUTIONS:

(a) The test tubes were cleaned with a dichromic acid solution and then rinsed sixtimes. Dichromic acid is constituted by adding 10 grammes of Potassium Dichromate, 25mls, concentrated sulphuric acid and 75mls distilled water. Thus removing all remants of soap, serum, or biological fluids which might produce foam and give false positive results.

(b) The final concentration of ethanol in the solution is critical and the stock bottle was kept tightly closed except during withdrawal as this concentration of alcohol is hygroscopic.

(c) The test tubes were not moved after the foam was produced. Because movement of the glass tubes may break the foam or distribute it over the sides of the tube so that it is difficult to detect.

(d) Evaporation from the foam could decrease the stability, especially in hot, dry rooms. Paraffin gauze were used to cover the tubes so as to minimise evaporation.

(e) Specimen with overt contamination with blood were discarded.

RESULTS:

TABLE I: KNOWLEDGE OF THE FIRST DAY OF THE LAST MENSTRUAL PERIOD

CERTAIN OF DATES	36	26%
DATES UNKNOWN	104	74%
TOTAL	140	100%

TABLE II: INDICATIONS FOR PLANNED ELECTIVE DELIVERY

EPH-GESTOSIS	65	46.4%
PREVIOUS CAESARIAN SECTIONS	32	22.9%
"POSTMATURITY" OR PROLONGED PREGNANCY	23	16.4%
INTRAUTERINE GROWTH RETARDATION	10	7.1%
PREVIOUS BAD OBSTETRIC HISTORY	6	4.3%
DIABETES MELLITUS	4	2.9%
TOTAL	140	100%

TABLE III: RESULTS OF THE SHAKE TEST Vs WEIGHT OF THE NEWBORN

	WEIGHT 2.5	WEIGHT 2.5kg
POSITIVE	71 (59.1%)	14 (11.7%)
INTERMEDIATE MATURITY	6 (5%)	5 (4 .2%)
NEGATIVE	9 (7.5%)	15 (12.5%)

TABLE IV: RESULTS OF SHAKE TEST Vs FUNDAL HEIGHT AS ASSESSED CLINICALLY BY PALPATION

	TERM 37 WEEKS	* 37 WEEKS
POSITIVE	72(60%)	8(7%)
INTERMEDIATE MATURITY	4(3%)	7(6%)
NEGATIVE	19(16%)	10(8%)

* Shake test was done on these patients though by palpation their fundal heights appeared preterm, some were sure of dates and others had bad obstetric history and by extrapolation as per records of their antenatal cards they were considered to beterm.

TABLE V: COMPLICATIONS OF AMNIOCENTESIS

BLOOD STAINED LIQUOR	8 MICRO - 20 MICROSCOPIC	28 (20%)
BLOODY TAPS		9 (6%)
DRY TAPS		11 (8%)
UTERINE HAEMATOMA		5 (4%)
PREMATURE RUPTURE OF MEMBRANES		4 (3%)
DIZZINESS		2 (1%)
ONSET OF LABOUR WITHIN 24 HOURS		2 (1%)

TABLE VI: TOLERANCE TO THE PROCEDURE OF AMNIOCENTESIS

TOLERABLE LIKE A VENEPUNCTURE OR INTRAMASCULAR INJECTION	128	(91%)
VERY PAINFUL PROCEDURE	12	(9%)

TABLE VII: OUTCOME OF THE NEWBORNS

Apgar Score 7	120	86%
Apgar Score 7	3	2%
Fresh Still Births	3	2%
Macerated Still Births	2	1%
Neonatal death	2	1%
Not recorded	10	8%
Total	140	100%

Cases of macerated still births were due to intrauterine growth retardation and these patients were left to go into spontaneous labour about a week or more after the bubble stability tests were done with positive results. One of the patients who had fresh stillbirth developed fever and premature labour and the shake test was done on request to act as a guide to the initiation of steroid therapy. Other remaining cases of low apgar scores and perinatal deaths were due to intrapartum complications.

DISCUSSION

As discussed in the introduction the importance of the history taking and physical examination data are clearly demonstrated in our set up where hardly any other method is used to assess fetal maturity apart from the traditional clinical tools namely the last menstrual period and fundal height estimation. Herts et al tried to establish rules for avoiding preterm delivery by clinical estimation of gestational age.(10) In a series of 690 pregnancies the correlations of menstrual history (LMP), fetal heart tones and quickening with gestational age based on the Dubowitz examination at birth, were examined and a conclusion was reached that carefully obtained history and physical examination information remains a cornerstone of appropriate obstetric care.

In this study it has been clearly shown that the use of a last menstrual period in assessing gestational age is completely out of question (See table I) where 74% of the patients did not know their last menstrual period. Thus it was not possible to revalidate this clinical parameter with the results of the foam test. Singh et al gives even a higher figure of women who do not know their dates in the developing world as 95%.(11)
The clinical parameter which plays a decisive role in establishing the fetal maturity in this study is the fundal height.

One ought to take into consideration the inexactitude which underlies palpation of fundal height e.g. thickness of maternal soft tissue, obesity, variation in liquor and tone of the uterus. Though the symphysis fundus tape measurements are closely related to the fetal crown-rump length[12] and have excellent correlation with the ultrasound findings[13], and they do reflect well with fetal growth[16] none of the patients in this study had symphysis, fundus measurement taken (or recorded).

In this study 60% of the positive shake test corresponded with fundal height of 37 weeks or more gestation. In fact if the interpretation of the shake test is to be broaden and results of the intermediate maturity are to be regarded as positive[14], the percentage will be 63.1%.

There is a good correlation between the results of the bubble stability test and the lecithin sphingomyelin ratio. When positive results of the shake test are obtained it would seem unnecessary to proceed to the more costly and time consuming L/S ratio determination.[15] A complete ring of foam or means 98% chance that the Lecithin/Sphingomyelin ratio is equal to 1.8 or more and 92% chance that the ratio is equal to 2. In amniotic fluid analysis in 578 samples conducted by Richard et al[16] the lecithin/sphingomyelin ratio correlated positively in a highly significant fashion with the rapid shake test.

This series also indicated that the bubble stability test could be used as a primary method with the Lecithin/Sphingomyelin ratio being useful as an additional indication of fetal lung maturity when the amniotic fluid sample was contaminated with blood. The results of the shake test were correlated with the actual birth weights of the babies (See table III). The weight of 2500gm was taken as a cut off point. 59% of the positive shake test corresponded with birth weights of 2.5Kg or more. In O'Dowd series in Zambia 32 babies weighed between 2500 - 4200 grammes and in all of them the bubble stability test was positive.(8)

As a diagnostic or therapeutic procedure little has been documented at Muhimbili Medical Centre. Indications for the foam test in this study are listed in table II, compare with the indications for amniocentesis at Kenyatta National Hospital, Nairobi.(17)

Previous c/s for elective c/s	46.92%
Previous Bad Obstetric History	21.45%
Post dates	3.8%
Diabetes Mellitus	1.8%
Hypertension	8.6%
Antepartum haemorrhage	4%
Variable lie at term	2.8%
Elderly Prim	1.8%
Rhesus disease	1.6%.

It is interesting to note that in our series EPH-Gestosis is topmost in the list 46.4% while hypertension in the Nairobi series formed only 8.6%. Previous caesarian sections comes second in our series 22.9 while at Kenyatta National Hospital it appears to be the predominant indication. This difference probably implies the type of obstetric/pregnancy complications and practice at the two institutions.

Though amniocentesis is regarded as a simple and innocuous procedure it is not devoid of complications. Table VI depicts the complications encountered in this series. A summary of complications encountered in the series reviewed by Aggarwal and Mati at Kenyatta National Hospital is reproduced here for comparison purposes. (In these series prior localisation of the placenta was also not done).

COMPLICATIONS:

Bloody taps	13.8%
Meconium Stained Liquor	6.9%
Premature rupture of membranes	1.3%
Onset of labour Within 24 hours	0.8%
A.P.H. (Abruption)	0.2%
Dry taps	4.6%

ASPIRATION OF BLOOD OR BLOOD STAINED LIQUOR:

In the aforementioned series no distinction is made between bloody taps and blood stained liquor. By bloody taps we mean aspiration of pure blood which probably indicates that the needle is within the substance of either the myometrium or the placenta. Bennet gives the mean incidence of this complication as 30% with a variation from 1.9% to 66% reported in the literature.(6) Roger Peel et al in amniocentesis with and without ultrasound control showed that 17.6% had blood stained amniotic fluid in the former group and 43.5% in the latter group and they recommend ultrasound as a necessary prerequisite to amniocentesis.(18) However in a prospective study by Lawrence et al the results suggest that ultrasonic placental localization is not helpful in avoiding bloody taps.(19) V.P. Aggarwal and J.K.G. Mati also concluded that amniocentesis can be safely performed even in units without facilities for placental localisation. The elucidation of feto-maternal haemorrhage by Kleihaur test was beyond the scope of this study.

ONSET OF LABOUR WITHIN 24 HOURS:

A low incidence of 1.4% is reported in this study, this could be explained by the fact that the procedure of amniocentesis in most cases was done one day before the scheduled induction or elective caesarian section. However even in the Nairobi series an incidence of 0.9% is reported.

Premature rupture of the membranes was 4.3% but there was no case of amniotic infection syndrome. Different authors have reported the occurrence of both chorio-amnionitis and the unexplained feature of maternal pyrexia with rigor.[23] Fairweather and Walker regard this latter condition as a result of minute emboli.

CONCLUDING REMARKS:

In assessing fetal maturity no single method is ideal. The best approach is by a combination of methods. The modern trend in the developed world is towards more and more sophistication in the use of ultra-modern gadgets and away from the traditional clinical tools of history taking and physical examination.

We need to complement our clinical tools by integrating the cheapest and simplest "appropriate technology" at our disposal amniocentesis and bubble stability test. These old ancilliary tools were revisited in this study. Working in an environment where even an amnioscopy is not available, amniocentesis and the foam test could be of tremendous help in ameliorating the quality of patients management and a big boost in enhancing the confidence of the doctors in their decision making.

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PUERPERAL TABOOS AND RITUALS AMONGST URBAN AND RURAL ZANZIBARIS

SUMMARY:

In this study conducted January/February 1982 a cross sectional survey of the rural population and town dwellers of Zanzibar was done by means of questionnaires inorder to identify the type of taboos and rituals still in vogue relative to the puerperium.

The results show the presence of food taboos and prescribed ritualistic behaviour among all postparturient Zanzibaris with differences on emphasis from one area to another. They are mostly based on the belief that maintenance of the mothers health during the postpartum period is dependent upon her observation of the taboos and prescribed rituals.

INTRODUCTION:

The main concern of developing countries is on development and progress, Tanzania is no exception. In building the society of the future, the emphasis in Tanzania, however is put on drawing from our traditional heritage.
Traditions still form a force to be reckoned with as far as our society is concerned. Our people are still influenced in their thinking, behaviour and action by beliefs and practices inherited from our forefathers.

Various societies in their different levels of development had certain rituals and taboos which reflected their intellectual and emotional response in providing meaning to the day to day activities of nature.

Some of the old ways withered away others more innovative are implanted. Cross cultural contacts facilitated entrenchment of new taboos and rituals and disappearance of others. This is especially so in relation to the east coast of Africa and in particular to Zanzibar "the Island Metropolis" in the Indian Ocean.(1).

It is now well recognised that understanding and knowledge of traditional beliefs and practices are of paramount importance in the proper management of our patient. In this study an endeavour in that direction has been made.

Postparturient mothers have been subjected to a variety of rituals and taboos, some of them quite harmful, e.g. hot pepper douches are given to central African women from the fourth postpartum day until the lochia has ceased. North African women squat over a large bowl of boiling water infused with herbs which frequently results in scolding (2). In oman salt is packed in the vagina (3).

Although modernization and aping of western values have a definite impact on societies of developing countries, people do not easily abandon their traditional values. In China inspite of socialism and the cultural revolution, women according to Bils'bury are still observing " doing the month" (4).

The aim of this paper is to try to identify the type of puerperal taboos and rituals still taking place in Zanzibar.

The information obtained would help to identify the weakness and strength of the taboos and rituals and this should form the basis of effective education programme aiming at promoting the positive aspects and up-rooting the harmful ones. We ought to bear in mind that however wrong the reasoning and pseudoscientific the arguments put forward to explain the beliefs and customs, some of the practices adopted by the people are not harmful.

MATERIALS AND METHODS:

This study was done between January and February 1982 in Zanzibar urban and rural regions. Pemba island was not included.

In Zanzibar town the only two M.C.H. Clinics were selected, one at the main hospital and the other at Mwembeladu maternity home. Across sectional survey of the rural area was done including the island of Tumbatu off the north-west coast. In selecting the target areas, a randomised sampling of the units in the already classified districts of the north, central and south was employed.

District	Unit Studied	Population Surved by the Unit
Central	Uzini	5927
South	Makunduchi	8897
North	Mkokotoni	1170
	Tumbatu Gomani	4764

The open ended questionaire was administered to parous women. These were selected from the female patients who were attending the clinic for one reason or another plus those who were requested to attend the clinic for the sake of interviews (organized with the help of local dispensary staffs and party chairmen who had prior knowledge of the interviews date).

The actual interview was conducted in Kiswahili by the author and his assistants (M.C.H. Co-ordinator and M.C.H. Aider who had been trained in interviewing with the questionaire) In Makunduchi we had a talk with five traditional birth attendants concerning the customs and beliefs of the puerperium.

BACKGROUND:

Zanzibar island (Unguja) has three regions each with two districts. The population according to the 1978 preliminary report on census is 273365; female of reproductive age 14 - 44yrs is 53079; of these 23,554 are urban dwellers and 29,525 are rural In Zanzibar there is one hospital which caters for the urban population and receive all referrals from the countryside. There is also a maternity home, both have M.C.H. services. In the rural areas most of the dispensaries have M.C.H. Services.

Zanzibar is the core of the Swahili speaking population of East Africa. Almost all of the inhabitants are muslim. For centuries this island was subjected to constant contact with the people of the middle and far-east. Thus the impact of the orient on the people, culture and social institutions of Zanzibaris are quite conspicuous.

RESULTS:

During the period of study it was established that certain patterns of rituals and taboos are common among almost all post-parturient Zanzibaris irrespective of their age differences (Table I)

Rituals and Taboos still taking place in Zanzibar during the Puerperium.

FOR WOMEN:- (a) Confinement period and observation of 40 days of ritual pollution.

(b) Roasting and hot water massage (related to the need to expell the blood and dry out the womb).

(c) Abstention from eating cereals, rice cooked with coconut, fruits like banaras and fish with sales for at least seven days postpartum (Cereals are believed to cause abdominal distension and discomfort).

(d) Tea and drinking of water are proscribed in Tumbatu (breech of this taboo is said to prolong lochial discharge).

(e) Crossing the sea channel (Tumbatu) is prohibite (Believed to be abdomen-matorgal death and drowing are associated with it).

NEWBORN:

(a) Call to prayer "Kuadhiniwa" is whispered to the baby within 24 - 48 hours after birth.

(b) Breastfeeding is not initiated immediately instead a wet nurse is given the task for few days (practiced in the North - colostrum is considered inappropriate for feeding the newborn).

FOR MEN: Husband or close male relative is the one who is supposed to whisper the prayer to the child.

Age Breakdown of those interviewed Table I:

	15 - 24	25 - 34	35 - 44	45 - 54	Total
Urban	25 (42%)	33 (55%)	2 (3%)	-	60(100%)
Rural	37 (53%)	30 (43%)	3 (4%)	-	70(100%)
Total	62 (48%)	63 (48%)	5 (4%)		130(100%)

This table shows that most of those interviewed are below 35 years of age.

Reasons for conforming to the puerperal taboos and rituals Table II:

	To maintain the health of the mother	Religious obligation	Just to please the parents	Fear of reprisals for failing to keep off or appease the devils (Jinnis)	Total
Urban	43(72%)	-	17(28%)	-	60(100%)
Rural	49(70%)	-	-	21(30%)	70(100%)
Total	92(71%)	-	17(13%)	21(16%)	130(100%)

Educational Status Table III

	No Education	Primary	Secondary	Higher Education	Only K. School	Total
Urban	15 (25%)	30 (50%)	15 (25%)	-	-	60(100%)
Rural	32 (46%)	23 (33%)	1 (1%)	-	14 (20%)	70(100%)
Total	47 (36%)	53 (41%)	16 (12%)	-	14 (11%)	130(100%)

In Koranic School children are taught how to read the holy book more or less ink a parrot manner. Reading and writing Kiswahili using the Arabic script used to be taught in some of these schools.

Compare percentage distribution of population according to school attendance by age groups (for Zanzibar):

Age Groups	Never attended school
15 - 19	45%
20 - 24	65%
25+	80%

The position of females is decidedly worse than that of males. (Data quoted from population of Tanzania census (1967) Vol 6 PP123 - 124).

CONFINEMENT PERIOD:

Forty days after childbirth are known as "arubaini", in kiswahili which literally means forty thus marking the period of taboos and ritual observation. The "arubaini" begins with childbirth either in the home or the hospital. During this period the postparturient mother is considered to be having "ujusi" a state of ritual pollution. Therefore devetional, social and sexual activities are prescribed. She cannot attend social gatherings e.g. burial on wedding ceremonies. She is prohibited from saying her prayers, is confined at home and exempted from performing her household activities.

In the rural areas women resume their day to day activities e.g. fetching water and cooking after seven days. The child at this juncture is allowed to see the sun. The state of ritual pollution continues.

Practically all women interviewed "hukalia moto" literally "sit on fire" (roasting). The mother soon after parturition is washed in hot-water and massaged and then stands over a fire (prepared of coconut shells or charcool) with her apart legs after that she will go and sit on a chair or lie on bedstead which for the moment has no mat on; and a fire under it for some hours daily.

On completion of "arubaini" the mother has to undergo ablution kukoga "arubaini" literally to take bath of the forty days. Only then is she able to regain her original status in the society infact an enhanced and more respected one of motherhood.

DISCUSSION:

This study has shown that most of the prevalent taboos and rituals are limited to the mother. The father and child are involved in the ritual of whispering the call to prayer though the husband is not the only person to perform this ritual as noted earlier in the results. In other cultures the husband plays a rather active role in postpartum confinement. Among the Lan tsn Miao tribe in Kweichew, South China the husband not only takes to his bed but takes care of the baby as well, husband "mothering" a form of "confinement couvade" (H. K. Heggen hougen Father and Childbirth).

In the past the child was subjected to a number of rituals. According to Ingram at the head of the child are laid lemon, razor, a silver chain and its mothers waistbeads.

This is to keep off the devil (N.B. none in the urban area put forward this as a reason for conforming to rituals and taboos, though 30% of those interviewed in the rural areas still believe in it see Table II). The period of confinement lasts until the umbilical cord falls off which is usually 7 days. (Probably Ingram here refers to a period of lesser confinement "arubaini ndogo" when the mother observes almost complete bed rest). Probably economic constraints upon peasant and poorer urban women do not allow them the ease in observing "arubaini." Shaving of the hairs and male circumcision do not have a consistent pattern in relation to the puerperium and therefore were excluded from the list of puerperal rituals. Almost all of those interviewed entertain the belief that rosting and hot water massage are very useful for drying up the postparturient mother who is considered to be raw and wet and hence very vulnerable to cold which is associated with a score of diseases.

It is interesting to note that the concept of avoiding cold and ingesting hot diet coupled with rosting and hot water massage during the puerperium probably draw its origin from the humoral medical theory though in a less well articulated form. This theory is traced to the classical traditions of Hippocrotes and Galen. The crux of the humoral theory is that body and foods are classified as hot and cold and there is a parellel classical differentiation of wet and dry. According to this theory health is maintained through equilibrium and disease is due to disruption of this balance.

Viewed from this perspective the puerperal rituals and taboos do testify to the widespread nature of the humoral medical theory. This is easy to understand as regards the cosmopolitan nature of Zanzibar.

Moslem traders were probably largely responsible for disseminating these cutstoms and beliefs. As we know the Arabic medical tradition during the zenith of Islamic civilization did extensive borrowing from Hellenic sources. Therefore as far as the folk traditions of the indigenous people of East Africa are concerned an element of acculturation cannot be ruled out. Approaching the subject of taboos and rituals analytically following the system advocated by Williams and Jelliffe whereby the customs are classified into four categories namely harmless, harmful, uncertain and beneficial give us a more profound insight.

BENEFICIAL:

In this category can be included the period of seclusion and abstinence from sex. It helps to protect the baby and the mother from infection. Sexual abstinence will promote child spacing especially when the concept of modern family planning has not yet been incorporated in the MCH services of Zanzibar. Hot dishes will help reduce food poisoning due to the presence of bacteria and toxins by eating food left overnight particularly in the rural areas where preservation facilities are non-existent.

HARMFUL:

Cereals, fish and fruits are cheap sources of proteins and vitamins for the islanders. There proscription is a matter of grave concern. Though meat and chicken are encouraged few can afford them. Limitation of fluid intake (among the Watumbatu) coupled with rosting can lead to severe dehydration (compare proscription of newly harvested rice

and prohibition of fresh well water a few days after the birth among the zaramo of bagamoyo and kisarawe 1973 National Demographic Survey of Tanzania). The taboo of not crossing the sea channel (In fact crossing the channel is anathema from 6 months of gestation to within 3 - 4 months postpartum) leads to a number maternal death, since none of the complications of pregnancy, labour or puerperium can be dealt with in Tumbatu island where there is only an NCH aider to be consulted. All problems cases should be referred to the only hospital in Zanzibar town.

Under this category should also be included the practice of allowing the wet nurse to breastfeed the newborn for few days which deprives the baby of much needed maternal antibodies abundantly present in the colostrum.

HARMLESS:

The ritual of whisfering the cell to prayer in the first 24 - 48hrs after birth by the husband or a close male relative but one must be cautions against indescriminate handling of the neonate.

UNCERTAIN:

Roasting and hot water massage come under this catogory. dehydration could be a dangerous sequela as a result of excessive sweating and subsequent insensible loss of water particularly when the ritual of roasting is compounded by the taboo of limiting fluid intake.

CONCLUSION AND RECOMMENDATIONS:

The study revealed that postparturient women regardless of whether they reside in the urban or rural areas follow dietary and behavioural taboos and rituals. The underlying reason is mostly to ensure that healthy puerperium reflecting the prevailing beliefs regarding the physical changes and ritual vulnerability.

There is an urgent need to wipe out illiteracy and uplift the standard of education of the people. (N.B. None of those interviewed had higher education and 47% had no modern schooling) while 41% had only primary education.

Finally applying the analytical approach advocated by Williams and Jellife the beneficial and harmless taboos and rituals should be tactfully utilized to promote health education in the antenatal clinics thus inculcating the ideals of modern medicine without anargonizing popular beliefs and practices.

ACKNOWLEDGMENT:

I wish to express my sincere thanks to Dr. Uledi of the Ministry of Health Zanzibar for his invaluable co-operation in making this study possible. I also thank Dr. Kris Heggenhougen for his valuable advice and correction of this paper and the Head of Community Medicine Department Dr. M. P. Mandara.

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GYAENACOLOGICAL CASE NO. I

RUPTURED ECTOPIC PREGNANCY

SALPINGECTOMY

PATIENT: MRS. A. L. AGE: 28 YEARS

IN-PATIENT NO: 258890

RESIDENCE: KARIAKOO, DAR ES SALAAM

DATE OF ADMISSION: 8th AUGUST 1981

DATE OF OPERATION: 9th AUGUST 1981

DATE OF DISCHARGE: 17th AUGUST 1981

S U M M A R Y:

A patient who was admitted with a history of amenorrhoea lowe abdominal pain, vomiting and vaginal bleeding was found to have a ruptured tubal pregnancy. She recovered well after emergency laparatomy and salpingectomy.

HISTORY OF PRESENT ILLNESS:

The patient was referred from Magomeni Dispensary and admitted via Casualty Department with history of amenorrhoea for two and half months and complaint of lower abdominal pain aggravated by micturition for three days. She had slight vaginal bleeding for 10 days which was not associated with the passage of clots. Later the pain became severe not responding to non-narcotic analgesics and sedatives. This was followed by vomitting and dizziness. There was no history of fever or blackouts. No history of trauma.

PAST MEDICAL HISTORY:

Not contributory. This was her first admission she denied history of tuberculosis, schistosomiasis or sexually transmitted diseases.

FAMILY AND SOCIAL HISTORY:

House wife. Does not smoke cigarretes. Occasionally drinks alcohol. No family history of diabetes mellitus. Married with three children.

GYNAECOLOGICAL HISTORY:

Menarche was at 15 years. The menstrual cycles were 3 - 4 days in every 28 days, regular flow without pain or intermenstrual vaginal bleeding. She did not use contraceptive pills or intra-uterine devices. Her last normal menstrual period started on 30th May 1981. No history of dyspareunca.

OBSTETRICAL HISTORY:

She was para 3 + 1 abortion in 1978 at three months gestation for which no evacuation was done. Her post abortion recovery was characterised with persistent slight vaginal bleeding which ceased uneventfully after few days. The other three were normal full term deliveries. Her last baby was born in 1975.

EXAMINATION: GENERAL EXAMINATION:

She was satisfactorily nourished, in pain and very pale. But not dyspnoeic or cyanosed. Her body temperature was 37^{o}C. Her tongue was dry and furred. There was no evidence of jaundice or peripheral edema.

CHEST EXAMINATION:

No abnormality was detected in the respiratory system. Breasts were normal and active.

CARDIOVASCULAR SYSTEM:

Jugular veins were not engolged and there was no cardiac enlargement. Her pulse rate was 120 per minute regular good volume and the blood pressure was 110/70 mm Hg. The heart sounds were normal.

ABDOMINAL EXAMINATION:

The abdomen showed suprapubic distension there were no visible veins, masses or peristalsis. Generalised tenderness was elicited on palpation and more marked suprapubically. Rebound tenderness and fluid thrill were all positive. There were no palpable masses and no renal angle tenderness. The liver and spleen were not enlarged. The suprapubic distenscon was tympanitic on percussion.

VAGINAL EXAMINATION:

The vulva was normal. Speculum examination was tender and revealed a healthy vaginal epithelium, a healthy looking cervix with a transverse slit and somewhat dark blood was visualized trickling through the external cervical os. On Bimanuol examination the cervix was soft and the os was closed. Cervical excitation was very tender. The uterus and appendages could not be appreciated due to extreme guarding. The pouch of Douglas was full, cystic and tender.

D I A G N O S I S:

Due to the history of amenorrhoea, clinical evidence of acute abdomen coupled with pallor, positive fluid thrill and absence of fever, the impression of a ruptured ectopic gestation was entertained.

INVESTIGATIONS:

Haemoglobin 5g/01

MANAGEMENT:

The patient was scheduled for urgent laparatomy so as to arrest haemorrhage. Preparation. An immediate intravenous infusion was started with normal saline and blood was collected for urgent grouping and cross matching. The patient was shaved and given pethidine injection 100mg intramascularly prior to her transportation to theatre.

ANAESTHESIA:

General anaesthesia was used

PROCEDURE:

The abdomen was opened up via the subumbilical median incision in the manner detailed in the introduction. There was a large haemoperitoneum and the initial peritoneal incision was small aimed at facilitating the collection of blood for autotransfusion. There were clots and the blood was altered. The incision was enlarged and an intact amniotic sac with a fetus of 6cm was found freely floating in the peritoneal acavity. The uterus was bulky corresponding to about six weeks gestation. Both ovaries and right tube were normal. The left tube was hyperaemic and edematous. It was ruptured at the ampulla part. The blood was oozing from the site.

The ruptured tube was clamped near the cornual junction and another clamp was applied on the mesovarium and complete salpingectomy was done. The stump was transfixed with No. 1 chromic catgut. About 2.5 litres of blood were sucked out, clots were removed and the peritoneal cavity was mopped of blood. Auto transfusion was not done as the blood was assumed to be unfit. The abdomen was closed in layers after ascertaining that haemostasis was achieved.

POST OPERATIVE MANAGEMENT:

The patient had her blood pressure, pulse and respiration checked hovily for the first six hours post operatively, then 4 hourly for the next 18 hours. Her recovery from anaesthesia was uneventful. During the first 24 hours, she received 2.5 litres of 5% dextrose and 500ml of normal saline. Her urinary output was 1000ml. She developed a temperature of 39°C which defervesced on the second postoperative day. Twenty four hours after the operation bowel sounds were present and the patient was allowed to take oral fluids and was recommended gradual ambulation. She received two units of blood transfusion equivalent to one litre. The patient was discharged on the 9th day in satisfactory condition with an HB of 8g/dl.

The wound healed aseptically. Throughout the postoperative period the patient was getting penicillin injections and metronidazole tablets.

FOLLOW UP:

She was seen in the gynaecological clinic after two months. There was a resumption of her menses and presented no complaints.

COMMENTARY:

Ectopic pregnancy which is defined as one in which the fertilized ovum becomes implanted in a site other than normal uterine cavity was first reported in 936 A.D. Abulcasis recorded a woman in whom fetal parts escaped through the abdominal wall by suppuration. Lawson tate 1885 was the first British Surgeon to advocate and perform an operation for ruptured ectopic pregnancy. There is no doubt that one of the commonest emergencies in gynaecological practice is ectopic pregnancy.

The incidence varies and the frequency of pelvic inflammatory diseases appears to be a determining factor. Of all the gynaecological admissions from 1st July 1979 - 30th June 1980 at Muhimbili Medical Centre 1.3% were extra uterine (tubal) pregnancy. Incidences recorded in literature include 0.33% (Peel 1963 from the United of Kingdom) 0.63% (Lucas and Hassim 1970, from Zambia) and the highest incidence of 3.5% reported by Douglas (1963) from Jamaica. These figures emphasize the high incidence of this condition in the developing countries.

This patient had a period of infertility since 1978 after an abortion which was not evacuated. This could have been followed by pelvic inflammatory disease though there was no overt evidence to substantiate that during laparatomy. Never the less in Douglass series from the West Indies with the highest incidence of ectopic pregnancy so far in literature 60% of the patients showed on evidence of pelvic inflammatory diseases. However in series reported by Oronsaye from Nigeria (between April 1978 and December 1979). Pelvic infection was a major factor (65% of cases).

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The history and physical findings were enough in this case to warrant the diagnosis of a ruptured ectopic gestation. Shifting dullness was deliberately not elicited here as it was considered uncomfortable for a patients with peritoneal irritation and severe pain. In stead the observation of a "gentle wave" after lightly tapping the distended abdomen was regarded enough. (Pathak - Diagnosis and management of ectopic pregnancy). Examination under anaesthesia and culdocentesis were deemed superfluous in this particular case. Rarely do we see cases of unruptured ectopic gestation the diagnosis of which could be very intriguing. Culdocentesis was not done because negative taps are highly unreliable especially in cases where the pouch of Douglas is hidden by inflammatory adhesions.

Approaching tropical gynaecology with high index of suspicion for ectopic pregnancy coupled with good history taking, careful physical examination and sound clinical judgement will always pay a high dividend as far as ruptured tubal pregnancy is concerned. In an acute abdomen which looks like on ectopic pregnancy a laparatomy should be performed immediately even if the diagnosis is not confirmed.

Once the diagnosis was entertained, resuscitative measures were instituted. Intravenous fluids were infused to maintain adequate circulatory volume and tissue perfusion. Right total salpingectomy was done and the ovary was conserved as it was easy to delineate it and no overt pathology was noted in it.

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Salpingooophorectomy was not done though one had in mind Jeffcoates postulate (1955). This postulate was allowed to go into temporary oblivion so as to strictly adhere to the time honoured rule in the surgery of ectopic gestation: "Stop the bleeding do the minimum, and get out." Autotransfusion was not done as the blood appeared unsuitable due to an offensive smell (as recommended by Stewart).

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SECONDARY INFERTILITY

LAPARASCOPY AND DYE INSUFLATION

PATIENT: MRS. B.T. AGE: 26 YEARS

INPATIENT NO: 266387

RESIDENCE: KINONDONI DAR ES SALAAM

DATE OF ADMISSION: 13/6/82

DATE OF DISCHARGE: 15/6/82

SUMMARY:

The patient was admitted due to secondary infertility. Laparascopy was performed and revealed tubal adhesions and bilateral hydrosalpinx Tubal insufflation with methylene blue revealed bilateral complete tubal block.

HISTORY OF PRESENT ILLNESS:

The patient was referred from a peripheral clinic to the Muhimbili gynaecological outpatient clinic due to inability to conceive. Her chief complaint was failure to conceive for 6 years. Her last pregnancy was 6 years ago. After delivery the patient had fever, lower abdominal pain and vaginal discharge. She had sporadic treatment at a local dispensary. Her lower abdominal pain was localised and built prior to the menses and moderately relieved by the blood flow.

PAST MEDICAL AND SURGICAL HISTORY:

There was nothing significant.

FAMILY AND SOCIAL HISTORY:

There was no history of tuberculosis, hypertension or diabetes mellitus in the family. She was unemployed and married to a Police Officer. Her husband had no other wife.

GYNAECOLOGICAL HISTORY:

Her menarche was at 15 years. Cycles were regular 4 days every 30 days. After her last delivery she started to experience dysmenorrhoea and deep dyspareunia. She never used any form of contraceptive measure. The first day of her last menstrual period was on 18/5/82.

OBSTETRIC HISTORY:

She was para 1 with one living child. No history of abortion. She delivered at a peripheral clinic without complications. The puerperium was uneventful.

GENERAL EXAMINATION:

Her nutritional status was satisfactory. She was afebrile and not pale. There was no lymphadenopathy. The breasts were not active and there were no intramammary lumps. The respiratory system was normal.

THE CARDIOVASCULAR SYSTEM:

Her pulse rate was 74 beats per minute, regular and of good volume. The blood pressure was 110/80 mm Hg. The heart was normal.

ABDOMINAL EXAMINATION:

The abdomen was scaphoid. No tenderness was elicited on superficial palpation. There was no hepatosplenomegally. The renal angles were free of masses.

VAGINAL EXAMINATION:

This was done as described in the introduction. The patient was asked to empty her bladder before the examination. The vulva and perineum were healthy. The vaginal skin was healthy and there was no pathological discharge. The cervix was firm and the os was closed. The cervical excitation was non-tender. The uterus was of normal size, anteverted, mobile and moderately tender. The adnexa were free of masses and were non tender.

DIAGNOSIS:

A provisional diagnosis of secondary infertility following puerperal sepsis was made.

INVESTIGATIONS:

1. Haemoglobin was 12gm/dl and the white blood cell count was 5500 with normal differential count.

2. Blood urea was 18 mg/dl
3. V.D.R.L. for syphilis was negative
4. Fasting blood sugar was 80mg/dl
5. Urine was negative for glucose and protein.
   Urine culture yielded no growth
6. Cervical smear was grade I
7. Chest X-ray was normal
8. Husbands semen analysis - showed normal morphology with 70 - 80% forward progression volume of 4 mls, normal looking seminal fluid. The count was 80 million per ml of seminal fluid.

Further examination of the husband revealed normal findings.

FURTHER MANAGEMENT:

It was decided to do a tubal patency test by dye insufflation under Laparoscopic view and endometrial curettage for histological evidence of ovulation.

PREPARATION FOR LAPAROTOMY:

Premedication and administration of anaesthesia was done as described in the introduction.

PROCEDURE:

a. The patient was placed in the lithotomy position with thighs extended to about 45^{o} to allow access of the abdominal wall.

b. The abdominal skin was cleaned with iodine. The vulva, perineum and vagina were prepared as described in the introduction for a vaginal operation.

c. The bladder was catheterised aseptically as described in the introduction.

d. Bimanual pelvic examination was done and the previous findings were confirmed.

e. The cervical os was exposed by means of a sims speculum and the cervix grasped by a volsellum forceps. A standard self retaining manipulation cannula was inserted into the uterine cavity for the manipulation of the uterus and dye insufiation.

f. One centimetre transverse incision was made just below the umbilicus. Through this incision a Verres spring-loaded needle was inserted into the peritoneal cavity and carbon dioxide introduced at a rate of one litre per minute to a pressure of 20 - 25 mm Hg. About 2.5 litres of carbon dioxide were passed into the peritoneal cavity when the liver dullness disappeared.

g. A large trocar and cannula were inserted into the abdominal cavity in a direction of 45 degrees towards the concavity of the pelvis.

h. The tracar was then withdrawn and the cold light laparascope was passed down the cannula, and a direct view of the pelvic cavity was obtained.

FINDINGS:

1. There were bilateral peritubal adhesions
2. The uterine size and contour were normal
3. There were bilateral hydrosalpinx. The fimbrial ends were clubbed.
4. The pouch of douglas was viewed but there were some adhesions.
5. 30 mls of methylene blue dye was injected through the uterine cannula. There was no spill of dye at all. An impression of tubal block was entertained.
6. Laparascopic examination was concluded and the laparascope was removed and carbon dioxide was allowed to escape. The skin incision was closed with a single catgut 2/0 stitch.

CURETTAGE OF THE ENDOMETRIUM:

The uterine cannula was dislodged. The cervical canal was dilated to No. 8 Hegar's dilator. Sharp curettage of the uterine cavity was then done and the specimen sent for histology. The sims speculum and volsellum forceps were then removed.

POST OPERATIVE MANAGEMENT AND PROGRESS:

1. Her general condition was good. The blood pressure and pulse remained normal.
2. Histology of the endometrium revealed normal secretory endometrium.

3. The status of the patient's reproductive capacity was frankly explained to her. She was made to understand the pros and cons of tubal surgery and that the overall prognosis was poor. The patient was satisfied with the explanation and promised to come again for further consultation with her husband but was lost from follow up.

COMMENTARY:

Infertility is a common gynaecological problem at Muhimbili Medical Centre. It accounted for 3.9% of total gynaecological admissions in 1979 - 1980 (Departmental annual report). According to the on going nationwide survey here in Tanzania secondary infertility is the main problem. The average prevalence of secondary infertility is 19.5 per cent, and this constitute a community health problem.(1)

Secondary infertility usually arises from salpingitis as a result of postabortal, puerperal or post menstrual sepsis as well as from gonococcal infection. In this particular patient the most likely cause was puerperal sepsis.

Laparascopy is quite useful in evaluating the infertile female as it gives an overview of the genital tract. While hysterosalpingogram will show tubal patency and uterine contour, laparascopy will give a full idea about the uterus, tubes and ovaries thus the peritoneal factor of infertility can be assessed.

Results of tubal surgery are known to be poor and in places where microsurgical technique are not available the results are bound to be hopeless. The main line of approach in tackling secondary infertility should in the prevention of pelvic inflammatory disease.

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INCOMPLETE ABORTION
EVACUATION OF UTERUS
PATIENT: MISS. H.I. AGE: 28 YEARS
INPATIENT: NO.304285
RESIDENCE: MANZESE
DATE OF ADMISSION: 18/6/82
DATE OF EVACUATION: 19/6/82
DATE OF DISCHARGE: 20/6/82

SUMMARY:

Miss H.I. was admitted with history of vaginal bleeding with passage of clots following an amenorrhoea of two months. The vaginal bleeding started two days prior to admission. On vaginal examination the uterus corresponded to 10 weeks of gestation and the cervical os was opened with products of conception protruding through it. Evacuation of the uterus was done. The patient was discharged in good general condition.

HISTORY OF PRESENT ILLNESS:

She gave a history of vaginal bleeding with clots which was preceded three days earlier with an episode of fever and chloroquine ingestion. The patient categorically denied history of intervention aiming at terminating her pregnancy.

GYNAECOLOGICAL HISTORY:

Her menarche was at 13 years followed by regular menstrual cycles 5 days every 30 days. The menses were slightly painful. There was no history of dyspareunia or post coital bleeding.

She had no abnormal vaginal discharge. She neither used contraceptive pill nor intrauterine contraceptive devices. The first day of her last normal menstrual period was 10/6/82.

OBSTETRIC HISTORY:

She was para 2 + 0. Her first pregnancy was in 1977. She had an uncomplicated full term normal vaginal delivery at Ocean Road Hospital. Her second pregnancy and delivery were also uneventful. Her last born child was in 1979. All her children are alive and well.

PAST MEDICAL AND SURGICAL HISTORY:

There was nothing significant.

SOCIAL AND FAMILY HISTORY:

A school teacher by profession. She was divorced in 1980. There was no family history of diabetes mellitus.

PHYSICAL EXAMINATION:

Her general condition was satisfactory. She was pale. There was neither jaundice nor peripheral edema. Her temperature was 37^{0} Centigrade. The breasts were active and no lumps were detected.

CARDIOVASCULAR SYSTEM:

Her pulse rate was 100 per minute regular good volume. The blood pressure was 120/70mm of Mercury. The heart was normal.

THE RESPIRATORY SYSTEM:

Was normal.

ABDOMINAL EXAMINATION:

The abdomen was scaphoid and there were no visible masses. No tenderness was elicited on palpation. There were no palpable masses. The liver, spleen and kidneys were not enlarged.

VAGINAL EXAMINATION:

The external genitalia were normal. There was slight bleeding at the vulva. Cusco bivalve speculum was inserted and the vagina and cervix were inspected. There were pieces of clots lodged in the vagina. Slight dark blood was oozing from the cervical os. A digital examination revealed a soft non-excitable cervix with the os 2cm dilated. The products of conception were felt in the cervical canal. The size of the uterus corresponded to 10 weeks of gestation. It was anteverted and mobile. The adnexae were unremarkable. The examining finger was blood stained.

DIAGNOSIS:

Basing on the history and the aforementioned pelvic findings a diagnosis of incomplete abortion was made.

MANAGEMENT:

1. Blood was taken for grouping and cross-matching and a request for 1500 mls of blood was made.

2. Urgent haemoglobin and blood slide for malaria parasites were taken. The haemoglobin was 50% and the malarial parasites were positive.
3. Intramuscular Injection of Chloroquine 200mg 8 hourly for 24 hours was prescribed. This was followed by oral chloroquine 300mg base daily for three consecutive days.

PRE-EVACUATION PREPARATION:

1. The patient's perineum was shaved and consent for the procedure was obtained.
2. An intravenous drip 5% dextrose was set.

PROCEDURE:

The patient was placed in lithotomy position after requesting her to empty her bladder Catheterisation was not done. 150mg of Pethidine and 10mg of Diazepan were given intravenously slowly in bolus forms. Then 0.5mg of Ergometrine was given intramuscularly. The patient was cleaned and draped.

An Auvard's speculum was inserted, and the anterior lip of the cervix was held with vulsellum forceps. Using ovum forceps some protruding products of conception in the cervical canal were removed. Curettage was done with the sharp end of the curette starting on the anterior wall towards the left side, then the right side, followed by the posterior wall and left side.

The fundus was curetted in an east-west direction from one cornus to the other. Then the ovum forceps was used to pick up the fragments. It was inserted gently until the top of the uterus was felt, the blades were opened, rotated through a right angle and on the products of conception to be removed. This was also done on the posterior and anterior wall of the uterus. Initially copious amounts of products of conception were removed and at the beginning of the procedure some brisk bleeding was encountered but finally bleeding markedly diminished. The procedure was then completed. The vulsellum's forceps and the Auvard's speculum were then removed and the patient was returned to the ward from the evacuation room. The specimen was put into 10% formaldehyde and sent for histology.

HISTOLOGY REPORT:

Fragments of decidua and chorionic villi were demonstrated.

POST EVACUATION:

1. She was transfused 1500 millilitres of blood Group "O" rhesus D. Positive.
2. Blood pressure and pulse were recorded hourly for the first 6 hours then 4 hourly for 12 hours. They were within normal limits.
3. Temperature was recorded 12 hourly. She remained afebrile. On the second post evacuation day bleeding was slight.

She had no complaints. Her Haemoglobin was 9mg per decilitre. She was discharged on Ferous sulphate 200mg three times daily and Folic acid 5mg once daily for 4 weeks. She was asked to attend the clinic 6 weeks later for follow up.

FOLLOW UP:

She was seen again in the gynaecological outpatient 6 weeks later. She had no complaints. She had had her menstrual period a week back, on vaginal examination the cervix was healthy and the os was closed. The uterus was of normal size and anteverted. The adnexa were normal. The patient was discharged from the gynaecological outpatient clinic.

COMMENTARY:

The incidence of abortion for the population as a whole is estimated at a rate of 15 - 20%. The majority of gynaecological admissions at Muhimbili Medical Centre are due to abortions. From 1st July 1979 to 30th June 1980 abortions constituted 57.0% of all the admissions to the gynaecological ward.

In more than half of spontaneous abortions no cause can be found. Of the known causes faulty development of the ovum due to chromosome abnormalities, severe anaemia, malnutrition and hypothyroidism are considered to be among the significant aetiological factors.(2) Maternal infections associated with hyperpyrexia are among the accepted causes of abortions.(2) Febrile illnesses especially due to malaria are quite common in Tanzania. This patient initially developed fever which probably precipitated the abortion process.

Incomplete abortions cause severe and at times exsanguinating bleeding. As illustrated in this case, the patient bled substantially at home prior to admission. There was an urgent need for an evacuation.

During the procedure of evacuation though the cervix was sufficiently dilated to accommodate the index finger digital evacuation was not done. This would have necessitated good anaesthesia with adequate muscular relaxation.

Antibiotics were not given because there was no evidence of infection to warrant it and if given to the patients routinely could mask the true bacteriology when it later reveals itself.

Prevention of abortion especially spontaneous ones is not an easy task as in the majority of cases the aetiology is not known. However much can be done to prevent the morbidity and mortality associated with incomplete abortions. Immediate and timely medical help in the form of evacuation would play a crucial role in decreasing incidences of post abortal sepsis and exsanguinating haemorrhage.

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UTERINE FIBROID

TOTAL ABDOMINAL HYSTERECTOMY

PATIENT: MRS. R.S. AGE 44 YEARS

INPATIENT NO: 265510

RESIDENCE: VIKUNDI DAR ES SALAAM

DATE OF ADMISSION: 14/3/82

DATE OF OPERATION: 18/3/82

DATE OF DISCHARGE: 29/3/82

SUMMARY:

The patient had lower abdominal pain, an abdominal swelling and excessive bleeding during menstruation. She was found to have uterine fibroid. After a preliminary work up at the outpatient clinic total abdominal hysterectomy was done. The patient had an uneventful postoperative recovery.

HISTORY OF PRESENT ILLNESS:

The patient was first seen at the outpatient clinic on 12th January 1982 having being referred from a dispensary. She gave a history of lower abdominal pain, excessive vaginal bleeding during menstruation and an abdominal mass. The patient endured these sufferings for one year before seeking medical advice.

The pain was dull in character built up about a week prior to the menses and subsided gradually with the onset of menstrual flow.

It was neither associated with fever nor vomiting. The menses were regular but heavy with passage of clots. The duration of the flow remained unaltered - 6 days. The mass in the lower abdomen was growing very gradually.

She denied loss of weight. The patient admitted that her sexual acts were devoid of orgasm due to deep dyspareunia. Micturition and bowel mitions were normal.

PAST MEDICAL AND SURGICAL HISTORY:

The patient had been treated several times many years ago at a local dispensary due to recurrent episodes of severe lower abdominal pain apparently with some relief. She denied any history of a surgical operation. According to the patient she had not contracted any of the sexually transmitted diseases.

FAMILY AND SOCIAL HISTORY:

There was no family history of diabetes mellitus. She did not know whether or not there was hypertension in the family. The patient was married three and divorced twice. She was illiterate.

GYNAECOLOGICAL HISTORY:

Menarche was at 14 years and the cycles were 6 days every 28 - 30 days initially not painful and of moderate flow. Later on the menses became heavy and very painful. There was no history of post coital bleeding.

She neither used contraceptive pills nor intrauterine devices. Her last menstrual period started on 22/2/82.

OBSTETRICAL HISTORY:

She was para 1 + 0 with no living child. Her only child died 20 years ago due to measles.

GENERAL EXAMINATION:

The general condition was good; the patient was neither pale nor jaundiced. She had no demonstrable lymphadenopathy. There was no ankle edema. Her axillary temperature was 36.5° Centigrade.

The breasts were atrophic. There were no intramammary lumps.

CARDIOVASCULAR SYSTEM:

The pulse rate was 70 beats per minute regular good volume and the blood pressure was 100/70 mm of mercury. The heart sounds were normal.

THE RESPIRATORY SYSTEM:

There was nothing significant.

ABDOMINAL EXAMINATION:

The patient was requested to pass urine just prior to the examination. There was an obvious suprapubic bulge reaching upto midway between the umbilicus and the symphysis pubis.

The skin on this area was interspersed with both old and fresh therapeutic marks. Distended and engorged veins were not visualised on inspection.

On palpation there was a firm, irregular moderately tender mass size of 16 weeks pregnancy. The upper pole was well demarcated but the lower one could not be palpated. Though it was possible to move it transversely, the mass was not freely mobile. There was no rebound tenderness the mass was dull on percussion. The liver, spleen and kidneys were not palpable. The renal angles were non-tender. There was no free fluid in the peritoneal cavity.

VAGINAL EXAMINATION:

The vulva and perineum were normal. On speculum examination the cervix looked healthy and parous. There was no abnormal vaginal discharge. On digital examination there was no enlargement of the Bartholin's glands. The cervix felt firm and the os was closed. The cervical excitation was non-tender. Bimanually the uterus was enlarged about the size of 16 weeks gestation. It was irregular and firm and of limited mobility. The adnexa were slightly tender but no masses were felt.

RECTAL EXAMINATION:

Rectal mucosa was free. An irregular firm mass was felt in the pouch of Douglas about 4 centimeters in diameter.

DIAGNOSIS AND ADVICE:

The impression was of a uterine fibroid. The patient was advised that the treatment of choice was hysterectomy and that she would thereafter not menstruate or conceive. She agreed and was booked for admission and operation in six weeks time.

INVESTIGATIONS:

The haemoglobin was 10.4 gm per decilitre. White blood cells - 7,300 per cubic millimetre with a normal differential. Red blood cells were normochromic and normocytic.
Rythocyte sedimentation rate was 20 mm per hour.
Blood group A rhesus D positive.
Urine analysis:-

glucose - nil

protein - nil

On microscopy no abnormality was detected and culture yielded no growth. Blood urea was 16 mg per decilitre.
Serum creatinine was 0.5 mg per decilitre.
Intravenous pyelogram:-

Normal kidney function and there was mild left hydroureter with slight kinking at the pelvic brim.
While undergoing investigations pending for the operation, the patient was put on Tablets Persolate 200 mg three times daily and Folic acid 5 mg once daily.

PREPARATION FOR OPERATION:

The patient was admitted on 14/3/82 and was scheduled for operation on 18/3/82. She was put on metronidazole tables 200 mg three times daily.

Her haemoglobin was re-checked and was 11.6 gm per decilitre. Blood was taken for cross-matching with a request for 1500 ml of blood on the operation day.

The patient had her abdomen shaved and was given an enema the night before the operation.

THE OPERATION:

Total Hysterectomy with Bilateral Salpingectomy.

PREMEDICATION:

Pethidine 50 mg intramascular stat.

Atropine sulphate 0.6 mg subcutaneously stat.

ANAESTHESIA:

General anaesthesia was given as described in the introduction.

PREPARATION:

The scrub nurse aseptically catheterised the bladder. The abdomen was cleaned with antiseptic solution and draped with sterile surgical towels.

PROCEDURE:

The abdomen was opened through a subumbilical median skin incision extending from below the umbilicus to just above the symphysis pubis as detailed in the introduction.

The patient was put in a Trendelenburg position and a self retaining retractor applied. The non adherent intestine were pushed and held back with abdominal packs moistened with warm physiologic saline solution, the tails of which being held with artery forceps outside the abdominal wound.

FINDINGS:

(a) The uterus was enlarged to about 16 weeks pregnancy size. It was firm, nodular with multiple subserous fibroids.

(b) Small intestines were adhered to the kinked and clubbed fallopian tubes and to the posterior aspect of the uterus. The pouch of Douglas was partially occupied by a pedunculated subserous fibroid.
The ovaries appeared to be normal.

DONE:

The adherent intestines were freed by blunt dissection and the use of scissors. Then hysterectomy and bilateral salpingectomy was done in the manner detailed in the already described hysterectomy procedure. (See the case of carcinoma of the endometrium). The only difference is in the extent of the operation, in this particular case the removal of the wide vaginal cuff was not done and both ovaries were conserved. Haemostasis was achieved and the abdomen was closed as explained in the introduction.

Blood loss was estimated to be 500 ml. Intraoperatively the patient received 1000 ml of cross-matched blood.

MACROSCOPIC:

Multiple subserous fibroids. The uterus was cut open. Multiple interstitial fibroids were found. The cut surfaces were whitish in colour. There were no submucous fibroids and the endometrium appeared to be normal.
The patient recovered from anaesthesia without complications. She was transferred to the ward after regaining consciousness.

POST OPERATIVE MANAGEMENT:

1. The patient received 2 litres of dextrose/saline in the first 24 hours.
2. Pulse, blood pressure and respiration were monitored hourly for the first 6 hours and thereafter 4 hourly for the next 24 hours.
   Temperature was recorded 12 hourly.
3. The patient was sedated with 100 mg of Pethidine intramascularly, 8 hourly 3 doses.
4. Fluid input and output chart was instituted.
   Urinary output was checked and found to be satisfactory.
5. Intravenous crystolline penicillin 2 mega units 6 hourly was prescribed for the first 24 hours which was then followed by intramascular injections of procaine penicillin fortified 1.2 mega units for six days.

Flagyl tablets were resumed on the second post operative day when the patient started to pass flatus.

On the second postoperative day she had a spike of temperature to 38°centigrade which defervesced on the third postoperative day. When examined the respiratory system was normal, renal angles were non-tender. (The catheter was removed on the second postoperative day). The blood slide for malaria parasites was negative but the patient received a course of chloroquine. Throughout the postoperative period the patient remained normotensive. She was ambulant from the third postoperative day.

The stitches were removed alternately from the 7th postoperative day and completed on the 8th day. The wound healed by primary intention. On the same day a speculum examination was done gently and the vaginal vault healed well. Her haemoglobin was re-checked and found to be 10gm per decilitre. She was discharged on Ferous Sulphate 200 mg twice daily and Folic acid 5mg once daily for 4 weeks and was to be seen at the outpatient clinic after 4 weeks.

FOLLOW UP:

She turned up 5 weeks later with no complaints. Her haemoglobin was 11.5 gm/dl. The abdominal scar and vaginal vault had healed well.

She was advised to obstain from sexual intercourse for two more months so as to give ample time for the tissues to heal.

HISTOLOGY RESULTS:

Bundles of unstriped muscle cells with characteristic whorl - like pattern. Some admixture of connective tissue elements were also seen. Findings consistent with uterine leiomyoma.

COMMENTARY:

115 total abdominal hysterectomies for fibroid were performed at Mahimbili Medical Centre from 1st July 1979 - 30th June 1980 quite a large number of the gynaecological operations. This reflects well the observation that uterine fibroid is a common occurrence amongst african women.

The aetiology is unknown but fibroids are frequently associated with frequent primary on secondary infertility. This patient has secondary infertility though she also had signs of pelvic inflammatory diseases namely thickened tubes and pelvic adhesion.

Total abdominal hysterectomy was regarded as the treatment of choice because of the size of the uterus, pain and haemorrhage together with the age of the patient. Subtotal hysterectomy was not at all entertained due to the high incidence of the cervix cancer in our environment (80% of all cases of gynaecological cancer).

Vaginal hysterectomy because of the size of the fibroid and anticipated adhesions would have been a very tedious and unrewarding exercise. Dilatation and curettage together with Pap smear were not done because clinical assessment did not favour any of the two.
Diagnostic curettage may easily miss a small focus of malignancy in a uterine cavity especially in an enlarged and distorted one. Even if carcinoma of the endometrium is suspected hysterectomy is indicated. Sending the whole uterine specimen for histology was far better in ruling out malignancy than curettage or vaginal cytology.
Post operative radiotherapy could have been resorted to once malignancy was established.

The ovaries were conserved because the macroscopic appearance of the removed uterus was not at all suggestive of malignancy and they were not abnormal in their appearance. By not removing the ovaries this patient was allowed the benefit of remaining a woman for the few years before reaching her menopause.

SUBMUCOUS POLYP

[illegible] POLYPECTOMY

PATIENT: MRS. C.M. AGE: 28 YEARS

INPATIENT NO.301432

RESIDENCE: CHUO KIKUU

DATE OF ADMISSION: 29/7/82

DATE OF OPERATION: 10/8/82

DATE OF DISCHARGE:

SUMMARY:

The patient was admitted with the chief complaints of lower abdominal pain and prolonged vaginal bleeding. She was found to have submucous polyp. Polypectomy was done and the patient had an uneventful recovery.

HISTORY OF THE PRESENT ILLNESS:

The patient was admitted via casualty to the gynaecological ward with history of lower abdominal pain, coliky like and associated with vaginal bleeding. The bleeding was heavy with passage of clots. The problem of recurrent heavy vaginal bleeding had been going on for 3 months. Of late she noted intermenstrual discharge rather foul smelling. She also found her self to be unusually quickly overwhelmed by fatigue while performing her day to day activities. She denied contact bleeding. There was no history of dizziness, or vomiting. Bowel and micturition patterns were not disturbed.

PAST MEDICAL AND SURGICAL HISTORY:

Nothing significant

FAMILY AND SOCIAL HISTORY:

Married. Stays together with her husband. They have two children. No contact with tuberculosis patients.

GYNAECOLOGICAL HISTORY:

Menarche was at 14 years. The cycles were 4 - 7 days in every 28 days initially not painful till 1978. Henceforth dysmenorrhoea had been her problem. She neither used contraceptive pills nor intrauterine contraceptive devices. The last menstrual period started on 9/7/82 and bleeding had been persisting ever since.

OBSTETRICAL HISTORY:

She was para 2 + 3 abortion at 3 months gestation each. The first two spontaneous abortions occurred in 1979 and the third one was in 1980. All of them were evacuated. The postabortal periods were uneventful. Her first delivery was in 1974. Her last born child was in 1977. Her pregnancies deliveries and puerperium were uneventful.

GENERAL EXAMINATION:

Anxious looking, moderately pale but not dyspnoeic or jaundiced. Her body temperature was 36.5° centrigrade. She had no peripheral edema. There was no lymphadenopathy. The breasts were normal and not active. The respiratory system was normal.

CARDIOVASCULAR SYSTEM:

Her pulse was 100 beats per minute regular of good volume and the blood pressure was 120/80 mmHg. The heart was normal.

ABDOMINAL EXAMINATION:

There was no abdominal distension. Further inspection ruled out the presence of visible masses on peristalsis. Palpation revealed some tenderness at the suprapubic region. Rebound tenderness and shifting dullness were negative. The renal angles were non-tender. The liver, spleen and kidneys were not enlarged.

VAGINAL EXAMINATION:

The external genitalia was normal. Speculum examination revealed a growth rather darkish surrounded by the cervical lips with some offensive brownish dark blood discharge. The contour of the cervix appeared normal, and the os was opened to about 5cm. Bimanual examination was moderately tender. The mass was rather hard and not friable the tip of a finger was gently insinuated between the mass and the cervical lips which were not stony hard and due to tenderness no further attempt was made to pass above the growth and explore its relations. The uterus was of normal size, no evidence of inversion and it was moderately tender. The adnexa were also tender but no mass was felt. An aspirate from the posterior fornix was taken, smeared on slides and immediately placed in fixative and the specimen was sent for cytological examination.

DIAGNOSIS:

The main complaints of prolonged and excessive vaginal bleeding associated with colicky like lower abdominal pain coupled with the positive findings of a hard non-friable mass, the lower pole of which was palpable via the patulous cervical os created an impression of a pedunculated submucous polyp. Due to the offensive discharge cervical malignancy was also though of. The other pathological conditions in the differentials were endocervical polyp and carcinoma of the cervix.

INVESTIGATIONS:

Haemoglobin 7g/dl

VDRL - Negative

White blood cell count 9000

The differential cell count:-

Neutrophils 60%

Lymphocyte 10%

Eosinophils 2%

Erythrocyte sedimentation rate 100mm per hour.

Blood group O Rhesus D positive.

MIDSTREAM URINE:

Protein - Negative

Glucose - Negative

Culture - No pathogens were isolated

Cytology:

Grade II.

MANAGEMENT AND PREPARATION:

The plan was to correct her anaemia and then do polypectomy. She was transfused 1500mls of blood. While waiting for the operation, the patient was getting haematinics - ferrous sulphate 200mg twice daily and folic acid tables 5mg once daily. A course of antibiotics was also given to control infection.

The operation was explained to the patient and her consent was obtained. Her haemoglobin on the eve of the operation was 10gm/dl. She was prepared in the ward and perineum was shaved.

In theatre prior to induction of anaesthesia the patient was requested to empty her bladder.

ANAESTHESIA:

General anaesthesia was given as described in the introduction.

PROCEDURE:

Patient in lithotomy position was cleaned with antiseptic solution and draped with sterile gowns. Vaginal examination was again done and the findings were essentially the same.

PROCEDURE FOR POLYPECTOMY:

Auvard's speculum was inserted and the labia retracted. The polyp was grasped with volsellum forceps and by traction on it and simultaneously retracting the cervix upwards the pedicle came into view and was seen to be about 1.5cm in diameter.

Before dividing the pedicle care was taken not to encroach on the uterine wall by first making a shallow incision across the pedicle thus ascertaining the absence of an encapsulated myoma. This ensured that no higher than necessary was the incision done.

The pedicle was then transfixed with No.0 catgut and tied off. The remainder of the pedicle was then cut off with scissors distal to the ligature. The uterus was explored digitally and the cavity was not all that smooth. Exploration was possible because the cervix was well dilated with the prolapsed fibroid. Curettage of the uterine cavity was also done. Bleeding was minimal.

Macroscopically the polyp was about 7cm in diameter. There were some areas of necrosis. The specimen was sent for histopathology together with the endometrial curetting.

POST OPERATIVE MANAGEMENT:

The patient had her vitol signs monitored as described in earlier gynaecological cases. She recovered well from anaesthesia. She was afebrile, no complaint of abdominal pain. Slight vaginal bleeding persisted for 3 days post operatively then ceased. The patient received one more pint of blood while convolescing in the ward and was discharged after.

She was seen at weeks later in the gynaecological clinic. Her haemoglobin was 11g/dl and pelvic examination was normal.

HISTOLOGY REPORT:

MICROSCOPIC PATTERN:

Dense fibrous tissue - the stroma. Gland like spaces lined with endometrial epithelium. Distal portion show haemorrhage into the stroma. No evidence of tuberculosis or malignancy.

COMMENTARY:

In Africa it has been noted that uterine fibroids are more common, develop earlier and grow larger in comparison to European women (Burgreen women).(1)

This patient with the clinical picture of menometrorrhagia presented with submucous polyp which was almost extruded via the cervical os. Most patients with submucous fibroid complain of menorrhagia and metrorrhagia. The uterus usually initiate labour like pain in an attempt to expel the submucous fibroid and this explained the presence of colicky like pain in this patient.

foul smelling vaginal discharge was due to necrosis on some parts of the polyp. The poor blood supply to the tumour via the progressively thinned pedicle was responsible for the necrotic process. Surgery was delayed in this patient as careful pre-operative preparation was necessary to reduce morbidity. Thus her anaemia was corrected and the antibiotics took care of the infection. Cytology results further reinforced our plan of management by ruling out malignancy.

curettage was done to ensure that the missed polyps were also removed. From the outset hysterectomy was not envisaged due to her tender age, low parity and the absence of definitive features strongly suggestive of malignancy. A view which was confirmed by cytological and histological data.

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TORSION OF AN OVARIAN CYST

SALPINGECTOMY AND REMOVAL OF THE CYST

PATIENT: MRS. A.A. AGE: 35 YEARS

INPATIENT NO. 251064

RESIDENCE: KUCUKKHI

DATE OF ADMISSION: 2/6/81

DATE OF OPERATION: 2/6/81

DATE OF DISCHARGE: 10/6/81

SUMMARY:

The patient was admitted with chief complaints of severe lower abdominal pain and persistent vomiting. The impression of twisted ovarian cyst was made. An emergency laparotomy was carried out together with removal of the cyst. Her post operative recovery was without complications.

HISTORY OF PRESENT ILLNESS:

The patient was referred from a peripheral clinic with history of lower abdominal pain of sudden onset. The pain was colicky in nature and of 24 hours duration. It was localised at right iliac fossa. The colicky pain was followed by nausea and vomiting. The patient did not associate any factor with her illness. She denied history of trauma or fever. There was no episode of syncope. The patient admitted that one week elapsed without seeing her expected menses.

PAST MEDICAL HISTORY:

In 1980, she was admitted to a gynaecological ward with somewhat similar complaints and was managed as a case of pelvic inflammatory disease. Analgesics and antibiotics were given and she was discharged one week later in satisfactory condition.

FAMILY AND SOCIAL HISTORY:

The menarche was at 13 years and the cycle were 5 days every 24 hours devoid of painful episodes. The menses were not heavy. There was no history of dyspareunia. She neither used contraceptive pills nor intrauterine contraceptive devices. Her last normal menstrual period started on 26/4/81.

OBSTETRIC HISTORY:

She was para 8 + 2 with two living children. Her ninth and 10th pregnancies terminated with spontaneous abortions at about 2 and 3 months gestation respectively. They were evacuated and the postabortal recovery was uneventful.
She attributed fever with convulsions and gastroenteritis to be the cause of death for her four children. Her last born surviving child was 2 years old.

GENERAL EXAMINATION:

The patient was in agonizing pain. She was not pale. Her hydration status was satisfactory. The axillary temperature was 36.7° centigrade. There was no lymphadenopathy.
The breasts were symmetrical and not active. There were no intramammary lumps.

RESPIRATORY SYSTEM:

This was normal.

CARDIOVASCULAR SYSTEM:

Her pulse rate was 112 beats per minute regular good volume. The blood pressure was 130/80 mm Hg. The heart was normal.

ABDOMINAL EXAMINATION:

The abdomen was not distended. Peristaltic waves were not visualised. On palpation there was generalized tenderness and rebound tenderness was elicited. The liver and spleen were not palpable. A tender mass of limited mobility was palpated at the right iliac fossa. It was smooth and both the upper and lower poles could be delineated. The mass was about 10 centimetres in diameter. It was dull on percussion. There was no shifting dullness. The bowel sounds were heard.

VAGINAL EXAMINATION:

The vulva was normal. Speculum examination showed white vaginal discharge with specks and the cervix had a transverse slit. On digitol examination the cervix was firm and the os was closed. On displacing the cervix to the right, (towards the lump) the pain was aggravated. Bimanually the uterus was found to be bulky, corresponded to 6 weeks of gestation. At the right adnexum a tender cystic mass was felt, its diameter was about 10 centimetres. The left adnexum was normal. The pouch of Douglas was not bulging.

DIAGNOSIS:

Due to the history of colicky lower abdominal pain, followed by persistent vomiting and the presence of a lump at right iliac fossa coupled with the absence of pallor, fever and shifting dullness, the first impression was of torsion of an ovarian cyst. An appendicular mass was considered in the differential.

INVESTIGATIONS:

Haemoglobin	=	10.1g2/decilitre
White cell count	=	5000 per cubic millimetre
Neutrophils	=	20%
Lymphocytes	=	27%
Monocytes	=	6%
Eosinophils	=	4%
Basophils	=	1%

Erythocyte sedimentation rate 10 mm/hour.

Urine for protein was negative.

Glucose in urine was also negative.

MANAGEMENT:

A decision was taken to do an emergency laparatomy.

PREPARATION:

The patient was instructed not to take anyting orally. An intravenous dextrose - saline drip was set. Blood for urgent grouping and cross-matching was taken with a request for three pints of blood forwarded to the blood bank.

ANAESTHESIA:

General anaesthesia was given with the premedication as described in the introduction.

PROCEDURE:

The abdomen was opened through the subumbilical median incision in the manner detailed in the introduction. A twisted right ovarian cyst, plum coloured was found. The right tube formed part of the pedicle. The left tube and ovary were normal. The uterus was enlarged corresponding to 6 weeks of gestation. There was some serosanguinous fluid in the peritoneal cavity. No attempt was made to untwist the cyst. The thinned right fallopian tube was faulty spread out over the surface of the cyst.

The thinned pedicle of the cyst was clamped with three clamps and the tissue between the middle and distal clamp was cut, thus removing the cyst together with the fallopian tube attached to it. The pedicle was ligatured twice with No 1 plain catgut. The small raw area on the pedicle was not covered and it was allowed to slip into the peritoneal cavity after achieving satisfactory haemostasis at the site. The serosanguinous fluid was sucked out. Finally the abdomen was closed in layers with silk to skin. The ovarian cyst was sent for histopathology.

POST OPERATIVE MANAGEMENT:

She recovered well from anaesthesia. Back from the operating theatre her pulse, blood pressure and respiration was checked hourly for the first 6 hours. Her temperature was monitored 12 hourly. Her urinary output for 24 hours postoperatively was 1425 millilitres and the intake parenterolly was 2.5 litres of 5% dextrose and 500 millilitres of normal saline. She remained afebrile. There was no abdominal distension and the bowel sounds were present. Early ambulation was initiated. During the post operative period, the patient got 3 doses of 100 mg of intramascular injections, capsules of ampicillin 500 mg four times daily for seven days. The patient was discharged seven days after the laparatomy and her would healed by primary intension.

FOLLOW UP:

The patient turned up at the gynaecological clinic after two weeks with complaints of vaginal discharge and vulval itching. Her scar was unremarkable.

Speculum examinatinn revealed curdy like white discharge of the vagina. A cervical swab was taken for gram stain and culture. Bimanual examination revealed a normal sized, anteverted uterus, mobile. The adnexa were unremarkable.

The patient was put on nystatin pessaries 1000,000 i.v. high into the vaginal for 14 days. Culture results later confirmed the suspected diagnosis of candida albicans. The patient was lost from follow up.

HISTOLOGY RESULTS:

A unilocular cyst of 7 centimetres in diametre. It is lined with cuboidal epithelium. There are few areas in the cavity with papillae. No evidence of malignancy.

Conclusion - Serous cyst.

COMMENTARY:

No organ in the body produces such a multiplicity or deversity of tumours the ovary and usually they are found accidentally at a routine examination, sometimes they present as a result of accidents occuring to the cysts.(1) Torsion of cystic or diseased adnexal tissue can produce necrosis, peritonitis, shock and rarely death.(2) Usually it is a complication of non inflammatory ovarian tumours. It occurs in 10 - 20% of neoplasms.(3)

In Muhimbili Medical Centre it is an uncommon gynaecological emergency. This patient presented with symptoms and signs of an acute abdomen. The positive physical findings consistent with peritoneal irritation and the presence of a mass in the right lower quadrant have much in common as in the series studied elsewhere. It is interesting to note that in this case tension was also in the right. It is postulated that the sigmoid colon affords less room on the left and thus prevents tension on that side.

During the operation untwisting of the pedicle was deliberately not done before clamping, as it was considered dangerous because of the possibility of embolism in these cases.(4)

removal of the cyst

Unilateral salpingectomy and was considered the standard primary procedure. The other ovary was conserved as the patient reproductive age warranted it. The covering of the raw surface of the pedicle was not deemed necessary. It is said to be extremely rare for adhesions to develop between small intestine and the raw pedicles though it is considered a wise precaution to cover them.(5)

This patient was admitted in the past with somewhat less severe similar complaints. That could as well be a torsion which saw spontaneous untwisting a common occurrence in those with long pedicles.

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CARCINOMA OF THE ENDOMETRIUM
TOTAL ABDOMINAL HYSTERECTOMY WITH BILATERAL SALPINGOOPHORECTOMY
POSTOPERATIVE RADIOTHERAPY

PATIENT: MRS. T.P. AGE: 60 YEARS
INPATIENT NO: 244035
RESIDENCE: TABORA
DATE OF ADMISSION: 25/3/81
DATE OF OPERATION: 15/6/81
DATE OF DISCHARGE: 19/10/81

SUMMARY

The patient was admitted due to vaginal discharge and postmenopausal vaginal bleeding. She was diagnosed as a case of endometrial carcinoma on the basis of clinical and histological data. An extended abdominal hysterectomy was done with subsequent postoperative radiotherapy, treatment was well tolerated. No evidence of the disease was found six months after her discharge from the hospital.

HISTORY OF THE PRESENT ILLNESS

The patient was referred from Tabora regional hospital with Chief complaints of persistent and copious fould smelling brownish watery vaginal discharge together with intermittent apparently unprovoked painless postmenopausal vaginal bleeding. Occasionally episodes of bleeding were heavy. As time elapsed the frequency of bleeding increased and the discharge became more and more intolerable to herself let alone to her kith and kin.

She endured these sufferings for one year. The patient was twice admitted in a regional hospital but to no avail. Of late she had lost some weight. There was no history of cough. Bowel motions and micturition were normal.

PAST MEDICAL AND SURGICAL HISTORY

A part from her two admissions to a regional hospital in 1980 there was nothing contributory. During her hospitalisation she was twice curreted. The patient was also getting different medication in the form of injections and capsules while in the hospital (Did not remember the names of the drugs).

FAMILY AND SOCIAL HISTORY

There was no history of diabetes mellitus in the family. She did not know whether or not there was hypertension in the family. She was married with no child.

GYNAECOLOGICAL HISTORY

She could not recollect the age of her menarche. The cycles were 3 days every 28 days, regular, without intermenstrual bleeding. Her menses caused 16 years ago.

OBSETETRICAL HISTORY

Para 0+0

GENERAL EXAMINATION

The general condition was satisfactory the patient was obese. She was neither pale non jaundiced. There was no lymphodenopathy. She had no ankle edema. Her axillary temperature was 37° centigrade. The breasts were atrophied and there were no intramammary lumps.

CARDIOVASCULAR SYSTEM

Her pulse was 82 per minute regular of good volume. The blood pressure was 130/80mmHg. The heart sounds were normal. The respiratory system was normal.

ABDOMINAL EXAMINATION

The abdomen was not distended. There were no visible masses. There was no tenderness. The liver, spleen and kidneys were not enlarged. There was apalpable mass suprapubically but due to the patient's obesity all efforts to define the mass were doomed to failure. There was no demonstrable free fluid in the abdomen.

VAGINAL EXAMINATION

This was done in a modified dorsal position in the manner described in the introduction. The vulva was atrophic. On speculum examination the vagina was atrophic and a gush of watery browrish, offensive discharge was seen.

The cervix appeared to be normal and there was a mass protruding from the os. On bimanual examination the uterus was found to be enlarged corresponding to about 20 weeks of gestation mobile. The adnexa were not well appreciated as there was some guarding.

RECTAL EXAMINATION

The rectal mucosa was free.

DIAGNOSIS

Viewing the chief complaints of post menopousal bleeding and offensive vaginal discharge from the perspective of the patients age parity and obesity, coupled with the physical findings of uterine mass, endometrial carcinoma was topmost on the list of differentials

1. Endometrial carcinoma
2. Endocervical carcinoma
3. Submucous fibroid

MANAGEMENT

The patient was put on close observation for any further haemorrhage. The plan of management was geared at arriving to a definite diagnosis and determination of the extent of the lesion. The building up of the patient for an eventual major pelvic surgery and possible radiotherapy was also envisaged in the plan of management.

INVESTIGATIONS

Haemoglobin level 12.4gm% - 84%

Erythrocyte sedimentation rate 96mm per hour

Neutrophil seg	47
stab cells	29
Lymphocyte	19
Monocyte	1
Eosinophils	1
Myelocyte	2
Metamyelocyte	1

Film comment - Normochronic, normocytic,

WBC - Leucocytosis with left shift and toxic granulation of neutrophils.

Blood urea and Creatinine - Urea 18mg/dl

Creatinine 0.8mg/dl

Urine routine - Sugar - Negative

Protein - Negative

Culture and sensitivity - No pathogens were isolated

Chest X-ray - No evidence of metestosis

EXAMINATION UNDER ANAESTHESIA AND BIOPSY:

Vaginal examination findings substantiated initial examination (in the ward) and further revealed the presence of a friable mass protruding from the os and that the uterus was mobile and not nodular. There was no evidence of pyometra. Biopsy of the mass was done.

HISTOLOGY REPORT:

A well differentiated adenocarcinoma of the endometrium. Intravenous pyelogram. The ureters and kidneys were normal.

A decision was taken to do an extended hysterectomy and subsequent irradiation therapy as the cancer was considered to be technically operable.

PREPARATION:

Five days prior to surgery the patient was put on metronidazole tablets 200mg three times daily.

The patient was informed of the decision to operate and agreed to it. Blood was taken for grouping and cross-matching and a request for four points of blood was made. She received enema on the night and the morning before the operation.

ANAESTHESIA

Premedication with 0.6mg of atropine sulphate was given subcutaneously. The operation was done under general anaesthesia as described in the introduction.

PROCEDURE

The abdomen was opened through the subumbilical median incision as described in the introduction with the patient in the Trendelenburg position. Self retaining retractors were introduced. The non-adherent intestines were gushed and held back with abdominal pocks moistened with worm physiologic saline solution.

FINDINGS

(a) The uterus was enlarged to 16 weeks of gestation non nodular with some small bowel adherent to a portion of its posterior wall.

(b) Bilateral ovarian cysts of 6 and 8cm in diameter respectively. Small bowels were also adhered to these cystic ovaries. The utero sacral ligaments and uterovesical pouch were clearly visualised and appeared to be normal. The pouch of Douglas was free.

There was no aortic or iliac lymphodenopathy by blunt dissection working from below up ward and with cautious intermittent use of scissors the adhering structures were successfully freed from the cystic ovaries and the uterus.

The uterus was then drawn up and pushed to the left. The right infundibulo pelvic ligament was identified and caught with a clamp. The right ureter was properly identified. The infundibulo pelvic fold was then severed between clamps and the stump transfixed with ligatures of No 2 chronic catgut and a second suture ligature was applied. Then the right round ligament was divided between clamps and the perioteneum between it and the infundibulo pelvic fold was opened up, thus freeing the anterior leaf of the broad ligament.

MOBILIZATION OF THE BLADDER

The mobile uterovaginal peritoneum was divided transversely with scissors and the right lateral side merged with the freed anterior leaf of the broad ligament. The bladder was then dissected caudally with the help of a "swab stick" in the midline in the region of the vesico-cervical space and stripped substantially away from the cervix and upper vagina thus exposing an ample vaginal cuff.

DIVIDING THE UTERINE VESSELS

The uterine vessels which come into view were clamped close to the uterus and divided. They were transfixed with double ligatures of No 2 chronic catgut.

The uterus was then drawn to the right and the afore-mentioned procedure was started a fresh on the left side. Though the identification of the left ureter was not accomplished, clamping and division of the structures was kept close to the uterus as possible and meticulous palpation and inspection was utilized to rule out the inclusion of the ureter.

DIVIDING UTERO-SACRAL LIGAMENTS AND OPENING UP THE VAGINA

The left utero-sacral ligament was detached from the uterus with scissors cutting distal to the holding forceps; the same was done on the right side. Both utero-sacral ligaments were separated off the uterus and were held in forceps and with the help of scissors the peritoneum attached to the posterior aspect of the cervix was divided together with tissue, still anchoring the uterus. By lifting up the uterus the utero-sacral ligaments and the peritoneal edge fell back and exposed the posterior fornix. With the help of blunt dissection the peritoneal covering from the upper third of the posterior vaginal wall was stripped.

The uterus was then pulled in a medial and cephalad direction and the upper vagina was clamped on its left lateral edge at the junction of the upper and middle thirds. The same procedure was carried out on the right side. At this juncture the uterus was pulled backward and the bladder reflected further downwards. Further occluding clamps were applied above the two clamps already in a place. The scalpel divided the vagina between two sets of forceps thus removing the uterus and the wide vaginal cuff leaving the original clamps. The stumps of the utero-sacral ligaments were transfixed with No. 2 catgut. Then the left vaginal angle was transfixed and the pedicle ligated with No. 2 catgut. The right vaginal angle was similarly ligated. Transverse closure of upper vagina was completed with interupted No. 2 catgut suture. The pelvic peritoneum was closed by a single continous stitch curving across the pelvic floor.

The abdominal packs and retractors were removed and the abdomen closed as described in the introduction and in addition the rectus sheath was reinforced with interrupted nylon sutures.

Macroscopically on sectioning the uterus, the myometrium appeared to be involved. The removed specimen was sent for histopathology. The tumour extended down the cervix.

POST OPERATIVE MANAGEMENT

The patient recovered well from anaesthesia. Her blood pressure, pulse, and respiration were monitored half hourly for 4 hours, then hourly for the next 20 hours. She received a total of 1.5 litres of blood =A (+) during the intraoperative period and the first 24 hours postoperatively. In addition 2 litre of dextrose saline were infused. The urinary output was 1200ml after 24 hours.

On the second postoperative day the continous intravenous drip was discontinued as the patient passed flatus and the bowel sounds were heard. Continous catheter drainagege was also stopped. Her blood pressure was 130/80 mmHg; pulse 88per minute regular, good volume and respiratory rate was 24 per minute.

During the postoperative period parenteral antibiotics were given for the first 24hrs chloramphenicol 500mg intrevenously 6 hourly, Grystolline penicillin 2m.u bvia the same route 6 hourly. Then chloramphenicol was continued orally 500mg q.i.d for 6 days together with Metronidazole 400 mg t.d.s.

Intramascular procaine penicillin 1.2m.u. was resorted after 24 hours. She received narcotic analgesic as described in other postoperative cases. There was no spike of fever. The wound healed by primary intension and all stitches were removed on the 8th day.

RESULTS FROM HISTOPATHOLOGY DEPARTMENT:

Gross:- Right ovary; shows cysts filled with sebaceous material.

Left ovary: Dermoid cyst with inspissated material.

Uterus:- One firm mass one calcified mass

Histology:- Well differentiated adenocarcinoma of the endometrium. The ovaries and myometrium are free.

The patient was scheduled to start radiotherapy 4 weeks after the extended abdominal hysterectomy for stage II carcinoma of the endometrium. Her hemoglobin prior to the commencement of radiotherapy was 12gr per dl. and no pathogens were isolated when the urine was cultured.

She received a total dose of 8000rad. 2000rad to central pelvis, 2000rad to the vault and 4000rad to pelvic wall. All treatments were well tolarated.

FOLLOW UP

The patient was seen again 6 months after completion of radiotherapy. There was no complaint of vaginal bleeding or discharge. No history of cough. On examination she was not pale. Her respiratory and cardiovascular systems were normal.

ABDOMINAL EXAMINATION

The scar healed well. There were no masses or ascites.

VAGINAL EXAMINATION

The vulva was atrophied. On speculum examination the vault healed well and there was nopathological discharge. Vault smear was taken for cytology and the results showed that there were no malignant cells.

CONCLUDING REMARKS

No macroscopic evidence of the disease. The patient was advised to come again after one year.

COMMENTARY

Carcinoma of the cervix is the commonest gynaecological malignancy seen at Muhimbili Medical Centre. Endometrial carcinoma formed less than 3% of gynaecological malignancies in 1976.

Of the 172 cases admitted due to the same gynaecological pathology between 1st January 1979 and July 31st 1979, 8 were due to carcinoma of the endometrium 5% (1)

Many patients with endometrial carcinoma are obese and nearly half of them will be mulliparous and the peak incidence is between the ages of 50 and 65 years. (75% of corpus cancer occurs after the age of 50 years (2)). This patient presented in a rather classical form. Complaints of postmenopausal bleeding and vaginal discharge in a 60 year old nulliparous woman with burgeoning somatotype were highly suggestive of the disease. Papsmear should have been taken but this was not done due to some local constraints at the time. Fractional curettage is of great importance in the diagnosis of endometrial carcinoma. This was not done due to the presence of the protruding mass.

One the operability of the lesion was established the patient was geared for an extended hysterectomy and postoperative radiotherapy. Extended hysterectomy which in this case implied removal of a wide area of vaginal cuff was necessary in order to avoid vault recurrence. When the diagnosis of endometrial carcinoma is known prior to surgery the cervix is usually closed by a strong suture to prevent the escape of malignant cells during the operation. This was not done as the mass was protruding through the cervix and the possible neoplastic explosion with direct tumour cell invasion of the vault would be taken care by the postoperative Radiation.

Though pelvic gland involvement was anticipated in the stage II growth (3), gland dissection and removal was not done. Authoritative opinion now questions the need and wisdom of pelvic lymphnode dissection and removal(4). The modern trend is towards the use of newer forms of radiotherapy for lateral pelvic extension(3), hence the decision to give postoperative radiation to central pelvis and pelvic wall to this patient.

Large doses of progestogens have been found to be effective for palliative treatment in advanced cases, especially those with pulmonary metastases and treatment can be continued indefinitely.

An aggresive approach in managing these patients with surgery as the mainstay of treatment even in the poor risk patients is very worthwhile. For by removing the actual primary source the patient is spared the "indignity and misery of bleeding and stinking genital cancer".

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PELVIC ABSCESS

POSTERIOR COLPOTOMY

PATIENT: MRS. R.K. AGE: 30 YEARS

INPATIENT NO. 291391

RESIDENCE: MUHIMBILI DAR ES SALAAM

DATE OF ADMISSION: 11/5/82

DATE OF OPERATION: 11/5/82

DATE OF DISCHARGE: 19/5/82

SUMMARY:

The 30 years old divorcee complained of lower abdominal pain and fever. A diagnosis of pelvic abscess was made and posterior colpotomy was done as an emergency procedure. She responded well on this treatment.

HISTORY OF PRESENT ILLNESS:

The patient was admitted from home via the casualty department with the chief complaints of lower abdominal pain and fever persisting for four days. The pain was of sudden onset localised at the suprapubic area and both iliac fossae. It had no association with micturition or defaecation. She had vaginal discharge, rather purulent and copious. There was no history of vaginal bleeding. She was not amenorrhoeic. The patient denied any episodes of syncope.

PAST MEDICAL HISTORY:

This was her first admission to hospital. Confessed that in the past about 12 years ago she was twice treated for allegedly gonorrhoeal infection and malodorous vaginal discharge. Had never underwent any major surgical procedure.

FAMILY AND SOCIAL HISTORY:

Divorced 3 years ago. Drinks alcohol. She has three living children.

GYNAECOLOGICAL HISTORY:

Menarche was at 14 years. Cycle were 5 days every 30 days moderate flow initially, however for the past 10 years rather heavy and moderately painful but still regular. She is sexually active and occasionally experiences deep dyspareunia. The first day of her last menstrual period was on 15th April 1982. The menses lasted for 5 days. She had never used intrauterine contraceptive devices or contraceptive pills.

OBSTETRICAL HISTORY:

She was para 3 + 1 abortion at 3 months for which an evacuation was done. Her postabortion recovery was essentially uneventful. There was no history of difficult delivery or abnormal puerperium. Her last born child was 14 years old.

GENERAL EXAMINATION:

Anxious looking patient and in pain. She was neither pale nor dyspnoeic. She was febrile with an axillary temperature of 38°Centrigrade. There was no lymphadenopathy. The breasts were non-active and there were no intramammary lumps.

THE RESPIRATORY SYSTEM:

Clinically no abnormality was detected.

THE CARDIOVASCULAR SYSTEM:

The pulse was 110 beats per minute regular of good volume. Her blood pressure was 120/80 mmHg. The heart was normal.

ABDOMINAL EXAMINATION:

On inspection there was a moderate suprapubic distension. The abdomen was very tender suprapubically and there was rebound tenderness, however no mass could be palpated. The liver and spleen were not enlarged the renal angles were not tender. On percussion the distension was tympanitic and there was no shifting dullness. On auscultation the bowel sounds were present.

VAGINAL EXAMINATION:

This was done as described in the introduction. There was purulent vaginal discharge. Pus was oozing from the cervix. The posterior fornix was bulging cystic and tender however no firm mass was felt on palpation. Cervical excitation was tender. The uterus was difficult to palpate due to suprapubic muscle guarding. The adnexa were tender. No adnexal masses were palpated.

RECTAL EXAMINATION:

The cul de sac was full, cystic and tender. Again no masses were felt. The uterus could not be appreciated.

DIAGNOSIS:

The presence of fever, purulent vaginal discharge, signs of pelvic peritonitis and cystic tender bulging at the pouch of Douglas and absence of pallor were highly suggestive of pelvic inflammatory disease with an abscess pointing at the posterior fornix.

In the differential diagnosis ruptured tubal pregnancy was also considered though the absence of anaemia and amenorrhoea which are pathognomonic made it highly unlikely.

INVESTIGATIONS:

a. Pus Swab from cervical os

Gram Stain:- Many pus cells and gram positive cocci

Culture: No Pathogens were isolated.

b. Culdocentesis:

Revealed pus non foul smelling. About 5 mls were sent for gram staining and culture. Results from Microbiology Department:-

Wet Preparation:-

Many pus cells and some red blood cells

No yeast cells were seen.

Gram Stain:

Many pus cells and gram positive cocci

Culture:

No Neisseria gonorrhoea were isolated

Anaerobic Culture:

No Pathogens were isolated.

Blood Picture:

Haemoglobin was 10.4 gm/dl

Leucocyte Count:

Total 12000

Differential

Neutrophils (seg) 58

Neutrophils (Stab) 4%

Eosinophils 4%

Lymphocytes 24

Monocytes 10%

Red blood cells - Normochromic and Normocytic

Erythocyte Sedimentation rate: 35 mm/h

Urine:

Microscopy - few pus cells were seen

Culture and Sensitivity - No Pathogens were isolated

Glucose and Protein - Negative.

MANAGEMENT:

Before waiting for the culture results, treatment with crystalline penicillin 5 m.u intravenously as a bolus every 6 hours and chloramphenicol 500 mg via the same route and frequency was started. Immediate drainage of the pus through posterior colpotomy in the theatre was contemplated. She was given an intramuscular injection of 100 mg of pethidine prior to her transportation to the theatre.

ANAESTHESIA:

Premedicated with atropine 0.6 mg intramuscularly. Ketalar 150 mg intravenously together with diazepam 20 mg were given.

EXAMINATION UNDER ANAESTHESIA:

This substantiated previous vaginal findings. There were no tuboovarian masses. The pouch of Douglas was bulging. The cervix was long and the os was closed. The uterus was found to be of normal size, anteverted, and of limited mobility.

PROCEDURE:

The anaesthetised patient, placed in lithotomy position, cleaned and draped in sterile towels was catheterised as described in the introduction 200 ml of clear urine was obtained. Auvard's speculum was introduced to expose the cervix which was then drawn upwards and forwards with volsellum forceps. The posterior vaginal wall was disinfected and a transverse incision made at the level of maximum bulging and fluctuance. Pus about 300 ml gushed out. Then blunt closed forceps was passed and gently opened, more pus was evacuated which was later followed by some sero-sanguinous fluid. A corrugated rubber drain was sutured to the edge of the wound with catgut No/o.

POSTOPERATIVE MANAGEMENT:

The patient had her pulse, blood pressure and respiration monitored hourly for the first 4 hours, then 4 hourly for the next 18 hours. A 4 hourly temperature chart was requested. A drip was maintained for intravenous medication which had been started preoperatively. She was to be nursed propped up in bed. The drain was to be removed when pus no longer drained.

Twenty four hours after posterior colpotomy the temperature became 37.5°, the pulse was 92 beats per minute, abdominal rigidity was almost absent, but there was still some pus draining. Within 36 hours there was a dramatic improvement on her general condition namely her temperature normalised the pulse was 82 beats per minute, regular good volume, the abdomen was soft but pus was still draining.

On the fifth post operative day the corrugated rubber drain was removed after ascertaining that no more pus was trickling. From the second postoperative day the antibiotic regime was changed to intramascular procaine penicillin and oral chloramphenicol till the seventh day. She was discharged with a haemoglobin of 11gm/dl.

FOLLOW UP:

The patient was lost from follow up.

COMMENTARY:

Pelvic inflammatory diseases acute and chronic are very common in the tropics.(1) with its natural sequelae of tubal occlusion, infertility, pelvic abscesses chronic lower abdominal pain and dyspareunia. In 1974 at Muhimbili Medical Centre pelvic inflammatory disease occurred in 16.1% of all gynaecological admissions, while in 1979 - 1980 pelvic infections formed 11.3%.(2)

Pelvic infection usually arises from postabortal, puerperal or postmenstrual sepsis. As far as bacteriology of genital infection, it has been established that the causative organisms are anaerobes and aerobes in various proportions.

In a study conducted at Muhimbili Medical Centre anaerobic organisms were predominant in infections of the female genital tract, they formed 79.2%.(3) The most commonly found anaerobes were anaerobic streptococci and the aerobic organisms were staphylococci, streptococci, coliforms, proteus, klebsiela and pseudomonas. Though the culture results of this patient did not yield positive growths, one should be cautions in their interpretation. There are problems of delay intransporting the specimen, problems of culture especially anaerobic organisms.

When the pelvic peritoneum is acutely infected, omentum, sigmoid and loops of small bowel soon become netted together to localise the infection to the pelvis. If an abscess forms, it is usually in the pouch of Douglas.(1) This patient had evidence of pelvic infection in the past which could explain her secondary infertility. Although complete resolution is possible, pelvic adhesions are left in most cases and with flaring up of the infection pus can collect to form an abscess.

Conservatism has a definite place in the management of pelvic inflammatory disease but in selective cases surgery should not be deferred. In this case the abscess was considered to be amenable to colpotomy drainage because of the following reasons (4):-

a. It was fluctuant and pointed into the posterior fornix.

b. The swelling in the pouch of Douglas was established beyond any shadow up doubt to be an abscess (Culdocentesis findings ruled out pelvic haematocele) and rectal examination ruled out the possibility that the abscess had discharged into the rectum (thus nullifying the necessity of doing colpotomy)

c. Absence of tuboovarian masses (In case of which laparatomy would have been more appropriate as adnexal abscess can very seldom be drained through the vagina)

The aforementioned findings strongly influenced the decision infavour of posterior colpotomy and against resorting to laparatomy. The choice of antibiotics was influenced by the result of the study conducted at Muhimbili Medical Centre which established that genital tract infections are due to mixed aerobes and anaerobes and that some of these anaerobic organism have been found to be sensitive to more than usual doses of penicillin.(3)

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POST EVACUATION UTERINE PERFORATION

REPAIR OF THE RENT AND BILATERAL TUBAL LIGATION

PATIENT: MRS. J.M. AGE: 36 YEARS

INPATIENT NO. 254438

RESIDENCE: KINONDONI

DATE OF ADMISSION: 30/6/81

DATE OF OPERATION: 2/7/81

DATE OF DISCHARGE: 10/7/81

SUMMARY:

The patient was admitted with clinical manifestation of peritonitis. She was managed conservatively but to no avail. A laparatomy was performed. The patient was surgically sterilised after repair of the discovered uterine rent. She had an uncomplicated postoperative recovery.

HISTORY OF PRESENT ILLNESS:

She was initially admitted from home to our gynaecological ward as a case of threatened abortion. After few days of hospitalization, she was discharged apparently in a satisfactory condition only to be readmitted two days later with the diagnosis of incomplete abortion. After the evacuation, the patient started to experience severe, constant lower abdominal pain and fever. She was put on broad spectrum antibiotic and big doses of crystalline penicillin.

PAST MEDICAL AND SURGICAL HISTORY:

Apart from the recent admissions to the hospital there was nothing significant.

FAMILY AND SOCIAL HISTORY:

No family history of diabetes mellitus. She is married with four living children. A school teacher by profession.

GYNAECOLOGICAL HISTORY:

Her menarche was at 12 years and the cycles were 3 days every 28 days, slightly painful. The menses were not heavy. There was no history of dysparaunia. She used oral contraceptive pills for one year during 1977.
This was her first time to be evacuated. She denied any history of dilatation and curettage. The first day of her last normal menstrual period was on 25/3/81.

OBSTETRICAL HISTORY:

She was para 4 + 1 abortion at 3 months (the current one). All her pregnancies and deliveries were uneventful. They were all full term and hospital deliveries. She did not remember the birth weights. Her last born child was 2 years old.

GENERAL EXAMINATION:

She was in pain, moderately pale. Her axillary temperature was 36° Centigrade. Hydration was satisfactory. The breasts were engorged. There were no intramammary lumps.

The respiratory system was normal.

THE CARDIOVASCULAR SYSTEM:

The pulse rate was 110 beats per minute regular of good volume. Her blood pressure was 130/90 mm of mercury. The heart was normal.

ABDOMINAL EXAMINATION:

The abdomen was not distended. There were no visible peristalsis or masses. Tenderness and guarding were elicited suprapubically. There was rebound tenderness but no shifting dullness. The liver and spleen were not enlarged. The renal angles were non-tender. On auscultation the bowel sounds were present and not exaggerated.

VAGINAL EXAMINATION:

This was done as described in the introduction. The vulva was normal. The vagina was tender with little bloody discharge. The cervix had no lacerations and it was 2 centimetres dilated. The cervical excitation was tender. The uterus and adnexa were difficult to appreciate due to suprapubic muscle guarding.

DIAGNOSIS:

The impression was of post abortal pelvic peritonitis and in the differential uterine perforation was also entertained.

PLAN OF MANAGEMENT:

Conservative management was planned initially under close observation. After 24 hours the patient was to be reviewed and the response to be evaluated.

SPECIFIC TREATMENT AND INSTRUCTIONS:

1. Intravenous Injection of Crystalline Penicillin 4 mega units 6 hourly.
2. Chloramphenicol 500 mg intravenously 6 hourly.
3. Flagyl tablets 400 mg three times daily.
4. 4 hourly temperature, blood pressure and pulse chart.
5. Input/output chart (9).
6. Drug chart.

INVESTIGATIONS:

Cervical swab:-

Culture

Blood: - Haemoglobin 6.5 gms per decilitre.

Group "O" rhesus D Positive

Total white cell count 8,500 per cum mm.

The differential cell count

Neutrophils 70 per cent

Lymphocytes 24 per cent

Eosinophils 3 per cent

Basophils 3 per cent

Serum sodium 140 mEq/l

Serum potassium 3.8 mEq/l.

Blood for Cross-matching was taken and 4 units of blood were booked.

Urine:- Glucose was negative and there was no proteinuria.

Culture - No pathogens were isolated.

X-ray Films:

Chest X-ray in the antero-posterior view which include the domes of the diaphragm was done. The chest X-ray was normal and showed no gas under the diaphragm.

REVIEW OF THE PATIENT:

There was no improvement inspite of the massive doses of antibiotics. Her pulse was now 120 beats per minute regular of good volume. She had not defervesced, the temperature was even higher - 39° centigrade. On examination of the abdomen there was slight distension. Tenderness was now generalised and rebound tenderness was still present. There was no shifting dullness.

She received 3 litres of dextrose saline and the output was 800 millilitre of urine. Her haemoglobin was 7.5gm/dl after being transfused 1000 millilitre of blood.

SUBSEQUENT MANAGEMENT OF THE PATIENT:

She was scheduled for an urgent laparotomy.

PREPARATION:

1. Her consent was sought and obtained and the possibility of hysterectomy or sterilisation was discussed with the patient who gave us full mandate to do the needful.

2. A nasogastric tube was inserted and continous drain instituted.
3. The already initiated intravenous fluids and medications were continued.

The patient was premedicated with atropine 0.6mg subcutaneously and an intramascular injection of pethidine 100 mg.
As more blood was still not available another urgent appeal was made to the blood bank. We got one unit prior to the operation.

ANAESTHESIA:

General anaesthesia was given as described in the introduction.

PROCEDURE:

The abdomen was opened via the subumbilicol median incision as detailed in the introduction.

FINDINGS:

1. Moderate amount of haemoperitoneum
2. Left broad ligament haematoma foul smelling
3. Perforation of the uterus just above the isthmus about 4 cm, communicating with the haematoma within the two leafs of the broad ligament
4. Left tube was edematous
5. The uterus was bulky corresponding to six weeks of gestation. There were no products of conception.

DONE:

The broad ligament haematoma was evacuated after opening up the peritoneum. Great care was taken to avoid injury to the ovarian vessels.

It was not possible to remove all blood clots as some old clots were quite adherent and by forcefully removing them the risk of opening up pelvic vessels would be very high.

The uterine rent was repaired with catgut no 1. Then bilateral tubal ligation was done using Pomeroy's technique. There was persistent oozing from the site of the evacuated haematoma. This was dealt with by inserting a corrugated rubber drain which was brought out through a separate stab incision in the left flank. The abdomen was then closed in layers with silk to skin as described in the introduction.

The patient recovery from anaesthesia was uneventful. She was transferred to the ward after regaining consciousness.

POST OPERATIVE MANAGEMENT:

1. The patient was transfused 1500 mls of blood and 1000 mls of dextrose saline in 24 hours.
2. Antibiotics started before the laparatomy were continued and from the third post operative day, she started to get intramuscular procaine penicillin fortified 1.2 m.u once daily together with capsule chloramphenicol 500 mg four times daily for 7 days.
3. Fluid input and put put chart was instituted urinary output was checked and found to be satisfactory. From the third post operative day, she started on oral fluids as the bowel sounds were present and had passed flatus.

4. Pulse, blood pressure and respiration were monitored hourly for the first 6 hours and thereafter 4 hourly for the next 24 hours. Temperature was recorded 4 hourly. On the second postoperative day, she had a spike of temperature to 39° centigrade which defervesced on the third postoperative day.

5. Injections of Pethidine 100 mg intramascularly six hourly were given for the first 24 hours.

6. The drain was shorten from the second postoperative day. After 48 hours it was removed completely.
Throughout the postoperative period, she remained normotensive.

INVESTIGATIONS:

Haemoglobin 9.0 grammes per decilitre

White cell count 6,500 per cu mm.

Midstream urine for culture - No Pathogens were isolated.

The stitches were removed alternately on the 7th postoperative day and completed on the 8th postoperative day. The wound healed by primary intention. She was discharged on tablets Ferous sulphate 200 mg twice daily and folic acid 5mg once daily for 6 weeks.

The patient was advised to come for follow up at a gynaecological clinic after 4 weeks. She was lost from follow up.

COMMENTARY:

Infection and trauma to the genital tract are the common sequelae of criminal abortion.

As complications following an evacuation of spontaneous abortion, they are not common.

Fresh uterine perforations are repaired primarily after debridement of the devitalized tissues. Where fulminating infection has set in and the uterus is the midus of infection and much of it is destroyed, hysterectomy and high dose antibiotic therapy are advocated. I this patient, her age, parity and the presence of infection influenced the decision to sterilise her.

Genital tract infections are due to anaerobic and aerobic organism and this influenced the choice of antibiotics given to this patient.

Thus a high index of suspicion must be maintained so as not to miss uterine perforations even in situations when they are least suspected.

VESICO-CERVICAL FISTULA

SUCCESSFUL TRANSVESICAL REPAIR

PATIENT: MRS. M.A. AGE: 19 YEARS

INPATIENT: NO 266347

RESIDENCE: MBAGALA - DAR ES SALAAM

DATE OF ADMISSION: 3/3/82

DATE OF OPERATION: 14/6/82

DATE OF DISCHARGE: 30/7/82

SUMMARY

The patient was admitted with true urinary incontinence and diagnosed as vesico-cervical fistula sustained during her previous prolonged and difficult labour which culminated in a series of operations to relieve her obstruction. A successful repair was done and the patient was discharged continent of urine.

HISTORY OF PRESENT ILLNESS

She was admitted to the gynaecological ward with the chief complaints of constantly leaking urine 10 days after an operative delivery 6 months ago. Her third pregnancy reached full term and there was no documented evidence of antenatal attendance. She was in labour for two days at home before she went to a district hospital at Temeke from where a decision was taken to refer her to Muhimbili Medical Centre with obstructed labour and intra uterine fetal death.

Destructive operation was done but vaginal delivery was not accomplished. Then a laparatomy was performed apparently for a ruptured uterus with subsequent subtotal hysterectomy. She had a stormy postoperative recovery with development of constant urinary dribbling on the 10th postoperative day. During her six weeks stay in the hospital, a continous catheter drainage was maintanient for three weeks and later discontinued as almost no urine was draining via the catheter. She also received multiple blood transfusions and parenteral broadspectrum antibiotics. The patient was discharged and advised to come again for repair operation 3 months later.

FAMILY AND SOCIAL HISTORY

Peasant, illiterate was recently divorced. She is a non smoker and does not drink alcohol.

GYNAECOLOGICAL HISTORY

The menarche was at 14 years. Cycles were regular 3 days in every 28 days with no intermenstrual vaginal bleeding. She never used any form of contraceptive measure. Her menses had not started since the time of her previous pregnancy.

OBSTETRIC HISTORY

She was para 1+2 with no living child. Her first abortion was at three months gestation, the second one at six months. Both were not evacuated and had allegedly uneventful recovery. She never attended antenatal clinic during her previous pregnancies. Her first and final full term delivery was in September 1981 which ended up in a laparatomy with subtotal hysterectomy.

GENERAL EXAMINATION

Depressed looking young girl in satisfactory nutritional status. Her height was 140 centimetres. She had no difficulty in walking and her gait was devoid of any pathology. She was not pale and had neither lymphodenopathy non peripheral edema. Her temperature was 36.7° centigrade. The breasts were not active and there were no intramammary lumps.

CARDIOVASCULAR SYSTEM

Her pulse rate was 72 per minute regular good volume and the blood pressure was 100/80mm of mercury. The heart was normal. The respiratory system was normal.

ABDOMINAL EXAMINATION

The abdomen was scaphoid. There was a median subumbilical scar with no keloid formation. The liver and spleen were not palpable. The renal areas were not tender.

VAGINAL EXAMINATION

The vulva and perineum were wet and there was a pungent smell of urine. There were no excoriations. On digital examination there was no vaginal stenosis. The cervix was long and speculum examination revealed that urine was trickling from its vs. The uterus was not felt and the adnexe were non-tender and not palpable.

RECTAL EXAMINATION

The external anal sphincter was intact and no abnormality was detected on this procedure.

A provisional diagnosis of vesico-cervical fistula was entertained.

PLANNED MANAGEMENT

1. Investigations including examination under anaesthesia
2. Repair of the fistula

INVESTIGATIONS

Haemoglobin was 11.3gr/dl

The white blood count was 6000 per cubic millimeter with normal differential. The erythocyte sedimentation rate was 12mm/hr.

Blood urea was 14mg/dl

Creatinine 1mg/dl

Urine Albumin - Nil

Sugar - Nil

Ova - Nil

Culture - Yielded significant growth of gram negative bacilli

Sensitive to: Nalidixic acid; Nitrofurantoin, Cotrimoxazole

Resistant to: Sulphafurazole

Ampicillin

Tetracycline.

Blood group A RH D positive

Straight X-ray of the pelvis - No calculi were detected.

The patient was started on nitrofurantoin 200mg thrice daily for 10 days and was scheduled for an examination under anaesthesia a week later.

EXAMINATION UNDER ANAESTHESIA

This was done in order to assess the size and site of the fistular and the state of surrounding tissue and to quantify the number of fistulae.

A decision on the position to be adopted during the repair was to be taken during this examination. The patient was prepared as described in the introduction.

ANAESTHESIA

Ketamine hydrochloride 100mg and diazepam 10mg were given intravenously. She was premedicated with atropin 0.5mg intra-intravenously.

PROCEDURE AND FINDINGS

The patient was put in lithotomy position. The skin around the vulva was cleaned with antiseptic solution and drapings were applied. An Auvand's speculum was inserted and no fistula was visualised, but urine was seen dribbling from the cervical vs. The cervix was pulled down still no fistula was seen. A sound was possed through the cervix and a metal catheter was inserted through the external urethral meatus and a communication between the bladder fistula and its opening through the cervical canal was manipulatively established. During the introduction of the metal catheter about 20ml of clear urine was obtained indicating that the bladder was retaining some urine visavis the fistula. Rectal examination was also done.

FINDINGS

1. Vesico-cervical fistula
2. No other fistula was seen
3. The urethra was intact and communicated with the bladder
4. Other findings were as per previous examination

PLAN OF REPAIR:

A decision was taken to repair the fistula from above through the transvesical approach. Her haemoglobin was re-checked and found to be 12g/dl and urine culture did not isolate pathogens. Blood was taken for grouping and cross-matching with a request for 3 pints of blood.

PREPARATION:

This was done in accordance with the routine for all patient scheduled for gynaecological laparatomies (see introduction).

ANAESTHESIA:

General anaesthesia was used and administered as detailed in the introduction.

PROCEDURE:

The patient was cleaned and draped and the abdomen was opened up via the excised subumbilical scar as detailed in the introduction. Adhesions encountered were bluntly dissected. With the opening of the peritoneal cavity self-retaining retractor was used to give adequate exposure and the intestines were kept off the operation site by supporting them with moist abdominal pack and keeping the head of the table lowered; a steep Trendelenburg position was not required.

As the bladder was retaining some urine, it was easily identified. As the fistula followed subtatal hysterectomy, the easier transperitoneal approach was favoured. The bladder was opened across the fundus in an east-west direction between stay sutures and simultaneously the assistant was sucking out the "residual" urine. Extension in the North-South direction was not done. Through the splitted blaader the fistula was adequately exposed. It was a small fistula above the trigone and well above the interureteric bar.

Catheters were then passed up the ureters and the two halves of the bladder were held apart. The fistula which opened into the canal of the cervical stump was steadied with an angled sharp hook and the bladder wall was dissected off the underlying cervical stump using a bistoury blade on a long hand scalpel and acutely curved scissons. The cervical stump defect was repaired with interaupted catgut suture. Then the ureteric catheters were removed and the bladder wall incision was closed in two layers of continous 2 - 0 chronic catgut. The abdomen was closed in layers with silk to skin. Bladder drainage was maintained via the urethral Foleys catheter secured to the vulva by Charlewood's method. The catheter was patent and drained freely. Her recovery from anaesthesia was uneventful and was transferred to the ward.

POST OPERATIVE TREATMENT

1. Blood pressure, pulse and respiration were monitored as stated in earlier post operative cases.

2. Special attention was paid to patency of the catheter and fluid input and output 3.5:

   (a) 3½ litres of Dextrose saline were given on the first day to be followed by oral fluids more than 3 litres per day.

   (b) Lasix - injection 40mg intramascularly was given B.D. in the first 24 hours.

   (c) Bladder drainage observation 2 hourly

   (d) Furadontin tablets 2000mg t.d.s from the second post operative day till the removal of the catheter.

   (e) Pethidine 100mg 6 hourly by intramoscular injection 4 doses.

POST OPERATIVE PROGRESS

During the first post operative day the general condition of the patient was satisfactory. Her pulse was 84 per minute regular and good volume. Blood pressure was 110/80mmHg. The lungs were clear. The abdomen was not distended and the lowel sounds were present. The urinary output was good though slightly blood stained. The patient was advised to drink fluid frequently. The bed was dry.

On the second post operative day the catheter was draining clear urine. She remained afebrile and her recovery was uneventful. Abdominal wound healed by primary intention and the stitches were removed on the 8th post operative day. The continous bladder drainage was discontinued on the fourteenth day as the bed was dry ever since the beginning of the post operative day.

The patient was kept in the ward for three more weeks and was then discharged in good general condition, continent and happy. She was advised to refrain from coitus for at least 3 months and to report to Gynaecology outpatient after one month. During her stay in the hospital her haemoglobin was rechecked and midstream urine for culture was taken results:

Haemoglobin - 11gr/dl

Mid stream urine - No pathogens were isolated.

FOLLOW UP

She never t[illegible] up.

COMMENTARY

Vesico-vaginal fistulae of obstetric origin continue unabated to form a major pathetic problem in gynaecological urology here in Tanzania. Genital fistulae formed 1% (80 cases) of all gynaecological admissions in 1979 - 1980 at Muhimbili Medical Centre; 70 were vesico-vaginal, 6 were recto-vaginal and 4 were unclossiiied.

There is no mention of vesico cervical fistulae perse. This type of fistula occurs as a complication of labour, gynaecological operations and following a lower segment caesarian section (2). This patient had an obstructed labour due to cephalo-pelvic disproportion which ended up in a ruptured uterus (Probably iatrogenic after a failure to deliver the dead fetus vaginally despite the destructive operation) and the bladder was torn during the process of dissection. Almost a similar case of a ruptured uterus and torn bladder during delivery of a child by forceps in a patient with previous lower segment scar and subsequent development of vesico-cervical fistula is reported elsewhere (3).

This patient's bladder was retaining some amount of urine. Vesico-cervical fistula does not always cause total incontinence (4).

The method of repair was influenced by the preliminary examination under anaesthesia. As the fistula was high and inaccessible per vagina it was best to repair by the abdominal route and the transperitoneal, transvesical approach was the suitable procedure after hysterectomy (5).

Bleeding was minimal and the prevesical space was not entered to mobilise the bladder. Therefore oozing was not a problem and the paravesical spaces were not drained. During the postoperative period frusemide and intravenous fluid were given to enhance bladder washout by increasing the urinary output.

This patient depicted in a very dramatic manner the tragic consequences of poor obstetric care. It appears that she alone should be blamed for not attending the antenatal clinic and for not seeking timely medical help when labour started at home. But this is a rather naive approach because judgement is passed on an event viewed out of its context. The socio-econimic status in all its perspective should be taken into consideration.

She was definitely a victim of cizcumstance and had to go home bearing the brunt of permanent amenorrhoea, infertility and possibly crippling psychosomatic disorders. Is it the inexo-nerable fate for the forereable future awaiting the fair sex of tender age living in the least developed countries whose only "sin" is to conceive in an environment cursed by under development in all its perspective?

As for the creteria for cure according Coetzee and Lithogow only full continence and complete closure of the fistula were accomplished.

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CRIMINAL ABORTION - A REVIEW OF LITERATURE

Illegal abortion is a global problem which has reached epidemic proportions in the developing world. It is a major cause of death among women of reproductive age in the developing countries. This topic is considered to be quite relevant in the Medico-Legal setup of Tanzania. The subject of illegal abortion is very wide. The stupendous task of encompassing each and every aspect of illegal abortion is well beyond the scope of this paper.

The following case presentations introduce this subject in its true colours.

Case No. 1:

21 year old girl, nulliparous, not married and was newly employed. She was admitted to the hospital because of lower abdominal pain, fever and foul smelling blood stained vaginal discharge following an a menorrhoea of two months. The duration of the illness was allegedly two days.

This patient categorically denied history of any form of intervention to induce abortion. Her past medical history was unremarkable. On physical examination her general condition was poor. She was pale, febrile 39° centigrade. Her pulse was 120 per minute regular rather feeble and the blood pressure was 90/50 mmHg. The heart and the lungs were normal. Other positive findings were on the abdominal examination which revealed signs of peritonitis.

On vaginal examination there was foul smelling discharge and the cervix had multiple lacerations. The uterus was enlarged corresponding to 10/40 weeks of gestation. No products of conception were found. The patient was put broadspectrum antibiotic namely Chloramphenicol and big doses of crystalline penicillin together with metronidazole. She was transfused 1500 mls of blood.

A number of laboratory investigations were carried out namely serum urea and creatinine, serum electrolytes, blood culture together with urine and cervical culture. The only positive findings were from the blood culture which yielded heavy growth of pseudomonas organisms. Later a laparotomy was done as there was evidence of pus in the peritoneal cavity and about 800 mls were sucked out. There were also multiple adhesion and the bowels were matted together. The omentum was firmly adherent to the pouch of Douglas. The adnexa were inflamed and edematous.

Her post operative period showed no improvement. She became tachypnoeic, delirious and hyperpyrexic and the abdomen was grossly distended. She was now put on steroids and gentamicin intravenously together with metronidazole rectal suppositoris. The patient was also getting oxygen. Later she started to develop episodes of generalised body convulsions. The patient was intubated and put on intermittent positive pressure ventilation. This patient died after staying in the hospital for seven days.

Case No. 2.

A 21 year old first year university student was admitted initially to a medical ward in Muhimbili Medical Centre because of fever and severe anaemia. She was under investigation for her anaemia and had received multiple blood transfusion. There was allegedly some improvement. She was somehow discharged from the medical ward only to be readmitted after a few days to a gynaecological ward.

On admission, it was noted that, she had an amenorrhoea of two months. On further interrogation the patient confessed that on attempt was made to induce abortion two weeks ago and the abortionist used a metallic instrument. On examination her general condition was poor, she was very pale, dehydrated, and febrile 38^{0} centigrade. Her pulse was 120 beats per minute regular, feetle. Her blood pressure was 60/30 mmHg. The abdomen was very tender with positive rebound tenderness vaginal examination revealed a necrotic tissue at the foul smelling brownish discharge and there was a prolapsed bowel through the rent in the posterior fornix. The uterus was enlarged corresponding to 6 weeks of pregnancy and the cervix was opened 3cm. and products of conception were felt.

Urgent resuscitative measures were initiated and a number of laboratory investigations were done. She was put on broad spectrum antibiotics and received multiple blood transfusion when she was deemed fit for anaesthesia, the patient was rushed to theatre for an examination under anaesthia and laparotomy.

Initial findings were confirmed. During the laparotomy, the loop of ileum was found to have prolapsed via the rent into the posterior fornix. About 45 centimetres of the involved ileum was noted to be gangrenous. Resection and end to end anastomosis was done. The rent through the Pouch of Douglas was repaired. Finally the products of conception were evacuated.

Broad spectrum antibiotics, multiple blood transfusion together with steroid therapy among others were employed during the stormy postoperative period. Fortunately the patient survived the immediate catastrophe at a terrible cost.

Case No. 3:

A 17 year old girl was referred to the gynaecological ward because of persistent fever inability to eat, backache, lower abdominal pain and foul smelling vaginal discharge. These complications ensued 10 days after an induced abortion at 5 months gestation. She was nulliparous and not married. She confessed to her parents that someone helped her to procure abortion. On admission, she had risus sardonicus and opistotonus. She was dehydrated febrile 39° centigrade and very pale. Her pulse was 130 beats per minute regular of good volume and the blood pressure was 130/90 mmHg. The heart and lungs were normal. On abdominal examination, a supra-pubic mass equivalent to 12 weeks of gestation was palpated.

Vaginal examination revealed brownish, foul smelling discharge, the cervix was 3 centimeters dilated and products of conception could be felt.

A provisional diagnosis of criminal septic incomplete abortion with tetanus was entertained. This patient died within 24 hours of hospitalization.

These few cases were chosen from the many, just to illustrate different aspects of criminal abortion and their consequences.

Definition:

The word abortion is derived from the latin - aboriri meaning to detach from its proper site. In the middle ages this term was lost and the vernacular forms developed such as "fausse couche" in France, "fehlgeburt in Germany" and miscarriage in England. Criminal abortion is a relatively modern term because historically the induction of abortion was of no legal concern to the governments of most areas. Criminal abortion implies an abortion either attempted or produced contrary to applicable laws.(1)

According to Grimes(2) induced abortions that result in deaths are classified as legal or illegal according to the following criteria:-

1. If the woman's medical history indicates that a physician performed the abortion, regardless of the setting, the abortion is classified as legal.
2. If the history indicates that someone other than a physician performed the abortion, the abortion is classified as illegal.
3. If the physical evidence of earlier intervention is found and the abortion was not performed by a physician, the abortion is classified as illegal.

Induced abortion is also defined as a deliberate interferance with a pregnancy, with the intention of terminating it by the pregnant woman herself or by another person.

Historical Perspective (3); (4)

Abortion was practised from earliest antiquity and is one of the oldest methods of preventing unwanted births. That the ancient Egyptians resorted to the practice is shown by the directions cited in Papyrus Ebers one of the oldest medical books in existence which dates from the 16th century B.C. Abortions seems to have been effected largely through the medicinal mixtures.

Abortion was common in ancient Greece and Rome. Among the legends that grew up about Aspasia, the notorious consort of Pericles was one accusing her of teaching the practice to the youths of Athens. In the time of Cicero the practice had apparently reached such proportions that laws were found necessary to restrict it. The Hebraic tribes regarded abortion as a great sin.

Religion:

Among the medieval churchmen, the criminal nature of induced abortion was equated with murder. The only church group sympathetic with the practice of abortion was the Jesuit order which was rebuked by Pope Innocent XI and accused of inducing abortion in out of wedlock pregnancies. A viceroy one of the great Muslim scholars of the 10th century is said to have approved abortion. Muslim scholars of all schools make a distinction between two stages of pregnancy the first 120 days, and the remaining period.

the jurists state that it is permissible to take medicine for abortion so long as the embryo is still unformed in the human shape. This period of unformed state is given as 120 days. Induced abortion after 120 days is thus permissible with an excuse and permissible but disliked without an excuse but after 120 days of pregnancy, all scholars agree that it is forbidden except for extreme personal necessity to save the mothers life.(5)

Legal Status:

During the 19th century as abortion became more common and widely publicized, the dangers of the procedure also received more attention. The 19th century change from a permissive approach to criminal penalties against persons performing abortion influenced the legal status of abortion in many European colonies. To protect women from injury and to discourage abortion as a practice, many Western nations began to enact restrictive abortion legislation.

The first change in the common law doctrine came in 1803 consolidation of the British penal code which included penalties for abortion before quickening or by poisoning.(6) In France in 1810 the Napoleonic code stipulated 5 to 10 years prison terms both for the woman and the abortion providers. By 1861 Britain had amended abortion laws further to make both the woman and the abortion provider subject to imprisonment for abortion before quickening. Many developing countries with the exception of Tunisia, Zambia, India, Singapore, China, Cuba and Vietnam still carry in their penal codes restrictive abortion laws similar to those enacted in Europe toward the end of the last century.(7)

In Tanzania inspite of many attempts to free the country from the shackles of the past, the colonial legal legacy as far as abortion is concerned has not yet been erased. The law states and I quote "any person who, with intent to procure miscarriage of a woman, whether she is or is not with child, unlawfully administers to her or causes her to take any poison or other noxious things or uses any force of any kind, or used any other means whatever, is guilty of felony, and is liable to imprisonment for 14 years" and "Every woman being with child who with intent to procure her own miscarriage unlawfully administers to her or causes her to take any poison on other noxious thing or uses any force of any kind, or uses any other means whats'oever, or permits any such thing or means to be administered or used to her is liable to imprisonment for seven years".(8)

That is how the proclamation of the law sounds but its futility and failure to curb criminal abortion is evidenced by the figures presented in the tables below, the information of which was pieced together from the records of the Criminal Investigation Department here in Tanzania.(9) These figures are remarkable for their paucity and the whole irony is that the real culprits are always at large and those who bear the brunt of the harshment of the law are the young unmarried girls with unwanted pregnancies, the double victims of an awful vicious circle generated by the unique circumstances prevailing in the country under the "Patronage" of the outmoded, conservative legal umbrella of the abortion laws.

TABLE I:

REGIONS	Number of accused		Cases reported	Under investigations	Failures	Refused	Pending Court Order	Conviction	Acquited
1976	M	F							
DAR ES SALAAM		1	1	1	-	-	-	-	-
DODOMA		1	1	-	-	-	1	-	-
TABORA		1	1	-	-	1	-	-	-
KILIMANJARO		3	3	-	-	-	1	1	1
IRINGA		1	1	-	-	1	-	-	-
TOTAL		7	7	1	-	2	2	1	1

TABLE II:

REGIONS	Number of accused		Cases reported	Under investigations	Failures	Refused	Pending Court Order	Conviction	Acquited
1977	M	F							
ARUSHA		1	1	1	-	-	-	-	-
KILIMANJARO		2	2	1	-	1	-	-	-
KAGERA		1	1	-	-	-	-	1	-
MWANZA		1	1	-	1	-	-	-	-
MBEYA		2	2	1	-	1	-	-	-
TOTAL		7	7	3	1	2	-	1	-

TABLE III:

REGIONS	Number of accused		Cases reported	Under investigations	Failures	Refused	Pending Court Order	Conviction	Acqvit
1978	M	F							
KAGERA		2	2	-	-	-	1	1	-
KIGOMA		1	1	-	-	-	1	-	-
MWANZA		1	1	-	-	1	-	-	-
MOROGORO		1	1	-	-	-	1	-	-
IRINGA		6	6	2	3	1	-	-	-
TABORA		1	1	-	-	-	-	1	-
TOTAL		12	12	2	3	2	3	2	-

TABLE IV:

REGIONS	Number of accused		Cases reported	Under investigation	Failures	Refused	Pending Court Order	Conviction	Acquited
1979	M	F							
ARUSHA		1	1	-	-	-	1	-	-
KIGOMA		1	1	1	-	-	-	-	-
KILIMANJARO		2	2	2	-	-	-	-	-
MBEYA			-	-	-		-	-	-
MWANZA		1	1	-	-	1	-	-	-
RUKWA		1	1	1	-	-	-	-	-
TOTAL		7	7	4	-	1	1	-	-

TABLE V:

REGIONS	Number of accused		Cases reported	Under investigation	Failures	Refused	Pending Court Order	Conviction	Acquitted
1980	M	F							
DODOMA		1	1	-	-	-	1	-	-
MARA		1	1	1	-	-	-	-	-
MBEYA		1	1	2	-	-	-	-	-
RUVUMA		2	2	2	-	-	-	-	-
TABORA		1	1	-	-		1	-	-
SHINYANGA		1	1	1	-	-	-	-	-
KILIMANJARO		1	1	1	-	-	-	-	-
TOTAL		8	8	6	-	-	2	-	-

TABLE VI:

REGIONS	Number of accused		Cases reported	Under investigations	Failures	Refused	Pending Court Order	Conviction	Acquited
1961	M	F							
ARUSHA		1	-	-	-	-	1	-	-
MOROGORO		9	2	-	-	-	2	-	-
MWANZA		3	3	2	-	-	-	-	1
SHINYANGA		2	2	-	2	-	-	-	-
KILIMANJARO		2	1	-	-	-	1	-	-
MBEYA	2	5	4	2	1	-	1	-	-
TOTAL	2	22	13	4	3	-	5	-	1

TABLE VII:

REGIONS	Number of accused		Cases reported	Under investigations	Failures	Refused	Pending Court Order	Conviction	Acquitted
1962 JANUARY - OCTOBER	M	F							
DAR ES SALAAM	1	2	2	2	1	-	-	-	-
PWANI		2	1	1	-	-	-	-	-
IRINGA		1	1	-	-	-	1	-	-
DODOMA		2	1	-	1	-	-	-	-
MOROGORO		2	1	1	-	-	-	-	-
MBEYA		1	1	-	-	-	1	-	-
KILIMANJARO		1	1	1	-	-	-	-	-
TOTAL	1	11	8	4	2	-	2	1	-

TABLE VIII:

THIS TABLE SUMMARISES THE IMPORTANT CATEGORIES

YEAR	NUMBER OF ACCUSED		PENDING COURT ORDERS
	MALE	FEMALE	
1976		7	2
1977		7	-
1978		12	3
1979		7	1
1980		8	2
1981	2	22	5
1982	1	11	3

Even these figures which represent only a tip of an iceberg the upward trend of events is quite conspicous as evidenced by the following citation:- 1977 - 79 total number of accused was 26 and that of 1980 - 82 was 41. Similarly for those pending court orders the figures are 4 and 10 respectively.

The scope of the problem of criminal abortion:

Estimates gathered from family planning associations in the mid 1970 by the International Planned Parent-hood Federation totaled about 16 million abortions, mostly illegal, in 65 countries of Asia, Africa, the middle East and Latin America.(10) Where abortion is illegal data collection is a very difficult and unrewarding task. The information can mainly be extracted from Hospital records and their main disadvantages are:-

(a) Hospitalised women represent only a small proportion of all women obtaining illegal abortions.

(b) Criminal abortions are undercounted since most women conceal the information

(c) Falsification of records and incorrect certification are not uncommon especially for cases of criminal abortion.

Surveying abortion providers in a society where the laws of the country prohibit induced abortion is hardly worth mentioning as a source of data collection. The incidence of abortion for the population as a whole is estimated at a rate of 15 - 20%. This rate is supported by WHO experts on abortion.(11) Not all induced abortions find their way to the hospital. Those who come to the hospital do so because of complications which cannot be managed outside. Therefore the rate of induced abortion in the population as a whole cannot be calculated from these hospital figures.

In Dar es Salaam abortion admission as a percentage of all gynaecological admissions shows an upward trend according to the figures at Muhimbili Medical Centre. 1974 - 20.3; 1975 - 48.6; 1976 - 61.6; 1977 - 53.9; 1978 - 55.0; 1979 - 57.8. During 1977 - prospective survey in Muhimbili Medical Centre showed that 20% of all abortion cases were voluntary.

The Subject:

The characteristic of the woman who submits herself to criminal abortion have been the subject of considerable investigations. The Dar es Salaam study mentioned earlier showed that 80% of the voluntary abortion cases were young, single, working or schooling girls. In a study on patterns of septic abortion seen at Muhimbili Medical Centre students formed 61% of the septic patients and on employment basis the low wage earners topped the list.

In a Kampala study by Lwanga[14] amongst confessed criminal abortion the following relation of abortion to employment is shown which tallys with the trend in other developing countries.

Type of employment	No of cases
Students	31
Unemployed - unmarried.....	9
Temporary employment.....	5
Unemployed housewives.....	3
Employed professionals.....	3

Women in Africa tend to turn to abortion (criminal abortion - in countries where the law still restricts abortion) early in their reproductive lives and are unmarried. Their parity is low. Young unmarried students turn to illegal abortion because contraceptives are not easily accessible to unmarried women (e.g. Tanzania - Ministry of Health has incorporated contraception service with maternal and child care but there is no officially approved services to cater for the young and schooling girls, the high risk group[12] and because pregnancy is a ground for expulsion from school. This reflects well the current trend in Tanzania where pregnant girls are expelled from schools. The following figures from the Ministry of Education illustrate this point quite emphatically (15); (16).

YEAR	Number of Primary school girls expelled	Number of secondary school girls expelled
1979	5140 (0.34%)	135 (0.59%)
1980	4708 (0.30%)	157 (0.70%)
1981	5478 (0.29%)	

What options are left for the sexually active adolescent pregnant girls residing in a country where induced abortion is anathema.

Who are the abortionist?

Bates and Zawadzki[17] describe five categories of practitioners of criminal abortion:-

(1) The physician (the doctor) abortionist

(2) The abortionist with some medical training, including nurses, midwives, dentists and others

(3) The "quack" doctor, an unlicensed practitioner, with little or no training

(4) The amateur, with no background or training

(5) The self abortionist.

Bates and Zawadzki found in a series of 111 convicted abortionists that 27.9% were physicians, 22.5% were midwives and 5.4% were quacks. The remaining abortions were either done by amateurs or were self induced. While Taussig estimated that over half the abortions are performed by physicians, one fifth by midwives and that the remainder are self induced. The preponderance of one group over the other reflects the socio - economic status of the country concerned.

Methods employed in abortion attempts (4)

The method used is usually an indication of the abortionist background. The physician abortionist, for instance usually performs a curettage or suction curettage while the non-professional or the self abortionist is more likely to resort to a foreign body. The non-professional or the self abortionist may not always be certain that a pregnancy exists nor be sure of the exact period of gestation.

Foreign bodies:

The pathogenesis of foreign - body induced abortion involves rupture of the fetal membranes, stimulation of uterine contractions, and perhaps even disruption of the placental site. The important risk include infection and perforation. Injury to adjacent structures, such as bowel or bladder can occur and fistula may result. Numerous foreign bodies have been used, metal sounds, wires, wooden sticks, catheters. In a country like Tanzania even cassava stalks are used and its mechanism of action is compared to laminaria tents.

Air insufflation:

Instillation of air into the vagina and uterus by various means including oral genital contact with resulting fatal air embolism.

Potassium permanganate:

Tablets are placed in vaginal fornix leading to chemical burns and sloughing of the damaged tissue. Systemic effects are hemolysis and methemoglobinaemia.

Oral agents:

Chloroquine intoxication is the most common here in Tanzania[19] 20mg per Kg/body weight is a lethal dose. Other oral agents are quinine, castor oil, ergot and others. They manifest abortifacient effect when taken in doses dangerous to the mothers life.

Toxic amounts of quinine may produce abortion. Lesions produced by high dosage include haemolytic anaemia, agranulocytosis and degenerative changes of the retina and optic nerve. Ergot can lead to acute poisoning without characteristic pathological lesions. Late in pregnancy it can lead to uterine rupture. Chronic ergot poisoning can lead to gangrene of extremities.

In Tanzania the traditional healers use a number of local medicine to induce abortion. The following agents have so far been identified.(25)

Vernacular Name	Botanical Name	Indication
1. Liogaimba	-	to induce abortion/ menses
2. Legezabwende	Ricinus communis	to induce contraction's
3. Ufunguo	Chenopodium opulifolium	to induce menses/ abortion
4. -	Croscopteryx febrifuga	to induce abortion/ menses
5. Magwela	Acacia pentagona	to induce menses.

Bacteriology:

In a study on the pattern of septic abortion conducted at Muhimbili Medical Centre 1975 - 1976 (13) the following organisms were obtained from the cervical swabs cultures and blood cultures:-

Escherchia Coli

Clostridium Welchii

Pseudomonas aeroginosa

Klebsiela.

It is interesting to compare with the organisms cultured from fatal septic illegal abortion cases in the United States 1975 - 1977:- (5)

Clostridium perfringens (Welchii)
Escherichia Coli
Streptococcus faecalis
Enterococcus and anaerobic streptococcus.

Anaerobes are said to be the most frequent isolates associated with septic abortion when optimal culture techniques are used.

Mortality and Morbidity:

In the United States legal abortion is one of the safest of surgical procedures with a death of 1.4 per 1000,000 procedures, or about 11 times safer than tonsillectomy. In developing countries criminal abortion kills as many as 50 - 100 women per 100,000 procedures, or one for every 1000 to 2000 procedures. In some Indian Hospitals as many as 300 per 1000 women with complications of illegally induced abortion die(7).

In a report on maternal deaths at Muhimbili Medical Centre during 1979 - 1980, 28.2% were due to sepsis and post abortal sepsis featured as an important cause of maternal deaths.(21) According to the post morten registry at Muhimbili Medical Centre, 32 young girls aged 16 - 20 years with confirmed pregnancy of less than 6 months gestation died of probable drug poisoning (with the aim of procuring abortion) during the 3 year period 1978 - 1981. Of late about 5 - 6 young pregnant school girls die of chloroquine overdosage annually.(19)

In Latin America, where research has been most extensive and abortion is illegal everywhere, over 30% of maternal deaths are due to abortion complications. In Colombia, septic abortions alone caused 40% of all maternal deaths in the maternal and Child Health Institute in Bogota between 1970 and 1978.(7) Based on the IPPF estimate 16 million abortions, mostly illegal are occuring in 65 countries in Africa, the Middle East, Latin America and Asia. In Lagos University Teaching Hospital, Nigeria, there were 22 cases of post abortion tetanus admitted between 1964 and 1966, 15 of the women were young and unmarried.(22) Roger Rochat inferred that in these countries close to 84,000 women die every year from complications of illegally induced abortions.(23)

As shown earlier the rate of sepsis after illegal abortion is very high. This is mostly due to inadequate sterile technique or unsafe methods and delay in seeking treatment or failure to admit that uterine instrumentation had occurred because of fear of criminal complications. Factors that influence abortion mortality - method, provider, duration of pregnancy, and availability of later care also influence abortion morbidity.

The legal status of abortion in a country usually influences the specific abortion technique and thus the subsequent risks to the woman. Where abortion is illegal, the choice of method is much more limited by a woman's ability to learn of providers, the type of provider accessible, the means at the provider's disposal, and the cost of the procedure.

as a result safety considerations often play little part in determining the method of illegal abortion.

The cost of Criminal Abortion:

Complications of illegal abortions burden not only the individual women but also medical institutions and society as a whole. Treating abortion complications consumes substantial quantities of the meagre resources, hospital beds, blood supplies and the time of trained medical personnel. In some developing countries the cost of treating abortion complication accounts for up to 50 per cent of the budgets of maternity hospital.(24)

The minimum visible cost of treating one case of septic abortion at Muhimbili Medical Centre in Dar es Salaam in grade 4 in terms of medication and food with an average stay of 28 days is 6035 shillings.(24) This ought to be viewed from the perspective of foreign currency because most of the drugs used for treatment of septic abortions such as chloramphenicol, gentamimin, metronidazole and crystalline penicillin are imported from abroad. A country like Tanzania can ill-afford to waste its hard pressed foreign currency reserves.

The percentage of septic abortion cases is increasing. In a study which covered a period of 12 months in 1975 - 76 of all abortion complications 1.7% were due to septic abortions while for the year 1979 - 80 the percentage was 2.34%.(25)

These percentages were derived from retrospective studies and they are probably a gross underestimation of the actual hospital figures, because according to Schwarz at least one third of women admitted with incomplete or inevitable abortions can be classified as septic at the time of admission to hospital.(1) Mtimavalye L.A.R. of Muhimbili Medical Centre revealed that of all abortion cases at the centre 20% were voluntary (criminal in our set up).

Using Schwarz's estimate the number of septic abortions for instance in 1979 - 80 would be 1553. Thus the cost of treating these septic abortion cases per year amounts to 9,372,355/- which is 40.37% of the total budget for Muhimbili Medical Centre as far as food and drugs are concerned.(24) The cost of illegal abortion falls on individual women as well. In Dar es Salaam a country where the per capita national income is 168 dollars per year physicians are said to charge 150 - 200 dollars for dilatation and curettage.(26) In addition there are the indirect costs of the abortion - the loss of a woman's services to her family and the permanent loss is she dies or become crippled with chronic lower abdominal pain and secondary infertility leading to marital disharmony.

What to do:

What has been presented in this discussion is by no means a comprehensive review of the multifaceted problem of criminal abortion but just an attempt in that direction. In this study an endevour was made to project the current stand and trend on criminal abortion in Tanzania. There is no doubt that what has been revealed in this review in terms of the scope of the problem of induced illegal abortion is just a tip of an iceberg.

The crux of the matter is how to tackle this preventable problem in an acceptable positive and constructive manner. The following points should form the vanguard of any approach to be adopted in tackling the problem of criminal abortion namely:-

(a) Legalization of abortion and abortion procedures should be readily available. So many studies can be quoted to show the positive impact of legalized abortion on the complications of criminal abortion. Kahan et al[27] in a study conducted in Atlanta Georgia between 1969-1975 showed that legally induced abortion increased logarithmically from 8 - 498 per quarter year and the number of women admitting to illegal abortion decreased significantly. Steward[28] et al showed that number of admissions to San Francisco General Hospital for septic abortion declined with the availability of legal abortion services. Similar findings were reported by Seward et al[29] at Los Angeles county council Hospital.

the legalisation of abortion to be meaningful its availability must be sufficiently broad to obviate having to resort to criminal means and the procedural requirements should not be cumbersome.

To give an example of Zambia, under the 1972 law every abortion must be approved by three medical practitioners, including one specialist, and must be 10/performed in a hospital except when an immediate procedure is necessary to save the woman's life or to prevent permanent or [illegible] mental injury. It has been noted that the number of legal abortions remained low(30) An estimated one third of the 2,991 women treated at University Teaching Hospital Zambia in 1976 had illegal abortions(31). Thus it appears that the requirements of Zambian law as well as the limited number of physicians and hospitals keep legal abortion inaccessible to many women and therefore illegal abortion is continuing despite liberalization of the law.

Taking into consideration the circumstances prevailing in many developing countries where there is acute shortage of doctors and the available one are bogged down in their busy clinics and wards, legalisation of abortion alone can hardly reduce the incidence of criminal abortion. However it should be considered as a positive venture and a step in the right direction.

(b) Family planning programmes should also be designed to substitute for abortion. The impact of these programmes on illegal abortion and its complication is well illustrated in the chilean example survey research in 1965 indicated that as many as one of every four women in chile had had an illegal abortion. Since 1968, numbers of women hospitalized for abortion complications have decreased, while rates of contraceptive use have increased and birth rates have declined. Thus illegal abortion and its complications are decreasing as the national family planning programme grows.(7)

Unplanned pregnancy is far more likely to occur among teenagers and such pregnancies are more prone to higher incidence of complications. According to the 1974 World Health Organisation Meeting on Pregnancy and Abortion in Adolescence,(32) this period in a woman's life is the time when:-

1. The individual progresses from the point of the initial appearance of the secondary sex characteristics to that of sexual maturity.
2. The individuals psychological processes and pattern of identification develop from those of child to those of an adult.
3. A transition is made from the state of total socioeconomic depedence to one of relative independence.

Concerns have been raised about the use of contraceptive pills in teenagers. They might result in subsequent amenorrhoea and infertility. Since ovulatory menstrual cycles may or may not be established at this age under the control of the hypothalamic - pituitary - ovarian axis, use of oral contraceptives with their known effects on this axis theoretically might have a permanent adverse effect on the resumption of ovulation.(32) However recent research has shown that in experimental animals disturbances of ovulatory feedback control can be induced only at a very early stage of neurological development comparable to fetal life in the human.(33)

Another area of concern expressed by those considering prescribing oral contraceptives for teenagers is possible inhibition of the development of full stature or bony development in important areas of the body such as the pelvis. It is generally accepted that estrogens can cause epiphyseal closure in animals and in girls. However the average gain in height once the menarche has occurred is only $\frac{1}{2}$ - 1 inch. An aid in assuring that development is near completion is the appearance of body habitus and degree of breast development; major growth in stature ceases within one year or less of full development of breasts.(34)

From the study of Dietze, mortality rates for girls 15 - 19 using all methods of contraception are lower than in any older age group.(35) Thus it can safely be recommended that contraception should officially be approved for use by the high risk group - the young and schooling girls.

Sex education should form part and parcel of school curricula. Adequate information should be afforded on reproduction, abortion and its consequences, sexuality and contraceptive techniques.

(d) The scope of the problem of criminal abortion in its entirety should be publicised to the members of the public via the mass media and professional organisations so as to mobilise appropriate channels which can be persuaded or allowed to implement the aforementioned recommendations. The individual health hazards of illegal abortion and the public health costs of treating the ensuing complications will remain a serious problem if efforts are not made to change the situation.

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