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HEAD, OBSTETRICS AND GYNAECOLOGY

UNIVERSITY OF DAR ES SALAAM
Accepted for
The M.Med. (OBST/GYNAE)
Date 3/8/82
External Examiner

OBSTETRIC AND GYNAECOLOGIC CASE RECORDS AND COMMENTARIES

Y. HEMED

UNIVERSITY
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DAR ES SALAAM
1981

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CONTENTS

PART ONE

	PAGE
Introduction to Obstetric and Gynaecology Services and some common procedures	1
OBSETETRIC SERVICES	
1. Antenatal care	2
2. Intrapartum care	6
3. Post partum care	8
4. Postnatal care	9
5. Some common obstetric procedures	10
(a) Vaginal examination	10
(b) Procedure of Vaginal examination	10
(c) Bony pelvis assessment	10
Operative procedures	
Preoperative preparation of the patient	11
Anaesthesia	13
Caesarean section	14
Postoperative care	18
GYNAECOLOGICAL SERVICES	
1. Gynaecology outpatient clinics	21
2. Gynaecology inpatient services	22
3. Gynaecological operations	
Preoperative preparation of the patient	22
Anaesthesia	23
Catheterisation of the urinary bladder	23
Examination under Anaesthia	24
Postoperative care	24
PART TWO: OBSTERTIC CASE COMMENTARIES:	
1. Normal vertex delivery in a Primigravida	26
2. A case of placenta praevia managed by caesarean section	35
3. A case of cervical incompetence managed bz cervical cerclage	43

PAGE

4. A case of retained placenta managed by Manual removal under general anaesthesia 51
5. Uncomplicated breech delivery 57
6. A case of E.P.H. Gestosis delivered by Vacuum extraction 66
7. Rhesus negative mother 74
8. Elective caesarean section 82
9. A case of cord prolapse delivered by caeserean section 90
10. Puerperal sepsis with Acinetobacter S.P.P. bacteria 97

Long obstetric case commentarz: Twin pregnancy in Muhimbili Medical Centre 105

PART TWO: B. GYNAECOLOGIC CASE COMMENTARIES

1. Incomplete abortion; evacuation of products of conception 129
2. Secondary infertility, laparascopy and dye insufflation 135
3. Cystocele, anterior colporrhaphy 142
4. Ruptured Tubal pregnancy, left Salpingectomy 149
5. A case of hydatidform mole detected by ultrasonography 157
6. Early invasive squamous cell carcinoma in cone biopsy 165
7. Uterine fibroid, total abdominal hysterectomy 172
8. Postcoital laceration of the posterior fornix 182
9. Ovarian cyst removed at Laparatomy 187
10. A case of Bartholis abscess treated by marsupiliyation 198

PAGE

Long gynaecologic case commantary:
Abortions in Muhimbili Medical Centre. 198

PART TWO: C1:COMMUNITY OBSTETRICS

Blood pressure patterns in women over the age of 14 years in a rural Tanzanian community 212

INTRODUCTION TO OBSTETRIC AND GYNAECOLOGY CASE COMMENTARIES

The case records and commentaries presented in this book is part in the fulfilment in the achievement of the degree of Master of Medicine in Obstetrics and Gynaecology in the Universitz of Dar es Salaam.

The cases of written have been managed and supervised by the author between 1978 - 1981 at Muhimbili Medical Centre, Dar es Salaam, Tanyania, which also incooperates the Faculty of Medicine, University of Dar es Salaam.

The function of the centre is to give services to patients, teaching and research. It acts as the main consultant hospital in the countrz. and in particular the Eastern and Southern yones. (Comprising of Dar es Salaam, Coast, Mtwara, Lindi, Ruvuma, Iringa, Mbeya and Morogoro regions). In addition it is the referral hospital for Dar es Salaam and Coast Region.

Teaching services include Postgraduate and undergraduate doctors, Nurses, Midwives and Paremedicals.

The department of Obstetrics and Gynaecologz is divided into 4 firms, (A, B, C, D,) each with at lest 2 Consultants/Specialists. Each firm has its own patients in the wards, with independent outpatient and operative schedules including emergency duties.

Muhimbili Medical Centre has 1,065 bed out of which 356 beds are under the Obstetrics and Gynaecology department. The latter are distributed as follows:-

Sewa Haji block Muhimbili for Gynaecological services

Ward 18	40 beds
Ward 20	39 beds

Ocean Road Hospital

For normal obstetric services has the following wards:-

Ward 29 for antenatal and postnatal patients	33 beds
Labour ward	16 beds
Ward 31 for special care postnatal patients (Post caesarean section, episiotomy etc.)	33 beds
Ward 32 postnatal patients	33 beds
Total	115 beds

OBSTETRIC SERVICES

1. Antenatal care

The department provides specialist antenatal care for high, risk pregnancy in addition to grade one mothers (normal and abnormal). Peripheral clinics are run by Nurse Midwives who identify the high risk patients who are then referred to Muhimbili Maternity clinics. These clinics are run by Specialists, Consultants and Residents with laboratory services provided by technicians.

The indications to attend to Muhimbili maternity clinics are usually stipulated in the antenatal clinic card, which includes:-

Past obstetric history of

1. Instrumental delivery.
2. Previous caesarean section.
3. Third degree tear of the perineum.

4. Delivery by symphisiotomy.
5. Previous still birth.
6. Previous neonatal death.
7. Manual removal of the placenta.
8. Post partum haemorrhage.
9. Gravida 10 or above.
10. Age over 35 zears.

Past Gynaecology history of

1. Repair of Gynaecological/Obstetrical fistula.
2. Myomectomy.
3. Repair of genital prolapse.

Maternal diasese such as:

1. Diseases of the heart and or lungs.
2. Diabetes Mellitus.
3. Positive serological test for szphillis.
4. Uterine fibroids and other abdominal lumps.
5. Chronic renal disease.
6. Preeclampsia and or Edema, Proteinuria, Hypertension Gestosis syndrome.
7. Haemoglobin levels of 7.4 gm percent or less.

Primigravida with

1. A height of 145 centimenters or less.
2. Age under 16 years or over 30 years.
3. Suspected disproportion.
4. Deformitz of spine, pelvis or lower limbs.

Complications during pregnancy such as

1. Multiple pregnancy
2. Breech and malpresentations.
3. Polyhydramnios.

4. Antepartum haemorrhage.
5. Rhesus - 'D' negative mother.
6. Intrauterine fetal growth retardation.
7. Intrauterine fetal death.
8. Prolonged pregnancy beyzond 41 weeks.

First anaternatal attendance:

At the first booking the patient is seen by the Midwife who reviews the previous and current obstetric history. The midwife then requests few basic investigations like haemoglobin, blood grouping and Rh-tzping, and serological test for syphillis. The urine is then checked for albumin and sugar. The blood pressure weight and height are measured and recorded on the antenatal clinic card. The patient is then directed to see the doctor (Resident, Specialist, Consultant) with her card and laboratory results. The doctor reviews the history of the present pregnancy, past obstetric and gynaecological histories, medical and surgical history. The patient is then given a detailed general physical examination, respiratory, cardiovascular, abdominal and vaginal examinations and a plan for her antenatal care laid out.

Subsequent antenatal visits

The patient is then seen monthly till the 28th week, then fortnightly till the 36 weeks and weekly thereafter until delivery. If complications arise which necessiates frequent visits, she is then asked to come accordingly.

During each visit the patient is asked if she had any new complaints and her general condition and fetal well being is reviewed. The weight is taken, haemoglobin level estimated and urine tested for albumin at each visit. If the patient's problem has been corrected and the doctor is satisfied that normal pregnancy will continue, the patient is asked to attend her former clinic with her antenatal card.

At each visit all patients receive the following prophylaxis:-

1. Ferrous sulphate tablets 200mg twice daily.
2. Folic acid tablets 5mg once daily.
3. Chloroquine tablets 400mg weekly.
4. Tetanus toxoid injection at 28, 32 and 36 weeks of gestation.

Extra investigations done during antenatal clinics if necessary are:-

1. Serology for anti-D-antibodies
2. Radiological studies for fetal maturity confirmation of twin pregnancies, malpresentation and intrauterine fetal death.
3. With the acquisition of the ultrasonography machine, radiological investigations for some obstretic complications is being gradually replaced.

Antenatal admissions:

The patients with complications during pregnancy requiring admission are admitted to the anatental wards 38 or 39. The commonest indications for admission to the antenatal wards in 1978 were anaemia (37.1%), Edema-

Protenuria-Hypertention-Gestosis Syndrome (24.7%) and false labour (21%).

2. INTRA-PARTUM CARE

Normal deliveries are conducted at the Ocean Road Hospital. All patients who require specialist antenatal care are asked to come to Muhimbili Maternity Centre for delivery. If complications arise in the course of labour for the mothers destined to deliver at Ocean Road Hospital, they are transfered to Muhimbili Maternity Centre by means of an ambulance. In 1978 a total of 28,827 deliveries were conducted at Muhimbili and Ocean Road hospitals.

Admission to the labour ward

All patients admitted to the labour ward are first seen by an admitting nurse in the admission room. The nurse who is a midwife takes a brief history of the onset of labour or any other reason for admission in the labour ward such as antepartum haemorrhage. The midwife further inquires about any abnormalities in the present pregnancy and previous obstetric history and outcome. Usually such information is available in the antenatal card if the patient is a 'booked' case. She also carries a physical examination, and records the general condition, temperature, blood pressure, the presence of oedema and the height of the patient. The fundal height, size of the fetus, lie, presentation and fetal heart rate is recorded as well as the intensity and frequency of uterine contractions. The urine is tested for albumin, and acetone.

The patient is then taken to the adjacent labour ward where a doctor reviews the history and does a thorough physical examination. An initial vaginal examination is made to determine the state of the cervix, dilatation,

presenting part and its level and position in the pelvic cavity and the presence or absence of moulding or caput, and whehter membranes can be felt. The doctor also examines the size and shape of the pelvic cavity. He then decides on the management of labour and the plan for delivery worked out.

The first stage of labour

The Phillipot's modification of friedmans curve is used to record graphically on patogram the progress of labour. The cervical dilatation, descent of the presenting part and intensity of the uterine contractions are recorded on the composite chart. An example of a partogram charted in a case of normal labour is shown in obstetric case No. 1.

The second stage of labour

When the cervix is fully dilated and the presenting part is in the low pelvic cavity a delivery tray which is already prepared (consisting of scissors, 2 artery forceps, sterile gauze, antiseptic and rubber band for cord tying, 0.25mg ergomerine in a syringe and needle) is brought at the bedside. Mothers who require instrumental deliveries or who have breech presentations are usually taken to the high bed.

As the contractions become powerful and explusive in nature and the presenting part distending the perineum, the mother may have a desire to defeacate. At this time she is encouraged to bear down during each contraction. A sterile pad is placed on the anus and the perineum is supported.

An episiotomy is perfomed under local anaesthetic if indicated. The incision made by sciccors is placed in the midline at 6 O'Clock position for 2cm and then diverted to either side making a "J" shaped incision.

Once the head is born, the eyes, nostrils and mouth are cleaned and wiped with a sterile swab. The cord is divided with scissors between two artery forceps.

The third stage of labour

At the delivery of the anterior shoulder 0.25mg of ergometrine is given intravenously. When the uterus contracts the placenta is delivered by applying controlled cord traction with the right hand while the left hand presses the uterus immediately above the symphysis pubis upward and posteriorly. When the placenta reaches the vaginal it is held with two hands and rotated 360° while pulling outwards to deliver the fetal membranes. The placenta and membranes are then inspected for completeness and evidence of any abnormalities. The placenta is then weighed and the total blood loss is recorded in the labour chart.

3. POST-PARTUM CARE

The infant

After the baby is born oral and nasal secretions are sucked out. In cases where spontaneous respiration are not established, endotracheal intubation is done using a laryngoscope and oxygen administered. 10% glucose and 8.4% sodium bicarbonate are administered intravenously using the umbilical vein, as the case demands.

The baby apgar score estimated at one minute (and if necessary after 5 minutes) is recorded in the cart. The umbilical cord is ligated about 6 centimetres above the umbilicus with a ligature. The baby is weighed and examined for congenital abnormalities. If delivery was

uncomplicated and the baby is healthy, it is taken to her mother, otherwise the abnormal baby is taken to the neonatal ward for care.

All babies are vaccinated with B.C.G. before being discharged home.

The mother:

The birth canal is inspected for any tears or lacerations. If these are found or if an episiotomy had been made then they are repaired immediately after delivery. The vaginal wound is closed with continuous No. 1 catgut. Then the perineal muscles are sutured together with interrupted No. 1 catgut. Finally the skin is closed over the muscles with interrupted No. 1 catgut.

The uretus is squeezed to expel any clots and felt to ascertain a good contracted state. The blood pressure and pulse rate are checked soon after delivery. When all is well the patient is taken to an adjoining romm for rest and observation for 24 hours after which she is transfered to Ocean Road hospital for another 24 hours observation before being discharged home. If any complications have been noted such as a high blood pressure or anaemia she is transfered to ward 37 for further management.

4. POSTNATAL CARE:

Mothers who had normal deliveries are instructed to attend the maternal and child health clinics at their respective areas, while those who had complicated deliveries attend a postnatal clinic at Muhimbili Maternity Centre 6 weeks later.

At these clinics the mother's haemoglobin, blood pressure and uterine involution including the state of the cervix are examined. The urine is tested for albumin and sugar. A general physical examination, weight and presence of any abnormalities is checked on the infant.

5. SOME COMMON OBSTRETRIC PROCEDURES:

(a) Vaginal examination

In the antenatal clinic vaginal examination is done early in pregnancy to exclude abnormalities of the vulva, vagina and pelvic tumours. Pelvic capacity is usually assessed after 36 weeks in primigravid, in other cases whenever necessary.

In labour detailed vaginal examination is done during admission to assess the condition of the cervix presenting part, membranes, and the pelvic capacity. Subsequent vaginal examinations are done at least 4 hourly to assess the progress of labour.

(b) Procedure of vaginal examination

The examiner scrubs his hands using tapwater, brush and soap for at least 5 minutes. The examiner puts on a sterile glove on his right hand. The patient is placed in the modified dorsal position or lithotomy position. The right hand picks the swab soaked in savlon solution and transfers it to the left hand. The left side of the vulva is then cleaned by a single sweep from above, downwards to the fourchette. The same procedure is repeated for the right hand the introitus is swabbed from the urethral meatus above, downwards. The index and middle fingers of the right hand are then soaked in hibitane obstetric cream, with the labia separated the fingers are introduced into the vaginal. The vaginal mucosa, cervix, fornices and adnexa are then palpated.

(c) 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 pubis 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 arch 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.

(d) OPERATIVE PROCEDURES

Operations in the obstrtric department are performed both as elective and sometimes as emergency procedures.

Pre-operative preparation of the patient

Preparation for elective procedures

Most patients booked for elective procedures are admitted at least 24 hours before the intended procedure. Once in the ward, the history of her illness is reviewed and a detailed physical examination made on the patient.

Her fitness for general anaesthesia is checked with special emphasis on examination of the respiratory and cardiovascular systems. The patient's blood pressure, pulse and temperature are recorded. Urine is tested for albumin and presence of sugars. Blood group and crossmatch is done depending on the need and type of operation. The haemoglobin is estimated in the outpatient a day before operation.

Consent for the anaesthesia is then obtained and the exact nature of the operation is once more explained. After a light supper on the night before the operation, the patient fasts from 10 p.m. onwards, and a tap water enema given.

For abdominal operations the abdomen and mons veneris are shaved. The final preparation of the skin is done in the theatre where the skin is cleaned with savlon (1:200) followed by flavine in 70% alcohol. The antiseptics are applied starting on the operation site then proceeding laterally as far as the breasts above and to the level of the knees below. The patient is then drapped with sterile towels exposing only the operation site.

For vaginal operations, the same scheme as for an abdominal operation is followed except that the whole vulva must be shaved. The operation area is then prepared in the theatre as above. All patients are premedicated half an hour before the operation with 0.6mg intramuscular atropine.

Preparation for emergency procedures

When an operation has to be performed as an emergency, the preparation and premedication are done as described above except that they are done at the same time and enema is omitted. A wide bore gastric tube is passed to aspirate the stomach for any food taken in the past 6 hours.

ANAESTHESIA

While the patient is in theatre the anaesthetist reassess the patient's fitness for anaesthesia.

Induction of anaesthesia

The premedicated patient is induced with freshly prepared thiopentone sodium 250mg intravenously. The patient is then hyper-ventilated with oxygen for about 5 minutes.

MAINTENANCE OF ANAESTHESIA:

Maintenance of anaesthesia is usually achieved by using a varying combination of gases and vapours administered with the boyle's machine or an E.M.O. inhaler. Before the delivery of the baby maintenance of anaesthesia is by oxygen and Nitrous Oxide. After the baby has been delivered and the first layer of the myometrium has been repairedd ether is added to the system.

Endotracheal intubation

A short acting muscle relaxant, suxamethonium bromide 40mg, is given intravenously followed by intermittent oxygen through an ambu bag. An endotracheal tube is then inserted with the aid of a short acting muscle relaxant "Pavlon" (Pancuronium oromide) 6mg is given intravenously.

Reversal of anaesthesia

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

CAESAREAN SECTION

Pre-operative preparation

The patient is given magnesium trisilicate 15 mls orally to reduce the irritability of gastric juice in case of accidental inhalation. An intravenous infusion is set after taking blood for crossmatching. The abdomen preparation and other preliminaries are done as described before.

Technique of theoperation

The lower segment transverse caesarean section technique is used.

Opening of the abdomen

A low midline incision is used, occasionally a Pfannesteil incision is used.

Skin incision

The skin is put on stretch with the left thumb and index finger and a vertical incision made with a steady force. This incision is carried out below the umbilicus towards the symphysis and deep to pass to the rectus sheath. Bleeding points are clamped with small artery forceps and tied with plain No. 3/0 catgut.

Incision of the sponeurosis

A small incision is now made in the rectus sheath approximately in the middle of the skin incision. The edges are picked up by long artery forceps and the ba blades of the mayo scissors introduced behind the rectus sheath, and the sheath cut through along the whole length of the incision, first downwards the symphysis and then upwards towards the umbilicus.

Opening of the peritoneal cavity

At this stage all small swabs used are discarded and checked out, being replaced when necessary with swabs held in a sponge forceps. A site is selected and the peritoneum picked up with toothed dissecting forceps. The assistant picks up the peritoneum at the same level about 1cm away and the area between checked to exclude presence of bowel. The peritoneum is then incised very carefully and once opened permits the aspiration of air. Mayo scissors are then introduced and the peritoneum divided upwards and downwards along the length of the incision, being careful not no to cut the bladder at the lower end of the incision.

Opening and closing the uterus

Each side of the uterus is packed with an abdominal pack, to push away the intestines and minimize soiling of the peritoneal cavity.

A Doyen's retractor is then inserted to draw the bladder downwards. The lower uterine segment is identified and the loose uterovesical peritoneum covering it is lifted in the middle with a toothed dissecting forceps and opened transversely to about one centimeter from the round ligaments on both sides. The bladder is then carefully and gently stripped downwards from the uterus by a gauzed finger or swab on a holder, and retracted with the Doyen's retractor thereby exposing the lower uterine segment. A small transvere incision is made in the exposed lower segment as low down as possible in the mymetrium to the amniotic sac. The incision is then extended laterally by curved scissors. If the membranes were intact, an artifical rupture of the membranes is done. The right hand is then inserted into the uterus between the presenting part and the lower uterine segment, to dislcdge and deliver the presenting part. If the presenting part is the head,

At this stage any bleeding points are identified and are underpinned with fine catgut suture No. 2. Throughout the operation the following precautions are taken.

1. Care is taken to avoid the uretersand the bladder wall from being caught by stitches - especially from the lateral angles.
2. A firm pull is kept on the catgut during the whole stitching, for the incision becomes rapidly reduced in size, and there is a tendency for initial stitches to work loose.
3. The insertion of the inner row of stiches is made as accurate as possible to ensure good apposition of the uterine edges. After ensuring that there is no bleeding the uterovesical peritoneum is stitched with continuous catgut No. 1.

The abdominal packs are removed and all blood clots are moppec off. The pelvic and abdominal viscera is inspected before closing the abdomen.

Closing the abdomen

After completion of the operation the number of swabs, gauze and instruments are checked and counter checked to make sure that none has been left in the abdominal cavity.

Closing of the peritoneum

The peritoneum is picked up with pressure forceps oneof which is placed at each end of the incision. Starting from above the peritoneum is closed with a continuous suture No. 0 or 00 chromicised catgut.

Closing the rectus sheath

The rectus sheath is likewise picked up. Using a trocar pointed or cutting needle the rectus is stitched with No. 1 chromic catgut. If there is evidence or suspicion of the presence of infection, the stitching

is done with interrupted sutures otherwise continuous interlocking sutures are used.

Subcutaneous layer

Suturing of this layer is done with interrupted 3/0 plain catgut in very obese individuals.

The skin layer

The skin is closed with interrupted silk number one in a cutting needle. Closure of the skin with mitche'ls clips or subcuticular stitches is occassionally done. The stitched wound is cleaned with savlon (1 in 200) then with flavine in 70% alcohol. The wound is then covered with one to two layers of gauze with are secured by thin separate strips of adhesive.

POS-OPERATIVE CARE

Return to the ward

After an operation the patient is kept in an adjoining recovery room until she has improved sufficiently to be moved to the ward. In the recovery room the anaesthetist monitors the general condition pulse, blood pressure, and respiration of the patient. When the patient regains consciousness, she's wheeled to the ward. In the ward the patient's blood pressure and pulse are taken and charted half hourly for 4 hours. If they are normal further observation is continued at one hourly interval for 24 hours and later at 4 hourly intervals. A fluid balance chart is kept for every patient as is daily temperature recording.

Blood transfusion

Compatible cross matched blood transfusion is used preoperatively for anaemic patients or during the post-operative period when there was haemorrhage.

A standard unit of blood contains approximately 420 ml of whole blood and 120 ml of the acid-citrate-dextrose anticoagulant solution. During blood transfusion the patient is observed for febrile, allergic circulatory and hemolytic reactions.

Fluids

About 3 to 4 litres of 5% dextrose in water or dextrose-saline alternating with normal saline is given per 24 hour period.

The volume of the fluid administered is adjusted according to the fluid balance of input and output. An additional 600-1000 mls (insensible loss) of fluids is added to the daily volume calculated from the fluid balance chart. When the bowel sounds appear, the patient is gradually started on oral feeds, starting with fluids and soft meals to her usual diet pre-operatively.

Antibiotics

These are not routinely prescribed post operatively. Any patient with evident or suspected infection is given post operatively an antibiotic the type of which is decide upon, on the operator!s suspicion of the likely organism to be present. Most of our patients however require and do receive antibiotics post-operatively.

POST-OPERATIVE AMBULATION OF THE PATIENT:

The patient is encouraged to get out of bed early in the post-operative period. She is helped up and about as soon as she can get out of bed. Post operative hamoglobin is done on the third day. The skin sutures are removed 7 - 8 days postoperatively according to the state of the

INTRODUCTION TO GYNAECOLOGY

Gynaecological services

The majority of patients who receive the Muhimbili Hospital gynecological services come from Dar es Salaam region and to a lesser extent from the Coast region. Those referred, come from the rest of Tanyania particularly from the Southern zone and Zanzibar Island.

Gynaecology outpatient clinics

There are 4 general gynaecological outpatient clinics, one infertility clinic and one family planning clinic every week. Patients attend these slinics after referral from outside stations. They register at the records office and are given an appointment to attend the gynaecological clinic. At the clinic the patient is seen by the consultant or specialist or a resident who run these clinics. The doctor reviews the referral note/later and takes a detailed history and a complete physical examination. Appropriate investigations are done and some of the common investigations in the gynaecclogical clinic are:-

1. A complete blood picture
2. Serology tests for syphillis
3. Pregnancy test
4. Urine analysis
5. Urine culture
6. Vaginal swabs for bacteriology
7. Cytological smear and
8. Radiographic studies

When a definite diagnosis has been made the patient is given the appropriate treatment. Those who require operative procedure electively are given an appointment to come to the ward and the surgical procedure done during the operating day. Consultation with other disciplines is done whenever necessary.

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GYNAECOLOGICAL INPATIENT SERVICES

Patients are admitted to the gynaecology wards (18 and 20 and grade one wards 7 and 15) either as emergencies through the casualty or from gynaecological outpatient clinics. In ward 7 and 15, beds are available only when there are empty beds since these wards are shared by other departments. The number of patients in ward 18 and 20 however, far exceeds the available beds so that other patients have to sleep on mattresses on the floor.

On admission in the ward, the patient is first seen by an intern doctor who takes a detailed history and physical examination. The history is then reviewed by the resident who makes a further detailed physical examination. The management of the patients is done by the resident in close consultation with the specialist/ consultant.

Most of the investigations done in the ward are similar to those done at the out patient clinic.

GYNAECOLOGICAL OPERATIONS:

Pre-operative preparation of the patient

The extent and intended procedure is explained to the patient and a consent for anaesthesia and operation obtained from the patient. The history is reviewed and an independent history and full examination of the patient is carried out on admission.

Baseline laboratory investigations are done. The ivestigations include haemoglobin, urinalysis, the patient blood group and Rh typing and in most cases 2-3 units of crossmatched blood are reserved depending on the intended procedure.

The patient is instructed to take a light evening meal on the day before an operation, and no meals are allowed after 10 pm. The abdomen, vulva and perineum are shaved and washed with soap and water. Those patients undergoing a vaginal operations, are given savlon vaginal douches in addition.

Anesthesia

1. Premedications and induction of anaesthesia is similar to that described in the operation procedures in obstetrics.
2. Muscle relaxation is usually achieved by administration of pancuronium bromide ("Pavlon") 6mg intravenously. This is a long acting muscle relaxant and a positive pressure ventilation is usually necessary.
3. Maintenance and reversal of anaesthesia is similar to that described in the operation procedure in obstetrics. Unlike the general anaesthesia used for caesarean section, in gynecological operations ether is used in addition to oxygen and nitrous oxide.

Catheterisation of the urinary bladder

Before any gynaecological operation, the urinary bladder is catheterised.

The anaesthetised patient is put in the modified dersal or lithotomy position. The scrubbed surgeon or assistant cleans the vulva and perineum aseptically as described in the introduction. The index finger and thumb separates the labia minora exposing the urethral meatus which is then swabbed with a gauze saturated with savlon solution (1 in 200).

A sterile metal catheter is dipped into obstetric hibitane cream and then gently introduced to the bladder through the urethra. Any urine in the bladder is drained off into a kidneydish.

Examination under anaesthesia

After emptying the bladder, the patient is re-examined under anaesthesia to confirm the previous findings. Extra details are usually obtained on examination under anaesthesia. Sometimes in cases of abdominal hysterectomy the vagina is painted with gentian violet and serves i n the identification of vaginal mucosa from its blue colour.

Preparation of the operation site

The patient is placed in the appropriate position depending on the type of operation. For abdominal operations the patient is placed in the dorsal position in the trendelenburg position. For vaginal operations the patient is placed in the lithotomy position. Some Operations for vesicovaginal fistulae, the knee chest position is used.

The site of the operation is prepared as described in the preparation for obstetric elective procedures.

Opening and closing the abdomen

This is done as described in the opening and closing the abdominal wall during caesarean section. The stitched wound is cleaned with savlon and then with favine in 70% alcohol.

Postoperative care

The patient stays in the recovery room until she is fully recovered from anaesthesia. During this time the anaesthetist checks the blood pressure and pulse of the patient and clearing of the airway by a suction catheter.

In the ward the nurse follows the post operative orders prescribed by the surgeon.

1. The pulse and blood pressure are checked half hourly for the first 4-6 hours and then hourly depending on the patient's condition.
2. Post operative sedation and analgesia is usually achieved by Pethidine 100mg intramuscular inection, 6 hourly for 24 hours.
3. Antibiotics are given to the patient whenever the surgeon feels the need of prescribing them.
4. Fluid carting is done and the total 24 hours input and output recorded.
5. The intravenous fluids are given in the form of 5% dextrose in water or saline to a total of 2500 - 3000 mls per 24 hours, the volume being adjusted according to the input/output.
6. When bowel movements return, oral fluids and meals are gradually started and intravenous fluids weaned.
7. The temperature is checked 4 hourly for the first 24 hours and then twice daily if no abnormalities have been detected.

Ambulation and discharge from hospital

The patient is encouraged up and about as soon as she is able to depending on the healing of the wound, the stitches are removed between the 7th and 9th day and the patient discharged from the hospital on the following day.

All patients who have been operated upon are seen again in the gynaecological outpatient clinic follow up.

A OBSTETRIC CASE COMMENTARIES

1. NORMAL VERTEX DELIVERY IN APRIMIGRAVIDA

NAME: MRS. A.M.
I.P. NO: 1549
ADRESS: TANDIKA DAR ES SALAAM
AGE: 19 YEARS
ADMITTED: 29.4.80
DISCHARGED: 30.4.80

SUMMARY:

The patient attended grade one antenatal clinic at Muhimbili Maternity Block. She had a normal delivery after 10 hours in labour and was discharged home 24 hours later.

OBSTETRIC HISTORY:

This was her first pregnancy.

GYNAECOLOGICAL HISTORY:

Her menarche was at 14 years. Menstrual cycles of 4-5/30 days and regular. The last normal menstrual period had started on 20.7.79. There was no vaginal bleeding since her last menstrual period.

PREVIOUS MEDICAL AND SURGICAL HISTORY:

There was no history of serious illness or surgical operations.

FAMILY HISTORY:

There was no family history of diabetes mellitus, hypertension or tuberculosis.

SOCIAL - ECONOMIC HISTORY:

She had secondary school education. She and her husband were both primary school teachers.

ANTENATAL CLINIC BOOKING AND PROGRESS:

At the time of booking she was not anaemic and had no ankle oedema. She weighed 58 kg and her height was 156 cm. The blood pressure was 110/70 mm Hg. The uterine size was equivalent to 26 weeks of pregnancy. The presenting part was cephalic. The fetal heart was heard and respiratory systems were normal. The pregnancy continued to term without complications.

LABORATORY INVESTIGATIONS:

1. Haemoglobin estimation at 26, 30 and 36 weeks of pregnancy was 10.6 g/100 ml blood, 11.2 g/100 ml blood and 10.8 g/100 ml blood respectively.
2. Blood group was 'O' Rh-positive.
3. Urine was negative for albumin and sugar.
4. Serological tests for syphillis were negative.

HISTORY ON ADMISSION:

Labour pains started at home on 29.4.80 at 10.00a.m. She was taken to the New Maternity Block at 1.00 p.m. on the same day.

FINDINGS ON ADMISSION:

She was in good general condition. She was not anaemia and not dehydrated. She was afebrile and had no oedema. The radial pulse was 80 beats per minute regular and of good volume. The blood pressure was 120/70 mm Hg. The respiratory and cardiovascular systems were normal.

ABDOMINAL EXAMINATION:

The abdomen was uniformly enlarged uterine contractions were felt. The fundal ssize corresponded to a full term pregnancy. The lie was longitudinal and cephalic presentation. The head was engaged. The fetal heart rate was 136 beats per minute and regular.

VAGINAL ECAMINATION:

Vaginal examination was done as described in the introduction.

FINDINGS

1. The perineum and vulva were healthy.
2. The cervix was 3 cm dilated and well effaced, thin and soft.
3. The head was at the level of the ischial spines.
4. The membranes were intact and were ruptured by a pair kocher's forceps. The liquor was clear.
5. The head was in the left occipito-anterior position.
6. The bony pelvis was assessed as described in the introduction and was found to be adequate.

FURTHER MANAGEMENT AND PROGRESS OF LABOUR:

1. The fetal heart rate was auscultated every 30 minutes and ranged from 136 to 140 beats per minute and was regular.

2. Uterine contractions were checked every 30 minutes and were progressively stronger, more frequent and increased in duration.

3. Descent of the fetal head was assessed by abdominal examination every hour.

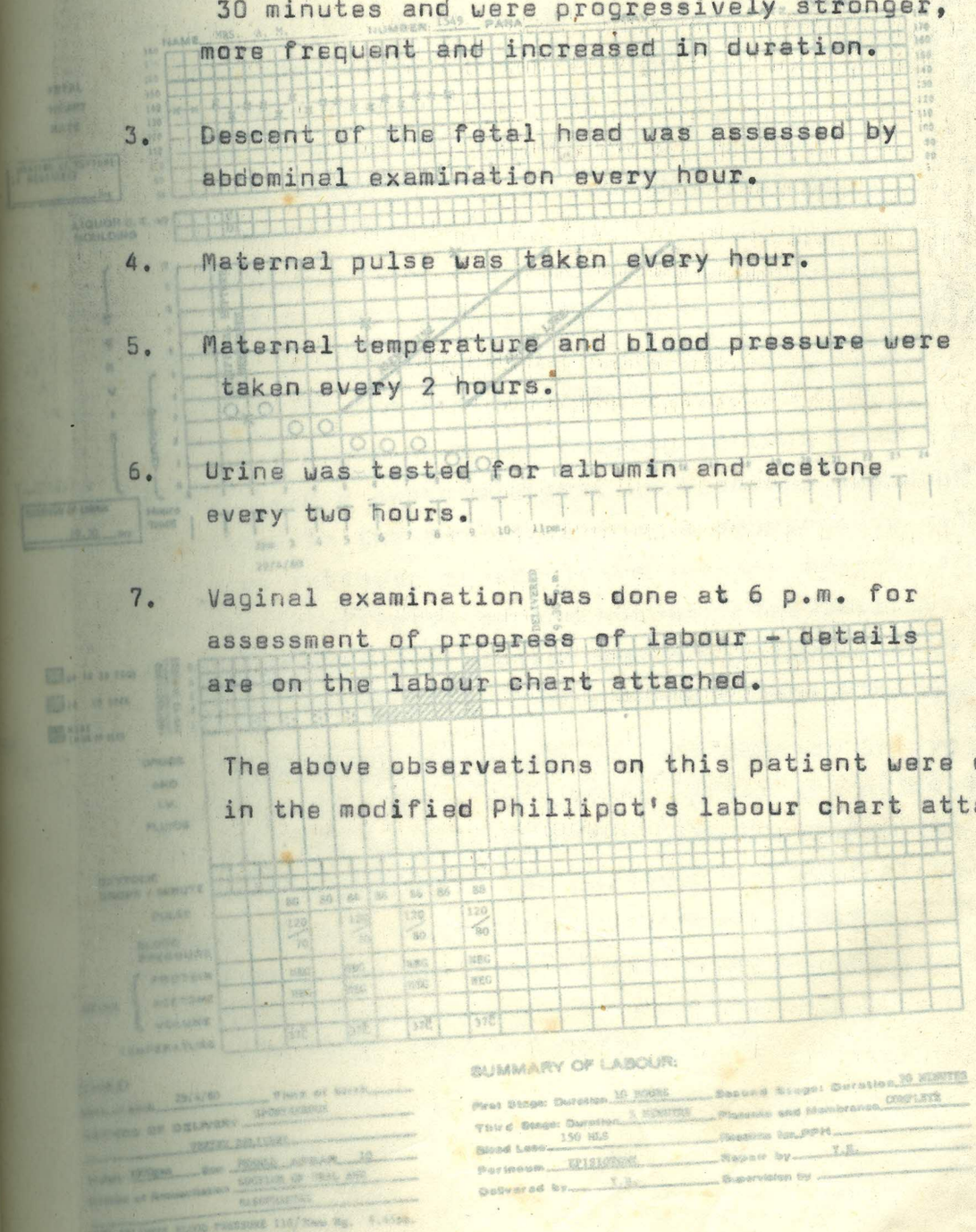
4. Maternal pulse was taken every hour.

5. Maternal temperature and blood pressure were taken every 2 hours.

6. Urine was tested for albumin and acetone every two hours.

7. Vaginal examination was done at 6 p.m. for assessment of progress of labour - details are on the labour chart attached.

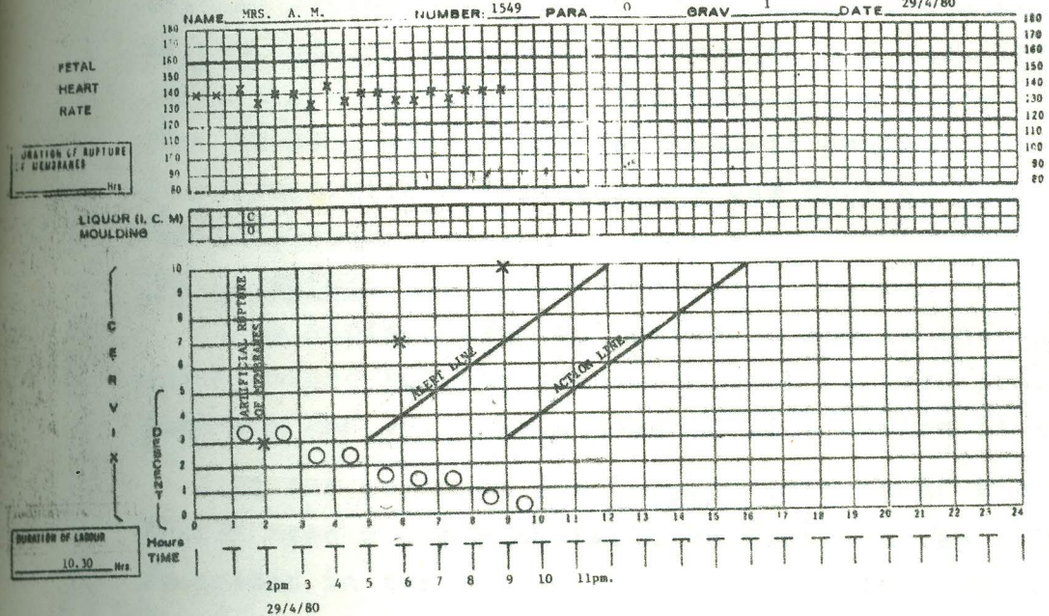
The above observations on this patient were charted in the modified Phillipot's labour chart attached.



RECORD OF LABOUR

SPECIAL INSTRUCTIONS

NAME MRS. A. M. NUMBER 1549 PARA 0 GRAV 1 DATE 29/4/80



PULSE	80	80	84	86	86	86	88
BLOOD PRESSURE	120/70		120/70		120/80		120/80
URINE PROTEIN	NEG		NEG		NEG		NEG
URINE ACETONE	NEG		NEG		NEG		NEG
URINE VOLUME							
TEMPERATURE	37C		37C		37C		37C

CHILD

Date of birth 29/4/80 Time of birth

METHOD OF DELIVERY SPONTANEOUS VERTEX DELIVERY

Weight 3000gms Sex: FEMALE APGAR 10

Method of Resuscitation SUCTION OF ORAL AND NASOPHARYNX

POST DELIVERY BLOOD PRESSURE 110/70mm Hg. 9.45pm.

SUMMARY OF LABOUR:

First Stage: Duration 10 HOURS Second Stage: Duration 30 MINUTES

Third Stage: Duration 5 MINUTES Placenta and Membranes COMPLETE

Blood Loss 150 MLS Reasons for PPH

Perineum EPISIOTOMY Repair by Y.H.

Delivered by Y.H. Supervision by

The patient progressed well and 7 hours after the initial vaginal examination the contractions were very strong lasting more than 40 seconds and occuring 3 - 4 times every 10 minutes, The cervix was fully dilated and the head was in the low pelvic cavity.

Preparations for delivery was done as described in the introduction.

THE DELIVERY:

The patient was instructed to lie in the supine position and to bear down with each contraction. The perineum and vulva were cleaned with savlon (1 in 200)

As the perineum was bulging infront of the descending foetal head a posterolateral episisotomy was done as described in the introduction. A spontaneous vertex d delivery followed by shoulders and the rest of the baby was easily effected by the mother. The umbilical cord was doubly clamped and divided and mucus sucked from the mouth The baby had an Apgar score of 10 at one minute.

THE THIRD STAGE OF LABOUR - was managed actively as described in the introduction. After the delivery of the placenta and membranes, which were complete, the uterus was well retracted. The perineum and vaginal canal were inspected and there were no tears or bruises. The episiotomy was repaired as described in the introduction.

The blood loss was about 150 ml.

SUMMARY OF LABOUR:

Duration of the 1st stage: 10 hours
Duration of the 2nd stage: 30 minutes
Duration of the 3rd stage: 5 minutes
Total duration: 10 hours, 35 minutes.

THE INFANT:

Sex: Female
SWeight: 3000 grammes
On examination the baby was active with no birth trauma or congenital abnormalities. The cardiovascular and respiratory systems were normal.

POST PARTUM CARE:

1. Thirty minutes after delivery the blood pressure was 110/70 mm mercury. The pulse rate was 72 per minute, regular and of good volume.
2. The patient was instructed to bath her perineum after each bowel motion with savlon in water solution to keep the episiotomy clean.
3. The baby was given BCG Vaccination in the postnatal ward. 24 hours later the mother and her infant were discharged home and advised to attend the MCH clinic at Temeke dispensary.

COMMENTARY:

In our obstetric unit in Muhimbili hospital, the progress of labour is usually monitored using the modified Phillipot's labour chart. The case described was a primigravida who was managed using such a chart, and she had a normal labour.

The mean duration of primigravid labour as calculated by Friedman was 14.4 hours, in contrast to 10 hours in the patient described.

The cervical dilatation graph was used in the evaluation of progress of labour to identify and permit early corrective therapy in case of abnormal labour. This was recorded in detail on a composite graph which displayed all features of the labour on one sheet of paper.

Friedman and others made a valuable contribution to the knowledge of the progress of labour by showing, graphically, that labour as judged by cervical dilatation progresses in several phases, the latent and the active phase.

The latent phase extends from the onset of labour to a point in time when the curve begins to change acutely i.e. when the cervix becomes taken up and dilated up to 2 - 3 cm. In primigravid this is about 8 hours. This is followed by the active phase, a period of upswing of the curve and terminates at full dilatation of the cervix. The active phase is further subdivided into the phase of acceleration of some 2 hours, a phase of maximum dilatation and then a brief phase of deceleration of about 1 hour between 9 and 10 cm dilatation.

The corresponding descent curve for the presenting part retains its latent aspect until the phase of maximum dilatation of the cervix. Descent reaches its maximum slope with the onset of deceleration phase of dilatation.

In plotting the cervicograph the time of admission is counted as zero time. From time zero to three hours, to the right, an oblique t line is drawn. A parallel line, action line, is drawn 4 hours to the right of the alert line. Both of these represent the phase of maximum dilatation. The alert line enables the detection early in labour those primigravidae who have infficient uterine action. Patients whose progress have crossed the alert line will have either primary inefficient uterine action on inefficiency secondary to some degree of cephalopelvic disproportio The use of phillports partogram has efficiently differentiate patients requiring caesarean section for cephalopelvic dispro portion from those with inefficient uterine action who can be delivered safely vaginally. This regime of management is very important in a country like Tanzania where obstructed l labour secondary to cephalopelvic disproportion is a common proble. These labour graphs should be used in hospitals and health centres where facilities for hospital delivery under medical supervision are limited and where the high incidence of cephalopelvic disproportion makes midwife supervision of large numbers of patients very difficult.

A CASE OF PLACENTA PRAEVIA MANAGED BY CAESAREAN SECTION

Name: Mrs. L!B.
Age: 26 years
Reg. No.: 23824/79
Address: Ilala Dar es Salaam
Admitted: 6.11.79
Operated: 6.11.79
Discharged: 15.11.79

SUMMARY

The patient was admitted to the labour ward on account of profuse painless vaginal bleeding. She was examined under general anaesthesia and found to have placenta praevia. She was delivered by caesarean section and discharged home with a healthy baby on the ninth postoperative day.

OBSTETRIC HISTORY

This was her fifth pregnancy. The first three pregnancies were normal deliveries. The children, two girls and one boy are alive and well. The fourth pregnancy ended as an abortion at three months and was evacuated at Muhimbili hospital.

GYNAECOLOGY HISTORY

Menarche was at 14 years and her cycles were 3-4/30 days. Her last menstrual period was on 25.2.79. Her expected date of deliverz would be 2.11.79.

FAMILY HISTORY

There was no family history of diabetes mellitus, hypertensive disease or tuberculosis.

SOCIAL HISTORY

She was an unemployed house wife and her husband was a businessman.

PAST MEDICAL AND SURGICAL HISTORY

There was nothing significant.

ANTENATAL BOOKING AND PROGRESS

She booked at Ilala M.C.H. antenatal clinic. The antenatal card she carried with her showed that at booking she was not anaemic. She weighed 51.4 kg and her height was e 156cm. The blood pressure was 110/70 mm Hg. The fundal height was equivalent to 16 weeks of gestation. The cardiovascular and respiratory systems were normal.

LABORATORY INVESTIGATIONS

1. The blood group was O Rh - 'D' positive
2. Serology for syphillis was negative
3. The haemoglobin level was 76 percent
4. Urine was negative for proteins and sugars

Pregnancy continued normally till at 36 weeks. On 6.11.79 at 9 am she noticed profuse painless bleeding per vaginum. Her husband rushed her to Muhimbili hospital where she was admitted.

FINDINGS ON EXAMINATION OF THE PATIENT ON ADMISSION

She was in good general condition. She was moderately anaemic but afebrile. The blood pressure was 110/70 mm Hg. The pulse rate was 90 beats per minute, regular and of good volume. The cardiovascular and respiratory systems were normal.

ABDOMINAL EXAMINATION

The abdomen was uniformly enlarged. It was non tender. There were palpable uterine contractions lasting about 15 seconds and occuring at the rate of 2 every 10 minutes.

The fundal height was equivalent to 36 weeks of pregnancy, The lie was longitudinal and cephalic presentation. The head was free. The fetal heart rate was 146 beats per minute and regular.

A provisional diagnosis of placenta praevia was made on the basis of the history and findings above. It was decided to deliver the patient actively on account of the fact that she had bled heavily and the baby was viable.

The patient was then prepared for examination under general anaesthesia (as described in the introduction) in the theatre where apparatus for caesarean section was made ready in case an immediate caesarean section became necessary.

PREPARATION OF THE OPERATION

1. An intravenous infusion of 5% dextrose was started, after taking blood for crossmatching 4 units of group O-Rh 'D' positive blood.
2. The patient was sedated with 15mg of morphia intravenously
3. The haemoglobin level was 10.8 grammes percent
4. A nasogastric tube was passed and gastric contents aspirated.

EXAMINATION UNDER GENERAL ANAESTHESIA

The abdomen and vulva were prepared for operation as described in the respective sections of the introduction.

While an assistant was standing-by, ready gloved, the patient was examined in the lithotomy position.

The head was pressed into the brim, and all the fornices were thoroughly explored for any interverning thickness in the lower uterine segment between finger and the fetal head. A mass suggestive of tissue was felt through the fornices and before proceeding further with

the examination the patient started bleeding briskly. The examination was abandoned and the patient put in the supine position ready for caesarean section.

LOWER SEGMENT CAESAREAN SECTION

The technique used to open the abdomen, and performing the caesarean section was similar to that described in the introduction save for some few observations and precautions. The lower uterine segment was found to be well developed with distended tortuous veins visible subserosally. After incision of the lower uterine segment the placents was encountered and was pushed a side starting from its edge, in order to extract the baby. The presenting part was high and the baby was easily delivered out of the abdomen. As soon as the baby, was out the umbilical cord was doubly clamped and divided. The placents was delivered and was found to be complete after thorough examination. The urerus was closed in 2 layers and the abdomen closed in layers as described in the introduction. The total amount of blood lost was estimated to 700 mls.

THE INFANT

Sex:	Female
Weight:	2400 grammes
Apgarscore:	7

On clinical examination, the baby showed no birth injiries or congenital abnormalities. The baby was given B.C.G. while in the neonatal ward.

POST OPERATIVE CARE AND PROGRESS

1. The blood pressure, pulserate and respiration were recorded 1 hourly for 24 hours then 4 hourly for 2 days.

2. The patient was observed for vaginal bleeding, and no active bleeding was noted post-operatively.
3. The patient received 5% Dextrose in water, 2000 mls in every 24 hours for 3 days, after which she was allowed on fluid, then solid diet. Post-operatively the patient received one more unit of blood (to make a total of 3 units of blood). No blood transfusion reactions occured.
4. Pain was relieved by 6 hourly intramuscular injections of pethidine 100 mg for 24 hours.
5. Crystalline penicillin 2 mu 6 hourly was given for 48 hours followed by P.P.F. 1.2 mu intramuscularly 5 days. Chloramphenicol 500 mg was administered intramuscularly for 3 days after which time she was given oral tablets 500 mg three times a day for 2 days.
6. The patient made an uneventful and quick recovery. On the 4th post-operative day the haemoglobin was estimated and found to be 68%. Skin sutures were removed on the 8th post-operative day, and the patient discherged on the 9th post-operative day. She was given ferrous sulphate 200 mg tablets to be taken thrice daily for 14 days.

POSTNATAL CLINIC VISIT

The patient was seen at the postnatal clinic 6 weeks after being discharged from the hospital. She was well and had no complaints. She was afebrile. The pulse rate was 80 beats per minute, regular and of good volume. The blood pressure was 110/70 mm Hg. There were no abnormal and vaginal examinations. The baby was well and breast feeding from her mother.

COMMENTARY

Bleeding in the third trimester of pregnancy should always arouse suspicion that placenta praevia is present. All painless bleeding of significance must be presumed to result from placenta praevia until proved otherwise.

Hospitalization and a thorough evaluation is essential for the ultimate well being of mother and child. The earlier placenta praevia is diagnosed, the better the prognosis.

At one time it was considered that, once a diagnosis of placenta praevia had been made, not only was prompt and active treatment indicated, but also any delay was totally unjustified.

Subsequently the reports of Johnson and later those of macafee and his colleagues suggested that frequently, depending on certain circumstances, delay of delivery for an interval, after the initial symptoms leading to a diagnosis of placenta praevia, appeared not only was justifiable but also helped to reduce the high neonatal mortality rate resulting from premature delivery. It is this scheme of deferment of delivery until the fetus has attained more favourable maturity that is considered "expectant" by some, and "conservative management" by others. The choice between aggressive and conservative therapy is dependent amongother factors, upon the amount of vaginal bleeding and the number of bleeding episodes. The concept of conservative therapy has been supported by the observation that the initial haemorrhage is rarely lethal if the maternal haemoglobin is kept at acceptable levels. Profuse haemorrhage, as had occurred in this patient, however is an indication for prompt and active therapy. Prompt therapy of impending (or actual) shock is indicated followed by, or simultaneous with, prompt delivery by the most expeditions method. Although the

original haemorrhage sometimes may abate reasonably promptly and the status of both the patient and the fetus improve after initial therapy including blood replacement, little can be gained and much can be lost by delazing definitive therapy if the original haemorrhage has been severe. It was under this idea in mind that conservative therapy in this patient would have bad more disadvantages than advantages. The diagnosis of placenta praevia by placental localisation and the determination of fetal age has permitted a more rational approach to the management of patients with late pregnancy bleeding. Placental localisation by methods such as ultrasound avoids the necessity for vaginal examination. When vaginal bleeding is slight and the pregnancy is less than 36 weeks duration, vaginal examination is contraindicated, for it may cause bleeding that may reach proportions that demand an immediate delivery. The accuracy of the various methods of placental localiyation is still open to controversy. All the methods are reliable in the last five weeks of pregnancy but in these circumstances one might proceed to examine the patient under "double set-up" precautions and establish the diagnosis without the aid of placental localisation as was done in this patient. If the gestational age is reliably estimated to be 36 weeks or more, and if the estimated fetal weight is in excess of 2500 grammes little can be gained by conservative therapy and much can be lost by delay. Abother serious consideration is the question of fetal growth associated with placenta praevia. Does it proceed at a normal rate?

Several publications (Gebert, 1971; Nisuander etal 1974) appear to support the idea that placenta praevia does not retard or in any way impede fetal growth. It should be noted however, that their data were plotted on a birthweight - gestation graph which are foreign to our own populations and which may not be precisely applicable to our own populations because of differences in race, sex of infant, nutritional status of the mother, and many other factors.

A CASE OF CERVICAL INCOMPETENCE MANAGED BY CERVICAL CERCULAGE

Name: Mrs. S.M.
IP. No: 32/M/80
Delivery No.: 4282
Address: Magomeni Dar es Salaam
Operated: 6.12.80
Delivered: 10.5.80
Discharged: 12.5.80

SUMMARY

The patient had four consecutive midtrimester abortions. Cervical incompetence was diagnosed and cervical cerclage was done at 14 weeks of pregnancy. The pregnancy went on to term followed by aspontaneous vaginal delivery of a healthy infant.

OBSTETRIC HISTORY

This was her fifth pregnancy. She had a full term normal delivery in 1971 followed by four consecutive, spontaneous abortions at 5 months. The four abortions were preceeded by draining of liquor followed by colicky abdominal pain and spontaneous explusion of a live fetus. She did not use any form of contraceptives.

GYNAECOLOGICAL HISTORY

Her menarche was at the age of 15 years. The menstrual cycles were 3-4/30 days and they were regular.

FAMILY HISTORY

She was a housewife who was not employed. She neither took alcohol nor smoked cigarettes.

PAST MEDICAL AND SURGICAL HISTORY

There was no history of any major illness or admission to hospital. There was no history of dilatation and curretage or of any surgical operations. There was no history of dysuria loin pains, frequency of micturition or recurrent fevers.

THE PRESENT OBSTETRIC HISTORY

The patient was seen in the gynaecological outpatient clinic on 28.11.80. Her last menstrual period started on 20.8.80. Her expected date of delivery would be 27.5.80. She complained of recurrent abortions and was anxious about the outcome of the present pregnancy.

FINDINGS OF EXAMINATION

The antenatal card she carried with her showed that she was in good general condition, not anaemic, afebrile and had no oedema. The blood pressure was 90/60 mm Hg. The cardiovascular and respiratory systems were normal.

ABDOMINAL EXAMINATION

The liver and spleen were not palpable and the renal angles were normal on palpation. The abdomen was enlarged in the lower parts. The size of the uterus corresponded to 14 weeks gestation. This was consistent with the period of amenorrhoea.

VAGINAL EXAMINATION

The vulval and vaginal were normal. Speculum examination revealed a healthy parous cervix. There was no evidence of scars or growth on the cervix. The cervical os was closed. Bimanual examination was not done.

INITIAL INVESTIGATIONS

1. The haemoglobin was 10.4 grammes percent
2. The blood group was "B" - Rhesus positive
3. Serological tests (Kahn and V.D.R.L.) for syphillis were negative.
4. Her urine was sterile on culture and was negative for albumin and sugars.
5. A random blood sugar was 90mg%
6. Serum creatinine was 0.8mg%
7. Blood urea was 10mg%

DIAGNOSIS

A diagnosis of cervical incompetence was made on the basis of the above clinical findings.

MANAGEMENT

The diagnosis was explained to the patient and she was asked to come to the gynaecology ward for admission and insertion of shirodkar suture.

INSERTION OF SHIRODKAR SUTURE ON6.12.79

The patient was admitted to the gynaecology ward and was prepared for a vaginal operation as described in the introduction.

OPERATIVE PROCEDURE

Premedication, induction and maintenance of general anaesthesia was done as described in the introduction.

INSERTION OF SHIRODKAR SUTURE IN THE THEATRE

The patient was placed in the lithotomy position and prepared and drapped with sterile towels in the manner described (in the introduction) for vaginal operation.

The cervix was visualised and grasped with a pair of Allis forceps and drawn forward to expose the posterior formix. A small vertical incision was then made in the vaginal mucosa about 2cm above the cervico vaginal junction. A similar transverse incision was made on the anterior vaginal wall just above the cervico-vaginal junction and the bladder dissected off the cervix to the level of the internal os and the bladder pillars exposed. A large half circle aneurysm needle threaded with No. 3 nylon suture material was passed through the posterior incision around the cervix subcutaneously to emerge through the anterior incision. A bite was taken in the anterior lip of the cervix and the needle then passed subepithelially through the anterior incision on the other side of the cervix to reappear through the posterior incision so that the entire cervical circumference was encircled by the suture. The suture was tied posteriorly so that the cervical canal could only contain a 6mm size dilator. The vaginal incisions were closed with 2/0 chromic catgut.

At the end of the operation the patient's general condition was good, the pulse rate was 80 beats/minute and blood pressure was 100/60 mm Hg. After recovery from the general anaesthesia she was taken back to the ward.

IMMEDIATE POST-OPERATIVE CARE

1. The patient was sedated with valium tablets, 10mg orally, 8 hourly for 48 hours then 5mg hourly for 3 days.
2. The patient was kept in strict bed rest for 48 hours.
3. Eighty milligrames of dilatol was administered intravenously in 500mls 5% Dextrose 40 drops per minute followed by 5mg tablet 6 hourly for 48 hours.

SUBSEQUENT CARE IN THE WARD

The patient was kept in the ward for 6 weeks. During her staz in the ward she was advised to rest in bed as much as possible. Four weeks after the operation, haemoglobin was checked and found to be 10mgs percent and the urine was negative for sugars and proteins. Urine culture were sterile. She was discharged on 10.1.80 at 20 weeks of gestation. The patient was advised to report to hospital immediately if:-

a) She developed lower abdominal pains
b) She noticed any abno-minal pains
c) She developed a febrile illness. She was asked to refrain from sexual intercouse and to attend the high risk antenatal care at Muhimbili hospital.

ANTENATAL CISITS

THE FIRST ANTENATAL CLINIC VISIT ON 24.1.80

Her antenatal clinic card showed she was not anaemic, afebrile and had no oedema. The blood pressure was 100/60 mm Hg. The fundal height was 22 weeks and the fetal movements were felt. Her haemoglobin level was 10 grammes percent. Her urine was negative for proteins.

Her pregnancy went on to term. On the 10.5.80 she was admitted into the labour ward on account of labour pains which started at 7.00 a.m.

FINDINGS ON EXAMINATION OF THE PATIENT ON ADMISSION

Her general condition was good. She was not anaemic. She was afebrile, temperature 37.5°C. Her blood pressure was 110/70 mm Hg and her pulse was 80 beats per minute, regular.

The cardiovascular and respiratory systems were normal.

ABDOMINAL EXAMINATION

The abdomen was non tender. Uterine contractions were felt lasting 30 seconds and occuring 4 times every 10 minutes. The fundal height was equivalent to 38 weeks of gestation. The fetus was in longitudinal lie cephalic presentation. The fetal heart rate was 136 beats per minute and regular.

VAGINAL EXAMINATION 8.35 a.m. 10.5.80

The patient was placed in the lithotomy position. The vulva and vagina were normal. The nylon stitch was exposed and removed. The cervix was found to be 5 cm dilated (after the stitch removal) and was 50% effaced.. Spontaneous rupture of membranes occured with clear liquor. There was no cord felt. The presentation was vertex in the left occipitoanterior position, 3/5 in the pelvis. There was no moulding or caput formation. The pelvis was assessed and found to be adequate.

INVESTIGATIONS

Urine was negative for acetone and albumin.

FURTHER MANAGEMENT AND PROGRESS OF LABOUR

The blood pressure, pulse rate, and fetal heart rate remained normal in the subsequent 2 hours. The uterine contractions became stronger and at 11.30 a.m. they occured 4 times every 10 minutes and lasting for 40 seconds.

DELIVERY AT 12.30 MID-DAY 10.5.80

At 12 mid-day the patient started bearing down and the head of the baby was seen distending the perineum. A male baby was born by spontaneous vertex delivery at 12.30 pm. The third stage was managed actively as described in the introduction. The perineum was intact. The total blood loss was estimated to 200mls. The uterus was well retracted.

THE INFANT

Sex: Male

Apger score: 10

Weight: 2950 grammes

On examination there was no birth trauma or congenital abnormalities. The cardiovascular and respiratory systems were normal.

POST-PARTUM CARE

The post delivery blood pressure was 110/80 mm Hg and the pulse rate was 86 beats per minute. The mother and the baby were discharged on 12.5.80 to attend the Maternal and Child Health Clinic. She was advised to report early during her next pregnancy. The patient was however lost for follow up and until the time of writing the patient was not seen at the Muhimbili postnatal clinic.

COMMENTARY

The operation of cervical cerclage is afairly common procedure in Muhimbili Hospital. In 1978 a total of 34 patients were admitted to the gynaecology wards for cervical cerclage.

This patient presented with midtrimester abortions which were preceeded with draining of liquor followed by expulsion of a live fetus. It appeared that in her case a mechanical factor of cervical incompetence existed and might have been responsible for the recurrent abortions. Since she denied history of any operations on the cervix, the two probable causes could have been either some undetected cervical trauma during her first delivery or to some congenital abnormality in the cervical musculature leading to cervical incompetence.

Unfortunately the diagnosis of cervical incompetence is not straight forward. In abortions associated with a malformed fetus, the fetus is usually dead and the uterus is performing its rightful function in expelling it. In this patient however, the aborted fetuses were alive.

Since there is always a risk of trying to "lock up" a pregnancy already doomed, the operation of shirodkar suture in this patient was performed at 14 weeks of pregnancy. At this period of pregnancy it was presumed that if the fetus had a faulty development, it would have been expelled by then. Another danger of performing the operation before 14 weeks of pregnancy is the initiation of uterine contractions associated with manipulations of cervix.

The shirodkar suture probably works by interfering with uterine polarity by discouraging the internal os and the neighbouring lower segment from being taken up. The patient was confined to bed rest for a period of six week and this alone could have played a big role in the successful continuance of her pregnancy.

The danger of obstructed labour followed by severe cervical laceration is real if onset of labour preceeds removal of the stitch. It is for this reason that the stitch should be removed at 38 weeks. This patient was accordingly waved off the danger.

A CASE OF RETAINED PLACENTA MANAGED BY MANUAL REMOVAL UNDER GENERAL ANAESTHESIA

PATIENTS NAME: MRS. Z.A.
AGE: 35 YEARS
ADDRESS: TANDIKA, DAR ES SALAAM
ADMISSION: 12.11.1979
DISCHARGED: 15.11.1979

SUMMARY

The patient was a grandmultipara, referred from Temeke M.C.H. Clinic in labour. She had spontaneous vaginal delivery one hour after admission followed by a retained placenta. The retained placenta was removed successfuly, manually, under general anaesthesia. She was discharged on the second postoperative day with her healthy infant.

OBSTETRIC HISTORY

She was gravida 9 para 7 Abortion 1 with 6 living children. The first child was 17 years old. All her deliveries were normal with no complications. She had a 4 month abortion in 1975 which was evacuated in Muhimbili Hospital. There were no post abortal complications.

GYNAECOLOGICAL HISTORY

Her menarche was at 15 years with cycles of 4/30 days. Her last menstrual period was on 15.2.79. Her expected date of delivery wauld be 22.11.79.

FAMILY HISTORY

There was no family history of diabetes mellitus, hypertensive disease or tuberculosis.

SOCIAL HISTORY

She was married and she was unemployed. She neither smoked nor took alcohol.

PAST MEDICAL AND SURGICAL HISTORY

She had no serious illness or surgical operation.

ANTENATAL CLINIC BOOKING AND PROGRESS

She booked at Temeke M.C.H. - Clinic. The antenatal card she carried with her showed that at booking she was not anaemic she weighed 54kg and her height was 155 cm. The blood pressure was 110/70 mm Hg. The fundal size was equivalent to 32 weeks gestation longitudinal lie and cephalic presentation. The fetal heart rate was 144 beats per minute and regular. The cardiovascular and respiratory systems were normal. Pregnancy continued to term without complications.

LABORATORY INVESTIGATIONS

1. The haemoglobin levels at 32, 34 and 36 weeks were 9gms, 10gms and 9.6gms respectively.
2. Serological test for syphillis was negative.
3. Urine was negative for sugar and albumin.

The patient went spontaneously into labour on 12.11.79 at 10am. She was admitted at Muhimbili Maternity block at 4pm on the same day.

FINDINGS ON EXAMINATION OF THE PATIENT ON ADMISSION

She was in good general condition. She was afebrile, had no oedema and was not anaemic. Her pulse rate wa 86 beats per minute, regular and of good volume. Her blood pressure was 110/70mm Hg. The cardiovascular and respiratory systems were normal.

ABDOMINAL EXAMINATION

The abdomen was symmetrically enlarged. The uterine size was equivalent to 38 weeks of pregnancy, consistent with the period of amenorrhoea. The fetus was in longitudinal lie, cephalic presentation. She had strong uterine contractions lasting about 30 seconds and occuring 4 times every 10 minutes. The fetal heart rate was 144 beats per minute.

VAGINAL EXAMINATION

Preparations for vaginal examination was done as described in the introduction.

Findings on vaginal examination:

The vulva and vagina were normal. The cervix was fully dilated. Membranes were not felt but clear liquor was seen draining out of the vaginal. 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.

DELIVERY

Half an hour after admission to the labour ward the uterine contractions became very strong. The patient was advised to bear down with each contraction. A spontaneous vertex delivery of a female baby wash each accomplished a few minutes later. The Apgar score of the baby was 10. Intravenous ergometrine 0.5mg was given with the deliverz of the anterior shoulder. As soon as the baby was delivered the umbilical cord was divided between two clamps. A trial to deliver the placenta by controlled cord traction failed. The bladder was catheterised, as described in the introduction, and about 30mls of clear urine was obtained. Controlled cord fraction was attempted again but failed to deliver the placenta.

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

Preparation of the patient for manual removal of the placenta

1. Blood was taken for cross matching and two units of group !O' Rh - positive blood were requested.
2. An intravenous 1000ml normal saline drip was started.
3. The patient was prepared for a vaginal operation as described in the General Introduction. The procedure for premedication, induction and maintenance of general anaesthesia was as described in the introduction.

MANUAL REMOVAL OF THE PLACENTA

The anaesthetised patient was placed in the dorsal position. Preparation of the operation site and bladder catheterisation was done as described in the introduction.

A vaginal examination was done and the placenta was still not expelled. The left hand was placed on the abdomen to steady the fundus of the uterus and push it down-wards while the right hand was introduced through the vagina. The right hand grasped the umbilical cord and followed it up to the placenta. As soon as the right hand reached the placenta and the placenta-uterine attachment identified, this steadied and pushed down the uterus to control the movement of the right hand. The placenta was then detached beginning with the lower margin by a sweeping movement of the right hand. After the placent was seperated it was withdrawn by gentle traction. The placenta and membranes were then examined and found to be complete. Ergometrine 0.5mg was administered intravenously. By then blood transfusion had already been started and one unit of blood had been administered.

The uterus was felt to be well contracted, and the amount of blood lost during the procedure was 300 mls. Her blood pressure was 100/70 mm Hg. and the pulse rate was 88 beats per minute.

The patient was sent to the postnatal ward where one more unit of blood was transfused. The blood pressure and pulse rate remained normal and there was only slight vaginal bleeding in the following 48 hours. On the second postoperative day the haemoglobin was checked and found to be 10.3 grammes. The patient was discharged on the second post operative day and she was asked to come to the postnatal clinic 6 weeks later.

The patient was however lost for follow up.

COMMENTARY

Retained placenta is a common obstetric emergency in Muhimbili Medical Centre. The placenta is usually delivered within 10-15 minutes of the birth of the baby in normal cases. When the placenta has not been expelled within 30 minutes of the birth of the baby the placenta is said to have been retained.

Mismanagement of the third stage of labour is the main aetiological factor in retention of the placenta. This includes fiddling with the uterus or overzealous massage of the uterus, during the third stage of labour, resulting in an hour - glass constriction of the uterus. Delivery of the placenta by the Crede's method, is thus associated with this complication. The reason for the retentionof the placenta in this patient was not known. Other conditions associated with retentionof the placenta are:

(a) Ineffective uterine contraction and anatomic defect in in the uterus, preventing development of a cleavage plane between placenta and uterus.

(b) Abscence of normal decidua with direct attachement of chorionic villi to the myometrium (placenta accreta). This is a rare condition. In this patient the placenta was adherent to the uterine wall and there was no evidence of placenta accreta.

Complications of retained placenta include post partum haemorrhage, shock, infection and anaemia.

Urgent blood transfusion, after initial resuscitation with intravenous fluids is mandatory as demostrated in this patient. Gentle handing of the patient and manual removal of the placenta, without delay, under general anaesthesia should be done to prevent shock and haemorrhage. Infection commonly follows if the placenta has been retained for longer than eight hours and antibiotic therapy should be used in such cases. In this patient the placenta was removed within two hours after the second stage of labour, and there was not need of antibiotic therapy.

Since complications of the third stage of labour tend to recur in the subsequent pregnancies, this patient required hospital deliveries in all her future deliveries.

UNCOMPLICATED BREECH DELIVERY

NAME: MRS. A. S.
REG. NO. 42966
AGE: 23 YEARS
ADDRESS: MWANANYAMALA, DAR ES SALAAM
DATE OF ADMISSION: 19.4.80
DATE OF DELIVERY: 19.4.80
DATE OF DISCHARGE: 21.4.80

SUMMARY

The patient who was in her second pregnancy was admitted in the labour ward because of breech presentation during the first stage of labour. An uncomplicated breech delivery was sucessfully effected. The mohter and her baby were in good health when they were discharged two days later. The puerperal period was normal.

OBSTETRIC HISTORY

She was in her second pregnancy with one living child. The female baby who was born in 1978 was full term and weighed 3.2 kilogrammes. There was no ante or postpartum complications. There was no history of the use of contraceptives since her last confinement.

GYNAECOLOGICAL HISTORY

Her menarche was at the age of 14 years. Her cycles were 4/28 and regular. Her last normal menstrual period was on 16.7.79. There was no history of vaginal bleeding since her last menstrual period.

PAST MEDICAL AND SURGICAL HISTORY

There was nothing significant.

GYNAECOLOGICAL HISTORY

The patient had her menarche at the age of 15 years. The Cycles were of 28 days lasting 4 - 5 days, normal flow regular, and dysmenorrhoea when the menstrual flow is established.

Her last menstrual period started on 11.4.80, so that at the time of admission she had 11 weeks of amenorrhoea. There was no history of use of any form of contraceptives.

OBSTETRIC HISTORY

She had one full term normal delivery in January, 1979 at Ocean Road Hospital. She had no ante or post - partum complications. There was no history of abortions.

PAST MEDICAL HISTORY

She gave no history of any major illness or operations; and she had never been admitted to hospital before.

FAMILY AND SOCIAL HISTORY

She was imarried in 1978 and she was unemployed. She never smoked but she took on average 3 - 4 beers especially during weekends. There was no history of any familial diseases.

PHYSICAL EXAMINATION

She was in good general condition; she was not anaemic, afebrile but in pain. She had no oedema.

CARDIOVASCULAR SYSTEM

The pulse rate was 94/minute, regular and of good volume. The blood pressure was 100/80 mm Hg. There was no cardiomegally and the heart sounds were normal.

SOCIAL AND FAMILY HISTORY

She was a housewife working as a telephone operator. There was no family history of diabetes mellitus, hypertension or twin delivery.

ANTENATAL CLINIC BOOKING AND PROGRESS

She booked at Kinondoni MCH Clinic. Her expected date of delivery was calculated to be on 23.4.80. At the time of booking she was not anaemic and she had no pitting ankle oedema. Her examination of the cardiovascular and respiratory systems were normal. The fundal height correspondenced to 24 weeks of prgnancy and was consistent with the period of amenorrhoea. The lie was longitudinal and the presenting part was cephalic. The heart was heard and it was regular. The patient made three more antenatal clinic visits at 28, 32 and 34 weeks of gestation respectively during these visits the presenting part was the cephalic.

LABORATORY INVESTIGATIONS

1. The haemoglobin was estimated at 24, 28 and 34 weeks of pregnancy and was found to be 10.3, 9.8 and 11 grammes per 100 mls of blood respectively.
2. Blood group was 'O'-Rhesus D-positive.
3. V.D.R.L. was negative for syphillis.
4. Urine was negative for proteins and sugars

The pregnancy continued to term without complications.

LABOUR, ITS PROGRESS, AND MANAGEMENT

The patient went into spontaneous labour on 19.4.80 at 9.00 am and she was taken by relatives to Ocean Road Hospital. At the hospital she was found to have a breech presentation and was referred to the New Maternity Block for further management.

FINDINGS OF EXAMINATION AT THE TIME OF ADMISSION

The patient was in good general condition. She was afebrile and not anaemic. She had no pitting ankle oedema. The pulse rate was 84 beats per minute, good volume and regular. The blood pressure was 110/70 mm Hg. Examination of the cardiovascular and respiratory system were normal.

ABDOMINAL EXAMINATION

The abdomen was unfformly distended and it was non tender. There was no hepatosplenomegally. Uterine contractions were felt. The fundal height was equivalent to 38 weeks of pregnancy. The fetus was in longitudinal lie with breech presentation. The fetal heart rate was 140 beats per minute and regular. The baby was estimated to weigh 3000 grammes.

VAGINAL EXAMINATION

Preparations and procedure for vaginal examination was done as described in the introduction. The vulva and vaginal were normal. The cervix was 5 cm. dilated and it was fully effaced. The breech was felt in the dilated cervix, in the left sacral anterior position, fixed in the pelvic brim. The membranes were felt and ruptured with kocher's forceps, yielding meconium stained liquor. There was no cord prolapse. The pelvis was assessed in the manner described in the obstetric introduction and was found to be adequate for vaginal delivery of the baby.

PROGRESS OF LABOUR

The patient was transferred to a high bed and she was asked to lie on her left lateral position. The progress of labour was monitored as described in the obstetric case No. 1 and it was normal. Four hours after admission the patient was reassessed and the cervix was found to be fully dilated and the breech was bulging in the vulva. The first stage of labour lasted 8 hours.

THE SECOND STAGE OF LABOUR

The patient was asked to lie in the lithotomy position. The vulva, perneum and sorrounding skin were cleaned with savlon (1 in 200) antiseptic. The perneum was infiltrated with 15 mls of 0.5% lignocaine. When the fetal buttocks started to distend the perineum an episiotomz was made in the manner described in the obstetric introductory remarks.

The buttocks and folded legs were born and the body quickly slipped to the umbilicus. A loop of cord was drawn out. As the patient bore down with succeeding painful contraction, the hanging fetus descended so that the lower angle of the anterior scapula appeared. The arms were felt flexed across the front of the chest. The arms were delivered one after the other by hooking a finger in the bend of the elbow. With the birth of each arm, first the anterior, then the posterior, the corresponding shoulder appeared leaving the fetus hanging by its neck. The head was then in the vagina. With the help of gravity the head descended until the hairline appeared in the vulva.

The baby was held by taking the ankles in the fingers of the right hand and by applying traction, the fetal trunk was lifted at the same time through three quarters of a circle up over the mother's abdomen. The chin, face and fore head in turn appeared over the perineum as the head was slowly and carefully delivered under control. Muscus was sucked out of the baby's mouth and nostrils and the baby started crying.

THE THIRD STAGE OF LABOUR

The third stage of labour was managed actively as described in the obstetric introduction. The third stage lasted 5 minutes. The episiotomy was repaired as described in the introduction. The total blood loss wal 200 mls.

SUMMARY OF LABOUR

Duration of first stage: 8 hours
Duration of second stage: 25 minutes
Duration of third stage: 5 minutes
Total duration: 8 hours, 30 minutes

THE INFANT

Sex: Male Apgar score: 10 Weight: 3100 grammes

Examination of the infant showed no obvious congenital abnormalities and had nobirthtrauma. Further examination of the respiratory, cardiovascular and central nervous systems were normal.

POSTPARTUM MANAGEMENT

The mother was in good general condition. Thirty minutes after delivery, the blood pressure was 110/70 mm Hg and the pulse rate was 86 beats per minute, regular and of good volume. The uterus was well contracted and there was no active vaginal bleeding. Up to the day of discharge, 2 days later the baby was helathy with no neurological deficits.

POSTNATAL CLINIC

The mother and her baby were seen at the postnatal clinic 6 weeks later. The baby was well and sucking normally from his mother. Up to the time of the visit the mother had not seen her menstrual periods. She was in good general condition and not anaemic. Abdominal and pelvic examinations were normal. She was given child spacing advise and allowed to go home.

COMMENTARY

The intrapartum management of uncomplicated breech has been described. The management of breech presentation at term continues to be a great problem. Methods of management have varied from delivery of all breeches vaginally to recommendation that all breech cases should be delivered by elective caesarean section. Overall breech mortality is so much higher than the vertex because of the large number of premature babies that are delivered by breech, but even when these cases are excluded, the breech presentation offers a greater risk to the infant.

Caesarean section has become a safe procedure as far as the mother is concerned in properly equipped and staffed hospitals, and this fact tempts the feeling that all the difficulties of breech presentation might be avoided by doing a caesarean section. On the other hand, caesarean section still carries a certain risk to both mother and baby. Among the risks which the mother is exposed in caesarean section includes, anaesthetic accidents, haemorrhag and sepsis. The magnitude of the problem of sepsis in Muhimbili Maternity unit is exemplified bz the 1977/1978 Annual report. The report showed that the leading cause of maternal death in Muhimbili Medical Centre in 1977 and 1978 was puerperal and postabortal sepsis. More than 50% of the maternal death was attributable to this cause. The danger of the scar on the uterns is well known and in each instance, the question of the proper method of delivery will have to be re-evaluated. It seems wiser to perform a caesarean section only in those cases in which the need for it can be demonstrated, and to deliver pelvically those cases in which delivery than be shown to be as safe as with vertex presentation.

Careful clinical examination and x-ray pelvimetry will allow the selection of those patients in whom labor can be permitted. In such cases steady progression of labour will result in safe vaginal delivery. The occurence of any complication should be treated by caesarean section at the time the complication becomes apparent. Complications occuring during the delivery, such as extended arms or prolapse of the cord can be managed in those cases which the pelvis is known to be adequate. Recent literature would suggest a renewed interest in external cephalic version to reduce the number of breech births. With detection of all breech presentation, particularly between the 34th and 37th weeks when external cephalic version is highly successful, the number of breech deliveries, can be reduced to about 2% This reduction can only be obtained if the risks of the procedure are appreciated and the operator is skilled and experienced in its use. In this case heuever the patient term didn't have a breech presentation before.

Perinatal mortality is higher in breech deliveries than in vertex positions. The main causes of infant deaths being anoxia from a prolapsed cord or from delay in extraction of ths head, injury incurred during delivery, and developmental anomalies which may predispose to breech positions. It is easy to injre the brachial plexus and to fracture the extramities, particularly if the infant is large. In 1978 (The Annual Report of Obstetrics and Gynaecology, Muhimbili Hospital) a total of 21 perinatal deaths (11 difficult deliveries; 7 cases of brain injury; 3 cord prolapse) occured as a result of breech presentation.

This gave a mortality rate of 37 per thousand deliveries at the Muhimbili Maternity Block. There were all together 599 breech deliveries at Muhimbili and 31 of them had antepartum fetal death. Because of the increased hazard, midwives conducting antenatal clinics in the MCH. clinics, routinely refer patients to Muhimbili high risk antenatal clinic whenever a breech position is diagnosed.

A CASE OF E.P.H. - GESTOSIS DELIVERED BY VACUUM EXTRACTION

NAME: MRS. F.A.
AGE: 17 YEARS
I.P. NO.: 20196
ADDRESS: TEMEKE, DAR ES SALAAM
DATE OF ADMISSION: 9.5.80
DATE OF DISCHARGE: 13.5.80

SUMMARY:

The patient attended Temeke M.C.H. antenatal clinic. E.P.H. Gestosis was diagnosed during labour. She had assisted vaginal delivery under sedation and was discharged with her baby 4 days after admission in good general condition.

PAST OBSTETRIC HISTORY

This was her first pregnancy.

GYNAECOLOGICAL HISTORY

Her menarche was at the age of 16 years. Menstrual cycles 3-4/28 days and regular.

The date of the last menstrual period was not remembered.

PREVIOUS MEDICAL AND SURGICAL HISTORY:

There was no history of serious illness or surgical operations.

FAMILY HISTORY

There was no family history of diabetes mellitus, hypertension or tuberculosis.

SOCIAL - ECONOMIC HISTORY

She was an unemployed housewife who had no formal education. Her husband was a fisherman.

ANTENATAL CLINIC BOOKING AND PROGRESS

She booked in Temeke M.C.H. Clinic. The antenatal card she carried with her showed that, at the time of booking she was not anaemic and she had no pitting ankle oedema. She weighed 62.5 kg and her height was 155 cm. The blood pressure was 100/70 mm Hg. The uterine size was equivalent to 28 weeks of pregnancy. The presenting part was cephalic the fetal heart was heard and it was regular. The cardiovascular and respiratory systems were normal.

Pregnancy continued to term without complications.

LABORATORY INVESTIGATIONS:

1. Haemoglobin estimation was 11.8 g/100 ml. blood and 11.2g/100ml of blood at 28 and 34 weeks of gestation respectively.
2. Serological tests for syphillis were negative.
3. Blood group was 'O' Rh-positive.
4. Urine was negative for sugar and protein.

REASONS FOR REFERRAL: Was E.P.H. - gestosis in labour in a primigravida.

HISTORY ON ADMISSION

The patient was admitted to our intensive care unit where the following history was obtained. The patient started labour pains on 9.5.80 at 11.00 p.m. She was taken by relatives to Ocean Road Hospital where she was found to have moderate E.P.H. gestosis. She was given valium 10 mg intravenously and referred to the New Martenity Block.

ABDOMINAL EXAMINATION

The abdomen was uniformly enlarged. Uterine contractions were felt. The fundal height corresponded to a 38 weeks pregnancy. The lie was longitudinal and cephalic presentation. The head was deeply engaged. The fetal heart rate was 136 per minute with regular beats.

VAGINAL EXAMINATION

Preparations for vaginal examination was done as detailed in the introduction. The bladder was catherised by a soft rubber catheter and about 100 mls of clear urine was obtained. The perineum and vulva were healthy. The cervix was 8 cm dilated, fully effaced and thin. The vertex was presenting and the head was deeply engaged. Membranes were not felt. The pelvis was assessed as described in the introduction and was found to be adequate for vaginal delivery. Urine was tested for albumin and showed a proteinuria of 300 milligrammes/litre.

DIAGNOSIS:

From the above clinical findings a diagnosis of moderately severe E.P.H. - gestosis during labour was made. It was decided to assist the second stage of labour with vacuum extraction under sedation.

The following observations and chartings were made:

1. Blood pressure, pulse, one hourly
2. The fetal heart rate every half an hour
3. Maternal temperature every one hour
4. Urine was tested for proteins using albustics every 3 hours.
5. Other observations pertaining to active management of labour as described in case No. 1 were observed.

6. The patient was given intravenous valium 20 mg at the time of admission and the valiumwas to be repeated after every 4 hours at the dose of 10 mg intravenously.

7. An intravenous infusion of 500 ml 5% dextrose was started at a rate of 20 drops per minute.

8. A 100 mg intramuscular injection of pethidine was administered at the time of admission to reduce labour pains which might precipitate a fit.

9. A fluid balance chart was stated. Within 30 minutes after admission to the intensive care ward, the patient started bearing down. A vaginal examination done at this time showed that the cervix was fully dilated and the head was in the low cavity. It was decided to assist the second stage of labour by vacuum extraction.

PREPARATION FOR VACUUM EXTRACTION:

1. Valium 10 mg intravenously was given to deepen the sedation in order to minimize the occurence of fits during the procedure.
2. The patient was on a delivery bed and put into the lithotomy position and both legs tied on stirrups.
3. The doctor, scrubbed and dressed, as for caesarean section, infiltrated the perineum with 1% lignocaine and a large right posterolateral episiotomy was done.
4. The vacuum apparatus was assembled and a number 5 cup was attached to the baby's occiput and vacuum pressure raised to 0.2 kg/cm^2. The rim of the cup was checked that it did not grasp the cervical or vaginal tissues.

5. The instrument's pressure was raised gradually by 0.1 kg/cm^2 per minute until the pressure reached read 0.8 kg/cm^2. By then 8 minutes had passed since the application of the cup.
6. During each contraction, traction was applied in the axis of the pelvis synchronous with the contractions. The fetal head gradually descended and with a final upward traction, the head was delivered.
7. The vacuum was released, and the baby delivered. The third stage of labour was managed actively as described in the introcution. The episiotomy was repaired as described in the introduction.

SUMMARY OF LABOUR

The 1st stage: 8 hours
The 2nd stage: 15 minutes
The 3rd stage: 5 minutes
Total duration: 8 hours, 20 minutes

POSTPARTUM CARE AND PROGRESS

1. After delivery the blood pressure, pulserate, maternal temperature, urinetesting for albumin and a fluid balance chart observations were continued. Fifteen minutes after delivery the blood pressure was 120/80 mm Hg and subsequent $\frac{1}{2}$ hourly checks of blood pressure were normal.
2. After delivery the valium dose was tapprered down gradually and was stopped 36 hours after delivery.
3. Urine became negative for proteinuria 36 hours after delivery.
4. Urine output was normal.
5. The patient and her baby were transfered to the postnatal ward and discharged home 4 days after admission.

THE INFANT:

The infant was resuscitated by suction of mucus from the nose and oropharynx. The Apgar score was 8. The baby whose sex was female weighed 3200 grammes. Clinical examination of the respiratory and cardiovascular systems was normal. The baby had no birth injuries or congenital abnormalities. The baby was given BCG vaccination while in the neonatal ward.

POSTNATAL VISIT

The patient and the baby were seen at the postnatal clinic 4 weeks later. The baby was healthy and breast feeding from her mother. The mother's blood pressure was 100/70 mm Hg, and the pulse rate was 76 beats per minute, good volume and regular. Abdominal examination and vaginal examinations didn't reveal any abnormalities. She was given family planning advice, and persuaded to attend antenatal Clinic early during her subsequent pregnancies.

COMMENTARY

This patient, like most women with E.P.H. - gestosis, had no symptoms attributable to the raised blood pressure unless the condition had deteriorated to the stage of impending eclampsia. The main aim of management in the pre-eclamptic stage is to prevent eclamptic seizures. In cases with pre-eclampsia before 38th week, the pregnancy be should maintained as long as possible to ensure adequate growth and maturity. The stress of labour may cause a rise in blood pressure. It is for this reason that the patient should be given analgesics and sedation to relieve pain and apprehension. In addition the second stage of labour should be assisted in order to shorten the duration.

Prevention of eclampsia consists of early antenatal detection and control of eclampsia. In this patient, however preeclampsia was first diagnosed in labour and measures to control the condition were instituted late in the first stage of labour. About 25 percent of women who have presclampsia will have a rise in blood pressure in a subsequent pregnancy, The likelihood of further episodes of pressclampsia is much higher if the patient had severe hypertension with proteinuri in two or more preceeding pregnancies. This patient will have to be watched extremely carefully during the next pregnancy, preferably with constant in-patient observation and frequent monitoring of fetal development.

E.P.H. - gestosis is the most common hypertensive disease in pregnancy. The fundamental cause of this disorder is unknown. Nonetheless the pathophysiology of E.P.H. - gestosis is now better understood, and reasonably effective plans of management, all palliatire, have been developed. The pathophysiology of E.P.H. - gestosis is characterised by internse vasospasm of peripheral arterisles. The initiating event in the development of this vasospatic hypertension is unknown. It may be related to alterations in vascular sensitivity to endogenous hormones (angiotensin II, catecholamines) possibly mediated through changes in arteriolar wall sodium concentrations, to the appearance of a z yet undescribed pressor agent or to diminishing concentrations of endogenous vasodilators (Prostaghudin E_2) Whatever the cause, the end result is acute vasospastic hypertension, with contraction of the circulating plasma volume in proportion to the severity of vasospaso in peripheral arterioles and capacitance vessels Decreases of plasma volume up to 40% have been reported in the most severe disease.

Sensitivitiy is angiotensin II can be seen as early as 20 weeks' gestation; long before the development of overt hypertension.

In some reports diminished plasma volume has been observed at 26 weeks gestation in patients who later developed E.P.H. gestosis. The significance of these later observations is unclear. They suggest that the process begins long before it becomes apparent clinically It has been suggested that primary hypovolaemia, hypotension and hypoperfusion inciate the vascular reactivity, subsequently producing hypertension. However this seems to be most unlikely turn of events. A much more likely sequence is primary vasospasm, producing first a contracted plasma volume and then elevation of blood pressure.

The differential diagnosis of hypertensive states in pregnancy presents mny uncertainties. Should a patient present during the first half of pregnancy with an elevated blood pressure, and the examination of the urine be negative (forproteins), one can assume that the patient has assential hypertension.

Should the blood pressure remain within normal limits during the first half of pregnancy and then increase in the second, one must rely on the presence or abscence of proteinuria for the diagnosis. If proteinuria is present the diagnosis is likely to be E.P.H. - gestosis; if absent essential hypertension in the more likely diagnosis.

RHESUS - NEGATIVE MOTHER

NAME: MRS. H.S.
REG. NO.: 00459/M/80
AGE: 30 YEARS
ADDRESS: KARIAKOO, DAR ES SALAAM
ADMITTED ON: 26.8.80
DELIVERED ON: 26.8.80
DISCHARGED ON: 29.8.80

SUMMARY

The patient's blood group was B, rhesus negative while her husband's blood group was B rhesus D Positive. She had a total of 6 delivaries and there was no evidence of isoimmunisation in the babies or the mother. The rarity of isoimmunisation in rhesus negative pregnant women in Tanyania is discusseed.

PREVIOUS OBSTETRIC HISTORY

Mrs H.S. was in her fifth pregnancy having had four full term babies previously. In 1971 she had a full term normal delivery, twin pregnancy. Both babies were females weighing 6lbs. 7lbs respectively.

In 1974 she had a full term normal delivery of an 8lb female baby. Antenatally she was diagnosed as Rhesus - D - negative mother but she was not investigated for rhesus antibodies. The baby's neonatal period was normal.

In 1976 she had a full term normal delivery of an 8lb female infant. No investigations for rhesus antibodies were carried out. There was no history of neonatal jaundice.

In 1978 - she delivered a 7lb male baby. Antenatally, rhesus antibodies were estimated but were found to be negative. No cord blood was taken. The baby's blood group is O rhesus positive (checked in 1979). The mother and the baby were well when discharged 3 days later.

All the pregnancies were with the same husband. There was no history of jaundice or anaemia in the neonatal periods of her babies. There was no history of blood transfusions. She used oral contraceptives in 1974 - 1975 then stopped because she wanted to get pregnant.

MENSTRUAL HISTORY

Menarche was at the age of 15 years. Menstrual flow was moderate in amount lasting 6 - 7 days and occuring every 30 days. There was premenstrual dysmenorrhoea which improved after the birth of her first baby. The last menstrual period started on 9.11.79. There was no vaginal bleeding after the last menstruation.

GYNAECOLOGICAL HISTORY

There was no history of any gynaecological illness.

MEDICAL AND SURGICAL HISTORY

She was admitted in Muhimbili hospital in 1975 because of urinary tract infection. She was treated with antibiotics.

In 1979 she was operated for a right Bartholin's abscess.

FAMILY AND SOCIAL HISTORY

She worked as a Personal Secretary in the Prime Minister's Office. She was married since 1971. Her mother delivered twins once. There was no history of hypertension, or diabetes mellitus in her family.

LABORATORY INVESTIGATIONS

PRESENT OBSTETRIC HISTORY

She booked as a grade one patient on 20.5.80 at the Muhimbili antenatal clinic. Her last menstrual period had started on 9.11.79 and her expected date of delivery was 18.8.80. The gestational age was 28 weeks.

PHYSICAL EXAMINATION

Her general condition was good. She was afebrile and had no ankle pitting oedema. She was not anaemic and not jaundiced. Her weight was 76kgs and height was 169cm.

CARDIOVASCULAR SYSTEM

The pulse rate was 84 beats per minute regular and of good volume. The blood pressure was 110/60 mm. of mercury. There was no cardiomegally. The first and second heart sounds were normal.

RESPIRATORY SYSTEM

There was nothing significant.

ABDOMINAL EXAMINATION

The abdomen was distended, more marked in the lower parts. There were no scars. The abdomen was non tender. The fundal height corresponded to a 28 week pregnancy size. The lie was longitudinal with cephalic presentation. The fetal heart rate was 150 beats per minute. The liver and spleen were not palpable. The renal angles were free of masses.

VAGINAL EXAMINATION

The vulva and vaginal were normal. The cervix was healthy parcus and closed. There were no dishcarges. The cervix was soft on bimanual examination. The uterus was equivalent to 28 weeks pregnancy size. There were no adnexal tumors.

VAGINAL EXAMINATION: done on 26.8.80 6.15 pm.

The vulva and vagina were normal. The cervix was 8cm dilated and fully effaced. The presenting part was the vertex in the left occipito - anterior position. There was no caput and no moulding. Membranes were intact, and artificial rupture of the membranes was done; clear liquor was obtained. No cord was felt. The pelvis was assessed and found to be adequate at all levels. Subsequent progress of labour was managed as in obstetric case number one.

LABOUR AND ITS OUTCOME:

At 8 pm the patient was in the second stage of labour. She was instructed to hold her breath and bear down with each contractions. At 8:15pm the patient delivered a 3.5 kilgramme male baby. The patient recived 0.25mg intravenous injection of ergometrine as the enterior shoulder was delivered. The perineum was intact. Ten minutes after the third stage the blood pressure was 110/70mm Hg. and the plse rate was 86 beats per minute regular and of good volume. The uterus was well contracted and there was minimal vaginal bleeding.

After the umbilical cord was divided, cord blood was taken for blood group, Rh factor, haemoglobin and billirubin estimations. Blood group was O rhesus positive. The haemoglobin was 16gm percent. Bilirubin level was 0.8mg per cent.

EXAMINATION OF THE INFANT

Wieght: 3500 grammes
Apgar Score: 10
Sex: Male

The baby was pink, active, with no jaundice or congenital abdormalities. Further examination of the baby showed that the liver and spleen were not palpable,. All other systems were normal.

The baby was taken to the neonatal ward for observation. Three days later the baby and the mother were discharged in good condition.

FOLLOW UP

The mother and her baby were seen in the postnatal clinic 4 weeks later. The mother looked healthy she was afebrile and a haemoglobin of 10.5 grammes. Blood for rhesus antibodies was negative.

The baby was healthy looking active, and not anaemic, haemoglobin 14 grammes. She was discharged home and adviced to take her child to the Maternal Child Health (M.C.H.) clinic regularly where she would also get child spacing advice there. She was also advised to attend antenatal clinic early in the next pregnancy.

COMMENTARY:

There is a widely held view that isoimmunisation of Rhesus (D) Negative pregnant women in Tanyania is a very rare occasion (Nhonoli and Kiango, 1974). This view is supported by the fact that the incidence or Rh (D) Negative is only 3%.

The mother's rhesus factor was negative (i.e. dd allele) and the father was rhesus positive (i.e. either Dd heterozygous, or DD homozygous). The children born could either be Rhesus positive or negative inherited in the mendelian fashion. The relative likelihood of the ratio of Rhesus positive and negative would depend on whether the Rhesus D - positive father was homozygous (DD allele) or heterozygous (Dd allele) for the Rhesus gene. The two children whose Rhesus factor was known were both Rhesus positive.

The patient described was a Tanzanian African multipara whose blood group was B-Rhesus negative and that of her husband was B-Rhesus positive. She had 4 full term normal deliveries and the last (5th) delivery was also normal. All the five children born were from the same husband and showed no evidence of rhesus immunisation.

According to mendelian laws the ABO blood groups of their children could only be inherited from the BO or BB genotype of either parents who phenotypically are both of B group. The resultant pehnotypic ABO blood groups of their children could only be either group B or group OO as indeed shown in the last 2 borns in whom the ABO blood groups were known.

Rhesus isoimmunisation does not occur in every case in an Rh-negative woman bearing an Rh positive child, but the phenomenon is doubtless dependent upon the size, quantity or repetition of the antigenic stimulus and ABO blood group of the mother and fetus. The size and quantity of the stimulus in this patient could not be estimated as the fetomaternal transfer of red cells could not be quantitated neither did the mother receive blood transfusion previously. The repetition of the antigenic stimulus could only be assessed during the last but one fetus whose

ELECTIVE CAESAREAN SECTION

rhesus factor was known to be rhesus positive. Nevertheless transfer of fetal cells to the maternal circulation was not documented either. Since the blood groups of all the babies from her husband could either be group-O or group B, the red cells from the fetus on gaining access to the maternal circulation would be compatible with that of their mother and therefore immunize the mother in cases of Rhesus positive fetuses.

A further factor which could explain why mothers of Negro origin do not commonly develop isoimmunisation is the presence of a variant of Rhesus D antigen designated as Du antigen. This antigen is a weak type and hence phenotypically may be taken as Rhesus D positive or negative during blood grouping. Some of our patients grouped as Rhesus - D negative may infact be Rhesus - Du and these patients for practical purposes, cannot be sensitized by Rhesus - D antigen. The Du antigen has been found in some of the women around Dar es Salaam (Magessa).

ELECTIVE CAESAREAN SECTION

NAME:	MRS H.H.
AGE:	20 YEARS OLD
IP.NO:	25657/78
ADDRESS:	KURASINI DAR ES SALAAM
DATE OF ADMISSION:	1.4.79
DATE OF OPERATION:	2.4.79
DATE OF DISCHARGE	11.4.79

SUMMARY:

The patient had two previous deliveries by cassarean section Her antenatal period was normal and she was safely delevered of a mature infant at 38 weeks of pregnancy. The perperium was normal.

PAST OBSTERIC HISTORY:

She was gravida 3 para 2 Abortions -0

1975 - She had term delevery ba caesarean section because of prolarged first stage of labour due to dephalopelvic disproportion. The weight of the baby was unknown. 1976 - She attended antenatal clinic and was delevered by caesarean section after spontaneous onset of labour, at 9 month of pregnancy.

In both deliveries the puerperium was normal and there was no avidence of puerperal sepsis.

MENTRUAL HISTORY:

Menarche was at 14 years of age. The menstrual periods lasted 3 days and occured every 26 - 28 days, normal flow and there was no associated dysmenorrhoea. Her last menstrual period was 4.7.78.

GYNAECOLOGICAL HISTORY

There was no history of any gynaecological disease. There was no history of dilatation and currettage. There was no history of use of any form of contraceptives.

PAST MEDICAL AND SURGICAL HISTORY

There was no previous history of admission to hospital or any surgical operations performed on her.

FAMILY AND SOCIAL HISTORY

There was no family history of twin pregnancies, diabetes mellitus, hypertension or tuberculosis. She was an unemployed housewife. She never smoked nor took alcoholic drinks.

PRESENT OBSTETRIC HISTORY:

The patient was first seen at the Muhimbili hospital antenatal clinic on 10.11.79. Her last menstrual period was on 4.7.78 and her expected date of delivery was on 11.4.79. The gestational age was 18 weeks.

PHYSICAL EXAMINATION

The patient was in good general condition. She was afebrile and not anaemic she had no pitting oedema.

CARDIOVASCULAR SYSTEM

The pulse rate was 76 beats per minute. The blood pressure was 100/60 mm Hg. The first and second heart sounds were heard and they were normal.

RESPIRATORY SYSTEM

Chest movements were equal on both sides. The trachea was central in position. Breath sounds were versicular. Air entry was good on both lungs. There were no crepitations.

ABDOMINAL EXAMINATION

The abdomen was enlarged more marked in the lower parts. There was a median subumbilical scar. The fundal height was equivalent to 18 weeks gestation size, consistent with the period of amenorrhoea. Fetal movements were felt.

VAGINAL EXAMINATION:

Speculum Examination:

The vulva and vagina were normal. The cervix was normal looking, nulliparous type. There was no abnormal discharge.

Bimanual examination:

The cervix was soft and the os was closed. The uterus was soft, smooth and evenly enlarged to a size corresponding to an 18 weeks gestation. The adnexa were free of masses and non tender.

Laboratory Investigations:

1. The haemoglobin level was 76%
2. Blood group was A Rh-'D' positive
3. Serology tests for syphillis were negative.
4. Urine was negative for proteins and sugars.

The patient was given ferrous sulphate tablets to be taken orally 600 mg daily; folic acid 5mg. orally daily and chloroquine 300 mg weekly.

Plan of delivery of the patient:

Elective caesarean section was planned to be performed at the gestational age of 38 weeks.

SUBSEQUENT ANTENATAL CLINIC VISITS:

The patient made three subsequent antenatal clinic visits at 28, 32 and 36 weeks of pregnancy. At these visits the patient received tetanus toxoid immunisation. The haemoglobin levels at these visits were 70%, 76% and 78% respectively. The weight gains and blood pressure of the patient during the visits was within normal ranges. At 28 weeks of pregnancy the fetal heart was first heard. The lie was longitudinal and cephalic presentation with normal fetal hearts rates during all the antenatal clinic visits. The pregnancy progressed normally until 38 weeks.

ELECTIVE CAESAREAN SECTION

The patient was admitted in the antenatal ward on 1.4.79. She had no complaints.

PHYSICAL EXAMINATION

She was in good general condition. She was not anaemic, she was afebrile and she had no pitting oedema.

CARDIOVASCULAR SYSTEM: } Examination findings were similar
RESPIRATORY SYSTEM: } to those noted during the first antenatal clinic visit.

ABDOMINAL EXAMINATION:

The abdomen was evenly distended with a subumbilicalmedian scar. It was non tender. The fundal height was equivalent equivalent to 38 weeks of pregnancy, longitudinal lie and cephalic presentation.

The fetal heart rate was 144 beats per minute.

VAGINAL EXAMINATION:

Bimanual Examination: The vulva and vagina were normal. The cervix was soft, uneffaced, and long. The cervical os admitted the tip of the examining finger. The uterus was soft and enlarged to the size of a 38 weeks pregnancy.

Investigations:

1. The haemoglobin level was 80 per cent.
2. Urine was negative for albumin and proteins.
3. Three units of group A-Rh-D-positive blood were requested.

A consent for operation was obtained from the patient. An elective caesarean section was planned to be done on the afternoon of 2.4.79

Preparation for elective caesarean section. This was done as described in the introduction.

Low segment caesarean section 1 p.m. 2.4.79

The patient was taken to the operating theatre and placed in the supine position. Premedication and general anaesthesia were administered in the manner described in the introduction. The abdomen was cleaned with savlon anf flavine in spiriti

Opening of the abdomen:

Two tissue forceps were placed one on each end of the scar. Thescar was then dissected off and the abdomen opened in layers as described in the introduction.

Findings: The uterine scar was found intact. There were minimal adhesions in the pelvis. Both ovaries and fallopian tubes looked healthy without adhesions. Other viscera were inspected and found to be healthy.

Procedure:

A low segment caesarean section was performed in the manner described in the introduction. Artificial tupbure of the fetal membranes was done and straw colored fluid was sucked out. A male baby, Apgar 10 and weighing 2860 grammes was delivered. The third stage was managed as described in the introduction.

The uterus and abdominal wall were closed as described in the introduction. The total amount of blood loss was estimated to 800 mls.

After the patient had recovered from general anaesthesia, she was taken to the postnatal ward.

Post operative management:

1. The pulse rate and the blood pressure were taken $\frac{1}{2}$ hourly for 4 hours then 1 hourly for 48 hours. They were within normal limits.
2. A fluid balance chart was instituted.
3. Pethidine 100 mg was administered intramuscularly every 6 hours for 24 hours.
4. A 2000 mls 5% Dextrose was infused intravenously every 24 hours for 2 dazs. Two units of group A-Rh-D positive blood was transfused within the first 24 hours post operative.

Progress of the patient:

The patient started to take oral feeds on the 3rd post operative day. She was not anaemic, afebrile and had minimal lochia discharge. The haemoglobin level was 70% on the 4th post operative day. The stitches were removed on the 8th post operative day and the patient was allowed to go home.

Postnatal clinic:

The patient reported to the postnatal clinic 6 weeks later. Her baby was healthy and lactating. The patient was well and had no complaints. She was afebrile and her blood pressure was 110/70 mm Hg. The abdomenal wound had healed normally. Further abdominal and pelvic examinations were

were normal. Her haemoglobin was 70 gms per cent. The likely hazards to future pregnancies were discussed with the patient. She however wanted one more child before considering sterilisation. She was therefore given family planning advice and started on oral contraceptives.

COMMENTARY:

The concept of mandatory repeat caesarean section in the management of a previously incised pregnant uterus has been subjected to extensive review and criticism with the result that the dictum "once a section - always a section" is no longer an inflexible rule in obstetric practice. The rationale of this change in policy is based on repeated demonstrations that in many instutions vaginal delivery following caesarean section is not only a feasible procedure but is associated with improved perinatal survival and maternal morbidity statistics. However after two caesarean sections the uterine scar is no longer able to withstand the process of labour and uterine rupture is more likely. Many studies have shown that fewer ruptures of the uterus occur when such a policy is adopted. The lower uterine segment becomes much more highly developed during the last weeks of pregnancy, and especially when the head becomes engaged. During labour it is non contractile and dilates to form the upper part of the birth canal. At the time of delivery this segment may only be 2 to 3 mm thick. It is recognised that various types of defects may exist along the line of closure, some of which may actually be samll "windows". Usually they present no problem and in the case of vaginal delivery the presence of a defect may not be recognized in many occasions.

Clinical signs and symptoms at any time during pregnancy or labour are notoriously inaccurate in the diagnosis of impending rupture. Likewise the clinical course following the previous operation - febrile reaction, character of abdominal wound healing, pus discharge-provides very little information that might suggest uterine rupture. Following vaginal delivery, a pelvic examination done during a uterine contraction may give valuable information. The use of a hysterogram in the nongravid state has been suggested by some authors, in demonstrating both large and small defects could be seen in the film yet no defect could be found at the time or a subsequent caesarean section.

The major argument infavor of vaginal delivery in selected instances following caesarean section is the decrease in maternal mortality. Abdominal delivery is associated with increased incidence of puerperal morbidity compared to vaginal delivery. While a difference between the two models of delivery will probably exist, better care in selecting candidates for the initial section and improved clinical facilities will remain the optimum methods for reducing maternal morbidity and mortality associated with this problem.

The problem of prematurity of the infant at birth is one of the draw backs to the concept or routine, repeat caesarean delivery. Until estimation of fetal maturity becomes an exact process, and scheduling the date of delivery prior to the onset of labour will be associated with an increased incidence of premature births.

A CASE OF CORD PROLAPSE DELIVERED BY CAESAREAN SECTION

NAME: MRS.H.M.
AGE: 20 YEARS
IP. NO: 45/80
ADDRESS: TEMEKE, DAR ES SALAAM

SUMMARY

The patient was referred from Ocean Road Hospital on account of cord prolapse. She was found to have occipito-posterior position and cord prolapse. She was delivered by caesarean section and discharged on the eleventh post operative day with a live baby.

PAST OBSTETRIC HISTORY

This was her third pregnancy. Her previous two pregnancies all ended in normal delivery in 1976 and 1977. All the children are alive and well.

GYNAECOLOGICAL HISTORY

Menarche was at 14 years with mestrual cycles 6/30 days. The date of her last normal menstrual period was 12.11.79. Her expected date of delivery would be 19.8.80. There was no vaginal bleeding after the last menstruation.

FAMILY HISTORY

There was no family history of diabetes mellitus, hypertensive disease or tuberculosis.

SOCIAL HISTORY

She was an unemployed housewife. Her husband worked as a clerk with the City Council.

PAST MEDICAL AND SURGICAL HISTORY

She had no serious illness or surgical operations.

ANTENATAL CLINIC BOOKING AND PROGRESS

She booked at Temeke M.C.H. clinic. The antenatal card she carried with her showed that at booking she was not anaemic. She weighted 62 kg and her height was 160cm. The blood pressure was 90/60 mm Hg. The fundal size was equivalent to 16 weeks gestation.
The cardiovascular and respiratory systems were normal.
She made 6 subsequent antenatal clinic visits at 20, 24, 28, 30, 32 and 34 weeks gestation. The pregnancy continued to term without complications.

LABORATORY INVESTIGATIONS

1. The haemoglobin levels at 32, 34, and 36 weeks of pregnancy were 9gm/100ml, blood 9.6gms/100mls blood and 10gms/100mls blood respectively.
2. Serological tests for syphillis were negative
3. Blood group was 'O' Rh-positive
4. Urine was negative for sugar and albumin

REASONS FOR REFERRAL

Cord prolapse.

HISTORY AT ADMISSION

Labour started spontaneously at 1:40 am on 24.8.80. She went at Ocean Road Hospital, where after spontaneous rupture of the fetal membranes the cord was felt in the vaginal. She was immediately transferred to the New Maternity Block.

FINDING ON EXAMINATION OF THE PATIENT ON ADMISSION

She was in good general condition. She was afebrile and not anaemic. The radial pulse was 84 per minute good volume and regular.

CAESAREAN SECTION PERFORMED ON 24.8.80 AT 2 AM

The patient was taken to the theatre. On the operating table the bladder was catheterised aseptically as described in the introduction.

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

The fetal heart just before caesarean section was 150 beats per minute. The abdomen was then cleaned with savlon (1 in 200) followed by flavine in spriti The patient was then drapped with sterile towels.

PROCEDURE OF OPERATION

The abdomen was opened by a median sub-umbillical incision as described in the introduction, and a lower segment caesarean section done.

The right hand was introduced into the uterus below the foetal head and delivered the head of the baby. At this point the foetal arm presented and was quickly replaced into the uterus, preceeding to extraction of the baby.

The third stage was normal and was managed as described in the introduction. The uterus and abdominal wall were repaired as described in the introduction.

The total bleeding was about 700 mls.

THE BABY

The male baby whose weight was 2800 grammes was born. The apgar was 7. It was rescusciated by suction of the oropharynx and administration of oxygen by a nasal catheter.

The baby had no congenital malformations.

THE MOTHER

POST-OPERATIVE CARE

After recovery from general anaesthesia the mother was taken to the postnatal ward. In the ward blood pressure and pulse rate were monitored one hourly for 48 hours and remained normal. A fluid balance chart was kept for 3 days and was normal. She was given pethidine 100 mg 6 hourly for 24 hours to alleviate post operative pain. She received two units of blood in the first 24 hours post-operative. 5% dextrose in water, 2000 mls were administered intravenously daily for 3 days before she started taking oral feeds. Crystalline penicillin 2 mega units were administered intravenously 6 hourly for 48 hours followed by P.P.F. 1.2 mu daily for 5 days.

She made a good postoperative progress and on the 4th postoperative day the haemoglobin was 86 per cent.

The stitches were removed on the 8th postoperative day and she was discharged home 5.9.80. She was given ferrous sulphate tablets 600 mg daily for two weeks.

POSTNATAL VISIT

The mother and her infant attended the postnatal clinic 6 weeks after discharge from the hospital. She had no complaints. The baby was active and breast feeding normally. She was not anaemic. The abdominal wound had healed normally. The cervix, was firm and the cervical os was closed. The uterus was normal size and mobile. There was no adnexal pathology detected. The haemoglobin was 11 grammes. Percent. She was advised to report early to the antenatal clinic (with her discharge card) when she conceives again.

COMMENTARY

In this patient the occipitoposterior position of the fetus is likely to have favoured prolapse of the cord by interfering with the close application of the presenting part to the lower segment of the uterus and the brim of the pelvis.
Unfortunately it was not known when the foetal membranes had ruptured. Sudden rupture of the membranes especially if the parturient was in the erect position, is a possible predisposing factor.

The cord having prolapsed was likely to have been pinched between the presenting part and the pelvic brim, resulting in a rapid fetal heart rate and a low apgar score at birth. Fetal death may however occur even without pressure on the cord. Spasm of the cord vessels may be as important a cause of fetal death as actual mechanical block.

The likelihood of fetal death would have been much greater if the cord was actually allowed to prolapse outside the vagina, and suffer a loss of temperature. Since the occipitoposteior condition which favoured prolapsed prevented the early engagement of the head, the cord escaped extreme of pressure during labour.

The line of management of this patient was influenced by the condition of the child, the presentation of the fetus and degree of descent of the presenting part into the maternal pelvis.

At attempt was made to replace the cord or at least minimise compression by postural treatment, the knee chest, position employed was aimed to raise the pelvis and bring the cervix to a higher level than the fundus, thus permitting gravity to act.

PUERPERAL SEPSIS WITH ACINETOBACTER SP.P. BACTERIA

NAME: D.E.
AGE: 20 YEARS
IP. NO.: 30426/78
ADDRESS: Magomeni, Dar es Salaam
OCCUPATION: Unemployed
ADMITTED: 10.12.78
DISCHARGED: 21.12.78

SUMMARY

The patient was admitted through the Casualty as an emergency case with a history of fever 3 days after delivery. A diagnosis of puerperal sepsis and septicaemia was made. She was treated with antibiotics, intravenous fluids and blood transfusion and was discharged 11 days later in good general condition.

HISTORY OF PRESENT ILLNESS

The patient was unable to talk and the short history was given by her husband. The patient delivered in Ocean Road Hospital 7 days prior to admission. 3 days after delivery the patient had continous fevers associated with abdominal pains, and a blood stained foul smelling vaginal discharge. There was no history of vomiting or diarrhoea. One day prior to admission the patient was unable to talk. She had been attending Magomeni Dispensary where she was given tablets and injection.

No further details of the history, pregnancy or delivery was available.

OBSTETRIC HISTORY

She was a primipara. She hadn't received any antenatal care.

MEDICAL AND SURGICAL HISTORY)
MENSTRUAL HISTORY) The patient couldn!t give
GYNAECOLOGY HISTORY) any history.
SOCIAL HISTORY)

FINDINGS ON EXAMINATION:

The patient was conscious but unable to talk. She was ill looking but well nourished. She was mildly dehyrated with a tinge of jaundice and moderately anaemic. Her body temperature was 40°C. The calves were not swollen and they were non-tender.

CARDIOVASCULAR SYSTEM

The pulse rate was 130 beats per minute good volume. Blood pressure was 105/40 mm Hg. The jugular venous pressure was not raised. The first and second heart sounds were heard and were normal. There were no murmurs.

RESPIRATORY SYSTEM

The respiratory rate was 48 per minute. She was mildly dsypnoeic. The chest was of normal build and moved with respirations systematically. There was good air entry on both sides of the chest. The lung fileds were clear.

BREASTS

The breasts were well developed with bilateral hyper-pigmented areaolae. Both breasts were secreting milk and the nipples were normal. No lumps were palpable.

CENTRAL NERVOUS SYSTEM

The patient was unable to talk or obey commands but she was conscious. The neck was soft and kernig's sign was negative. The pupils were equal in size and reacting to light normally. The optic fundus was normal. There was no sensory loss and the tendon jerks were normal.

ABDOMINAL EXAMINATION

The abdomen was markedly tender and there was guarding in the lower abdomen extending to the paraumbilical area. There was no rebound tenderness and there was no evidence of free fluid in the abdominal cavity. The uterus was enlarged to about 12 weeks size, smooth, regular and was not tender. The liver was not palpably enlarged but it was dull to percussion, and 3cm below the costal margin. The spleen was 3cm enlarged below the costal margin, smooth and non tender. The bladder and kidneys were palpable.

VAGINAL EXAMINATION

There was a foul smelling, yellowish/brown discharge from the vulva. There was no vulval tear. Speculum examination revealed a yellowish/brown discharge admixed with fresh blood ensuing from the external cervical os. There was no cervical lacerations and the vaginal walls were intact.

Bimanual examination revealed an enlarged uterus equivalent to a 12 weeks gestation, tender, with a smooth contour. There was marked adnexal tenderness, but it was difficult to feel the presence of any massess because of the extreme tenderness. The cervix was soft, and the cervical os was closed.

DIAGNOSIS

Puerperal sepsis with septicaemia.

INVESTIGATIONS

1. Blood picture
   Haemoglobin was 5.4gms (37%).. Total white cells count was 13,000 of which 72% were polymorphs, 25% lymphocytes and 3% eosinophils.

2. Blood cultures were taken at 2 different sites, with different syringes. Both samples isolated heavy growth of acinetobacter S.p.p. sensitive to sulphafurazole, Ampicillin, tetracycline and kanamycin, resistant to chloramphenicol.

3. Blood urea
   87 mg% (at the time of admission)
   45gm% (36 hours after admission)

4. Serum creatimine
   0.21gm% (at the time of admission)
   0.21gm% (36 hours after admission)

5. Serum electolytes
   Sodium 133m Eq.
   Potassium 3.2m Eq.

6. Liver function tests
   S.G.O.T. 0 i.u.
   S.G.P.I. 2 i.u.
   Alkaline phosphatase 8.8 K.A.U.
   Bilrubin (serum) normal
   Total serum protein 4.6mg%

7. Cervical swab preparation
   Few pus cells, showed trichomonas vaginalis, no yeast cells were found.
   Gram stain: few pus cells, no bacteria isolated.

11.12.78

Blood group O - Rh - positive

8. Urine
Showed few granular casts. Culture was sterile.

9. Fibrinogen level was 400mg%

10. The clotting time was 5 minutes

11. Blood slide was negative for malaria parasites

MANAGEMENT

Resucitation

1. After taking blood for the above investigations, an intravenous drip was set up, of normal saline to alternate with plasmagel, and a litre each was given in the first 8 hours. 8 hours later blood transfusion was started and one unit of blood was given and dextrose-saline drips at the rate of 300 mls/24 hours the amount of fluids was subsequently adjusted according to the input output chart.

2. Antibiotics
5 mega units of crystalline penicillin was given 6 hourly intravenously with 80mg of gentamycin 12 hourly intravenously for 5 days.

3. Antimalarials
Chloroquine 200mg was administered intramuscularly and 100mg 6 hours later.

4. General care
Blood pressure, pulse rate and temperature were recorded one hourly. A fluid balance chart was started.

10.12.78 7.15pm

The patient's condition was the same except that she was then well hydrated. Blood urea result arrived and was 87mg% and the dose of gentamycin was reduced to 40mg 12 hourly intravenously.

11.12.78

There was improvement in the general condition of the patient although she was still unable to talk. The blood pressure was 110/60mm of mercury, and pulse rate of 12 per minute and the temperature was 37.5°C. The abdominal tenderness was less marked.

12.12.78

There was subjective improvement and the patient could talk. She was afebrile, blood pressure of 110/70mm of mercury, but the pulse rate was still 112 per minute. She was still anaemic (Hb 37%). Blood transfusion was requested. Blood urea was 45mg% so the original dose of gentamycin of 80mg, 12 hourly was given.

13.12.78

2 units of blood transfusion was given with lasix 80mg intravenously.

Progress of the patient condition

Four days after admission, the patient was well and was up and about. There was no abdominal pain, and no vaginal discharge. The size of the uterus was equivalent to an 8 week gestation uterus. The patient's haemoglobin on the 6th day was 61%. On the 10th day the patient was discharged home and instructed to attend the postnatal clinic.

POSTNATAL CLINIC VISIT

The patient attended the postnatal clinic 6 weeks later with her baby who was breast feeding.

There was no abdominal pain or vaginal discharge. The cervix looked healthy and the cervical os was closed. The uterus was normal size and anteverted. The adnexaa were normal. She was advised to attend antenatal clinic during her subsequent pregnancies, and was allowed to go home.

COMMENTARY

Puerperal and post abortal sepsis was the commonest cause of maternal moratlity in 1978 (34% of the toatl deaths) and the second commenest cause in 1977 (19% of the total number of deaths) in Muhimbili Medical Centre (Mtimavalye 1977, 1978). In this patient the diagnosis of puerperal sepsis was suspected because of the pyrexia which occured during the peurperium.

Cervical swab was preferred to high vaginal swab. This is because high viginal swabs can be misleading in the absence of an overriding intrauterine infection, as the cultures may grow normal vaginal inhabitants which are not necessarily pathogenic. Nevertheless the cervical swab upon culture didn't grow any bacteria.

The presence of abdominal tenderness, foul swelling bloody vaginal discharged and the culture of bacteria in the blood stream was very suggestive of a puerperal sepsis. Ideally, however, to confirm that the septicaemia was secondary to the genital infection a similar bacteria should be isolated from both the blood specimen and the cervical swabs.

Acinetobacter S.p.p. is a seprophyte found in the environment (soil, vegetation etc). Since separate venepuncture specimens, were taken, after cleaning the skin with 90% alcohol, it was unlikely to have been a contaminant.

The commonest aerobic bacteria isolated from the cervix and vagina in Muhimbili Medical Centre, are E. coli, staphylococci, streptococci, klebsiela and coliforms (Mtimavalye 1979) Acinetebacter S.p.p. have rarely, if ever, been isolated in puerperal sepsis in this hospital.

Although the patient was given antibiotics (Gentamycin and crystalline penicillin) to which the bacteria sensitivity was not specifically tested, the patient showed improvement on the second and third day of admission. It was assumed therefore, that the bacteria was sensitive to the prescribed antibiotics, at least in vivo.

Full sensitivity reports taken a couple of days. Since sensitivity results require the use of pure cultures of the organism, this alone takes about 36 hours. The initial choice of antibiotic must be based upon the likely type of infection and the effecacy of the antibiotic used, bearing in mind the danger of breeding resistance by the encouragement of the growt of other organisms.

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TWIN PREGNANCY IN MUHIMBILI MEDICAL CENTRE

INTRODUCTION

Multiple pregnancy presents problems of obsteric and social nature due to difficulties confronted with in relation to early diagnosis, delivery complications, and increased neonatal mortality among the newborns (Skalba, 1974).

In general, all complications caused by or associated with pregnancy are most frequent in and are aggravated by twin pregnancy (Panwalla, 1971). Skalba found that 15% of the twin pregnancies exhibited complications, the most serious being prematurity.

The high perinatal mortality rate in twin births has often been attributed to prematurity, especially so in the first twin, while the risk in the second twin has been related to the period of retention of the second twin.

The pattern of twinning varies markedly from one area to another and the incidence of twinning is noted to be higher among the African race (Das, 1934). The first account of twin pregnancy in Tanyania was given in 1977 (Mgaya). In his retrospective study based on a sample of 474 twin deliveries, he found the incidence of twin deliveries, to be 18.5 per 1000 deliveries (or 1 in 55 deliveries). Another study based in Muhimbili Medical Centre in 1978, reported the incidence of twin deliveries to be 16.7 per 1000 deliveries (Massawe et.al, 1978). The reason for the high incidence of twinning in some races in is not properly understood. It seems that certain races have a tendency of multiple ovulation resulting into fertilisation of more than one ova.

The purpose of the present study was to find:

1. The incidence of twin pregnancy in Muhimbili Medical Centre over a 6 month period.

2. The number of twins diagnosed before delivery
3. The distribution of twin deliveries by maternal age and parity.
4. Family history of twins
5. Presentation of twins at the time of delivery
6. Operative delivery in twin pregnancy
7. Birth weights of twins
8. Time interval between delivery of both twins
9. Perinatal Mortality in the delivered twins

All the above (2 to 9) relate to the New Maternity Block, Muhimbili Medical Centre

The present study was based on twin deleveries after the 28th week of gestation between 1st January 1979 to 30th June 1979 in the New Maternity Block, Dar es Salaam.

Dar es Salaam region with a ppulation of 851, 522 (1978 census) is situated on the East African Coast lying 7^{0} south of the equator and 39^{0} East. The city is served by Muhimbili Medical centre and four non governmental maternity clinics. The Muhimbili Medical centre has two obstetric units, the ocean Road Hospital for normal deleveries and The New Maternity Block for high risk delivery cases, including twin deliveries.

In 1978, 95% of all the institutional deliveries and 75% of the total estimated births in Dar es Salaam were conducted at Muhimbili Medical Centre (MMC). And of the 28,827 babies that were delivered at M.M.C. 12,394 (43%) were born in the New Maternity Block and 16,533 (57%) were born in ocean Road Hospital (Massawe at al, 1978)

METHOD

A cohort of 16,185 mothers delivering between 1st January 1979 to 30th June 1979 was identified. The necessary details of the patients delivering during this period were recorded on a daily basis. Babies requiring neonatal care, were followed up in the neonatal unit until the time of discharge.

Diagnosis of twin pregnancy: The presence of twins was suspected during the antenatal clinic in cases of undue enlargement of the abdomen, multiple fetal parts, size of the head smaller than expected or when three poles were palpable. The suspected cases of twin pregnancy, were confirmed by taking a straight abdominal X-ray after the 28th week of pregnancy.

Birth weight: The weight in grammes was recorded immediately after birth. Any fetus weighing less than 1000 grammes was excluded from the study.

Perinatal Mortality: comprised late fetal deaths (still births) and first week deaths.

RESULTS:

During the 6 month period of the study, there were a total of 16,185 deliveries in Muhimbili Medical Centre as shown in Table 1.

1. TABLE 1 DELIVERIES IN MUHIMBILI MEDICAL CENTRE FROM 1.1.79 TO 30.6.79

UNIT	TWIN DELIVERIES	TOTAL NUMBER OF DELIVERIES
OCEAN ROAD HOSPITAL	51	9,936
THE NEW MATERNITY BLOCK	274	6,249
T O T A L	325	16,185

The incidence of twinning (as calculated from table 1) over the 6 month period was 5.1/1000 for Ocean Road Hospital and 43.8/1000 for the New Maternity Block, giving an overall incidence of 20.1/1000 deliveries for Muhimbili Medical Centre.

2. TABLE 2 DIANOSIS OF TWIN PREGNANCY AT THE NEW MATERNITY BLOCK

Diagnosis	Number	Percentage
(a) Undiagnosed twins	122	44.5
(b) Clinical diagnosis	152	55.4
(i) Confirmed by X-ray	(80)	(52,6)
(ii) Not Confirmed by X-ray	(72)	47.4

In 122 (44.5%) twin pregnancies, the diagnosis was not made before delivery. Of the 152 twin pregnancies that had been diagnosed antenatally (between 32-34 weeks of gestution) only in 80 cases was an X-ray taken to confirm the presence of twins.

3. TABLE 3 DISTRIBUTION OF TWIN DELIVERIES BY MATERNAL AGE AT THE NEW MATERNITY BLOCK

Age	Number of patients	Percentage
Under 20 years	58	21
20 - 30 YEARS	142	52
Over 30 Years	74	27
T O T A L	274	100

About half of the mothers who delivered twins were of 20 - 30 year age group.

4. TABLE 4 DISTRIBUTION OF THE DELIVERIES BY PARITY OF THE MOTHERS:

Parity	Number	Percentage (for twins)	% in all deliveries
Para 0	44	16.1	24
Para 1	40	14.6	22
Para 2 - 4	93	33.9	24
Para 5 - 6	49	17.9	13
Para 6	30	10.9	16
Unrecorded	18	6.6	0
T O T A L	274	100	100

33% of the mothers who delivered twins hade delivered between 2 to 4 times previously

*% distribution by parity of all women who delivered twins January 1978 to December 1978 (Masawe).

5. TABLE 5 FAMILY HISTORY OF TWINS:

History of twins	Number	%
Patient was a twin	16	5.8
Patient has had twins	12	4.4
Patients mother/sister has or had twins	144	52.6
Husband was a twin or husband had a twin brother/sister	20	7.6
No history of twins	52	19.0
Information not available	30	10.9
T O T A L	274	100

Note: Only the above possibilities with regard to the family history of twins were looked into, and there could have been other possibilities. About half of all patients who delivered twins had a female sib who was a twin or had delivered twins.

6. TABLE 6 PRESENTATION OF TWIN BABIES AT THE TIME OF DELIVERED

First twin	Second twin	Number	Percentage
Vertex	Vertex	103	37.6
Vertex	Breach	62	22.6
Vertex	Transverse	3	1.1
Breech	Vertex	51	18.6
Breech	Breech	29	10.6
Breech	Transverse	2	0.7
Transverse	Vertex	3	1.1
Transverse	Breech	3	1.1
Transverse	Transverse	1	0.4

Not stated	Note stated	17	6.2
T O T A L		274	100.0

From the above table the commonest presentation of twins was by vertex/vertex followed by Vertex/Breech. The high rate of malpresentation is evident.

7. TABLE 7 OPERATIVE DELIVERY IN TWIN BIRTHS

Operative procedure	Number of births		Total
	First twin	second twin	
Vacuum Extraction	4	4	8
Forceps delivery	0	1	1
Caesarean section	6	9	15

of the total 548 births a total of 24 births had operative delivery.

(a) Vacuum Extraction There were a total of 8 vacuum extractions done among the 548 twin deliveries; 1.45% of the total deliveries. Four vacuum extractions were performed for retention of the second twin, while the other 4 were done for the first twin because of prolonged second stage of labour (2) and fetal distress (2).

Of the 8 babies delivered by vacuum extraction, 3 babies (2 were second and one first twin) ended in still births. The still born babies weighed 2.2, 2.3 and 2.0 kilogrammes respectively.

All the babies delivered by vacuum extraction weighed between 2.0 to 2.5 kg; and 6 of them were males.

Of the 8 mothers delivered by vacuum extraction, 5 were nullipara, one was a primipara and 2 were para 3.

(b) Caesarean section inthe twin deliveries

Of the 548 twin births in the study group 15 babies were delivered by caesarean section from 9 mothers (3.2%).

(i) Indications for caesarean section were:

1.	Retained second twin	2
2.	Prolapsed cord (one for the first and one for the second twin)	2
3.	Previous caesarean section scar and "big baby".	2
4.	Both twins intransverse lie	1
5.	Transverse lie for the first and vertex in the second twin	1
6.	Acute fetal distress for both twins	1
	TOTAL	9

During the same period of study 405 caesarean sections were performed out of 16,185 deliveries (2.5%) in Muhimbili Medical Centre.

(ii) Apgar score: The 5 - minute Apgar scores for the babies delivered by caesarean section was 6-7 in 10 babies and 9-10 in 5 babies. There were no still births or neonatal deaths.

(iii) Parity: 7 out of the 9 mothers who had caesarean sectionwere para 4 and above 2 mothers were primigravidae.

(iv) Diagnosis of twin pregnancy: In 4 out of the 9 mothers delivered by caesarean section the diagnosis of twin pregnancy was not made until the uterine incision was performed. 2 of the caesarean sections were performed for a diagnosis of "previous caesarean section scar with a big baby" only to deliver twins.

(v) TABLE 8 SHOWING BIRTH WEIGHTS OF THE TWINS DELIVERED BY CAESAREAN SECTION

Weight in grammes	Number of babies	Percentage
Below 2000	0	0
2000 - 2500	9	60
2500 - 3000	5	33.3
Over 3000	1	6.7
T O T A L	15	100.0

60 per cent of the babies delivered by caesarean section weighed between 2000 - 2500 grammes.

9. TABLE 9 SHOWING BIRTH WEIGHTS OF THE DELIVERED TWINS

Birth weight (gremmes)	First twin	Second twin	Total	Percentage
Less than 2000	73	72	145	26.5
Over 2500	101	104	205	37.4
Unrecorded	33	33	66	12.0
T O T A L	274	274	548	100.0

Out of the 548 twin deliveries 63.9% of the babies born weighed 2500 grammes or less, and only 24.1% of the babies weighed more than 2500 grammes.

10. TABLE 10 THE TIME INTERVAL BETWEEN DELIVERY OF BOTH TWINS

Delivery interval	Number of patients	still-births	neonatal deaths	% Mortality
0 - 15 minutes	162	5	8	8.0
15 - 30 minutes	44	4	2	13.6
30 - 60 minutes	21	5	1	28.5
1 hour - 2 hours	12	6	2	66.6
Over 2 hours	10	2	4	60.0
Unrecorded	25	-	-	-
T O T A L	274	22	17	

Most of the twins were delivered within 15 minutes and those that were delivered beyond the 30 minutes interval had increased neonatal mortality. In 43 (7.8% recorded second twins were bron 30 minutes after the birth of the first twin.

11. TABLE 11: PERINATAL DEATHS AMONG THE TWINS

Mortality	First twin	Second twin	Total
Fresh still births	4	8	12
Macerated still births	4	5	10
First week deaths	9	8	17
Total Perinatal deaths	17	22	39

DISCUSSION:

1. Incidence of twin pregnancy:

The incidence of twin pregnancy is shown in Table I. The relatively low incidence of twin pregnancy in Ocean Road Hospital is due to the fact that this hospital mainly delivers patients with normal pregnancy, complicated cases (including twins) being referred to the New Maternity Block. This is likely to account for the high incidence of twinning (43.8 per 1000 deliveries) in the New Maternity Block, resulting from the bias in selection of the patients with twin pregnancy. The hospital twinning rate is therefore reflected by the overall twinning rate of 20.1 per 1000 deliveries. This figure is not very different from that found by others in this hospital (Mgaya 1977, Massawe 1978).

Hellin's law (1895) is usually quoted for estimating the incidence of multiple pregnancy (Beisher 1978). This law states that the frequency of twins is 1 in 89 births and triplets 1 in $(89)^2$ births and so on. This is roughly correct - the incidence of twin pregnancies in the caucasian races ranges from 1 in 80 to 1 in 90 deliveries; for Negro races the incidence is greater (1 in 50) and for Asiatic races it is less (1 in 150) (Das, 1934).

An exhastive investigation by Greulich (Moir, 1970) who studied over 120,000,000 births, noted the incidence of twin births to be 11.7 per 1000 deliveries.

The incidence of twinning in other parts of the world is shown in the following Table:12.

Country	Incidence	Author
Nigeria Adeoya Hospital	45.9%o	Nylander (1969)
England Wales	11.2%o	Registrar General (1967)
Sweden	13.6%o	Herlin and Hague(1967)
U.S.A. (General)	10.6%o	Shipley, etal. (1967)
White	10.0%o	)Statistical
Negro	13.4%o	)Bulletin of Metropoli-)tan of Life insurance)Co. (1960)
Japan	6.4%	Kaminura (1970)
Tanzania (Muhimbili Hospital)	16.7%o	Massawe (1980)
	21.9%o	Massawe (1978)
	18.5%o	Mgaya (1977)

Hospital deliveries in developing countries are a filtrate from a much larger number of pregnancies, most of which end in home deliveries unless some complications supervenes (Nylander, 1970). Thus twinning rates are only representative when the figures have been calculated from the total births in a defined population. Hospital twinning rates may only be representative if they are calculated from booked patients only, that is patients accepted for antenatal care, usually several weeks before delivery; before the diagnosis of twins has been made.

All of our patients who delivered twins had been booked for antenatal care either in Muhimbili Medical Centre or in other peripheral units offering antenatal clinic services. Since complications (necesiating emergency admission into hospital) occur more frequently in twin pregnancies (Panwalla, 1972) than those with singleton pregnancies, total hospital populations will have higher twinning rates than would be found in the general population. When data from booked patients only are used, as in our cases, this bias is minimised, so that twinning rates in the hospital will be in close aggreement with that collected from the whole community.

2. Diagnosis of twin pregnancy

Studies have shown that prior to delivery, twins are diagnosed or seriously suspected in approximately 70% of twin gestation. If one excluded cases in which neither twin weighs 2500 gms., the percentage diagnosed or seriously suspected twin is raised to 80% (Guttmacher, 1937). Analysis of our data shows that 44.5% of the twin pregnancies were not diagnosed before delivery. Clinical diagnosis of twin pregnancy was made in 55.4% of the cases and in only 29.1% of all twin pregnancies was an abdominal X-ray taken to confirm the presence of twins and exclude triplets etc).

Failure to diagnose twins has little practical importance in the matter of caesarean section in twin pregnancy (Guttmacher, 1962), but has important applications if bed rest is considered important. Premature birth rates and subsequent perinatal mortality may be considerably reduced if twin pregnancies are diagnosed early and patients are hospitalised for bed rest from 28 - 32 weeks to the time of delivery (Lampe, 1977).

3. Distribution of mothers who delivered twins according TO Age and Parity

The relationship of age to twinning has been reported by many authors. That high twinning rates occur at the 21 - 30 age group has been reported by some authors (Noetal, 1975; Panwalla, 1975) while others have reported peak twinning rates at 30 - 34 year age group (Nylander, 1970; Kamimura, 1976).

A high percentage (52%) of the mothers who delivered twins in our study group belonged to the 21 - 30 year age group. However, this could be solely due to the fact that mothers in the active reproductive age delivering at Muhimbili Medical Centre were in the 21 - 30 year age group.

Twinning rates increases with parity (Kamimura, 1976; Hoet al, 1975; Nylander, 1970; Petterson, 1976). In this study 16% of the mothers who delivered twins were primigravidae, while 84% had delivered at least once.

4. Family history of twins

Table 5 shows that most of the mothers who had delivered twins had a sibling who was a twin or a female sib who had delivered twins. This may indicate that female sibs of twins have increased twinning rate among their own offspring. Studies done elsewhere (Water house, 1950; White; 1964) confirms the latter observation.

Only 7.6% of all the mothers who delivered twins did the paternal side show evidence of a family history of twins. Most authors now have shown that the father plays a small role in twinning, (Morton, 1962; white et al, 1965) while some felt that the genotype of the father is at least as important as that of the mother in the production of dizygous twins (Greulich, 1934; Davenport, 1928).

6. A sib of dizygous twins would probably have the same probability of inheriting the dizygous twinning gene or genes as the twin themselves. If such genes can be expressed through the female but not the male, the twinning rate should be raised in the families of the female sibs of unliked sexed twins, but not in the families of male sibs. Since liked sexed twins include both dizygous and monozygous pairs, the sibs of these twins should have a twinning rate lower that that for the female sib of unlike-sexed twins. The details of the patient's brother's children was not however inquired in the present study.

5. Presentation of twin babies at the time of delivery

According to literature data, the rate of pregnancy and delivery complications is up to 40 times higher in multiple pregnancy as compared to the singletons. Skalba etal (1974) found delivery complications to be 43.5% for the first and 56.5% for the second one, due to frequent irregular presentation. Similar results were found by Wave and others, who reported an irregular presentation of the first twin in 28% of cases, and of the second one in 46.9% (Guttmacher and Kohl 1958; Kuczynski and Slomko 1965; Sternadel 1967, Wave 1971).

A crucial problem in multiple pregnancy is that of premature delivery, which occurs in not less than 60% of pregnancies below the 38th week. Along with complications associated to pregnancy and delivery, and with low weight, malpresentation carries a further hazard to the fetus.

Table 6 shows the order of frequency of presentation of the twins at the time of delivery which is similar to that generally accepted to be common. (Ian Donald, 1979).

6. Operative delivery in twin births

The still births that were delivered by vacuum extraction in the study group could have been due to the indication of the operation rather than to the operation perse. The added risk of prematurity of the delivered babies, may have worsened the prognosis.

In Ho's series (1975) 71 out of 354 twin deliveries were by caesarean section - a total incidence of 20% (compared to an overall incidence of 10%), while in a larger study 140 out of 2,418 twin births (5.8%) were terminated by caesarean section as against 5.9% in sigleton deliveries (Guttmacher, 1962).

The more liberal use of caesarean section in high risk pregnancy has been claimed to help reduce the neonatal mortality rate. Thus the neonatal death rate of twins delivered by caesarean section is much lower than the neonatal death rate of non-caesarean section babies (Ho et.al, 1975).

This observation is in agreement with ours in that there were no still births or neonatal deaths among th e babies delivered by caesarean section. The incerased perinatal mortality rate among the second twin is usually associated to prematurity and the period of retention rather than to the operative procedure instituted (Adeleye, 1972).

Parity: It has been suggested (Guttmacher 1962) that there is a positive aetiological role played by primiparity in the incidence of caesarean section in twin pregnancy. Our study failed to confirm this observation as the majority of cases delivered by caesarean section were of parity 4 and above

Diagnosis of twin pregnancy

In the caesarean section in which multiple pregnancy was not diagnosed no twin weighed more than 2500 grammes. In

the 2 caesarean sections done for what was thought to have been a big baby the total weight of both twins was above 4500 grammes. This finding contrasts the finding (Guttmacher 1962) that twinning per se was not the reason for caesarean section, and that one or more associated complicating factor was usually the cause.

In the remaining twins delivered by caesarean section in the study group the indications for caesarean section for the undiagnosed twins warranted the operation, whether the diagnosis was or was not made preoperatively. Thus the diagnosis of twins would have no influence on whether or not to do a caesarean section.

7. Birth weights of the twins

The incidence of prematurity in twin pregnancy is very high (Ferguson 1964; Ho et al. 1975; Skalba, 1974).

The birth weights of the twins in this study is shown in table 9. 63.9% of the twin babies weighed 2500 grammes or less.

The problem of prematurity can be approached in two ways - prenatal or prophylactic management and postnatal care. Paediatric management of the premature will probably remain complex and expensive, even with a better understanding of the physiology of these babies. The human uterus is still the best incubator devised, and more effort should be expended on enabling it to retain the fetus for longer periods.

The tendency for a normal multiple gestation to end in premature labour is probably related to overdistension of the uterus. This appears inevitable, and it is questionable whether we have any control over the size of the intrauterine mass. (Ferguson 1964).

There is some suggestion (Bender 1952) that rest may be of benefit in prolonging gestation and increase the weights of the babies. This may act by preventing the weight of the intrauterine mass from compressing the lower segment of the cervix. Even though the intraamniotic pressure is not changed by this mode of management, the effect of gravity must be appreciable in the upright position (Ferguson 1964). Perhaps clearance of excess fluid by rest in the horizontal position plays apart.

Bed rest in twin pregnancy has not been extensively practiced in our obstetric unit, Muhimbili hospital, Overcrowding and the lack of enough antenatal beds for the at risk patients in pregnancy, is the main problem. The problem then is to pick out those patients who should be confined to the bed completely.

The incidence of gran/multiparity in Dar es Salaam is high (Gumodoka, 1979) while we can do little about the gravidity, these patients are prime condidates for premature labour, and extra precautions are necessary. It is suggested that grand multiparous women with twin pregnancy should be given priority to bed rest in hospital. Unfortunately high parity also predisposes to twinning.

8. Time interval between delivery of both twins and Parinatal Mortality

Argument whether the second twin is at greater risk than the first twin has been the subject of discussion for some time. That labour carries no extra hazard to the second twin had been reported by some authors (Bender, 1952; Potter 1949), few others (Graves, 1962; Robertson, 1964; Ho 1975; Adeleye, 1972) shared the opposite view.

Since there is no agreement on a standard delivery interval between the first and the second twins, the definition of a retained twin rests on the view of the obstetrician conducting the delivery (Adeleye, 1972). Experience from this study has shown that the perinatal mortality rate doesn't differ significantly between the first and second twins.

There is also a dispute about the best delivery interval. Greenhill (1955) advocate waiting for an hour before rupturing the fetal membranes in the abscence of complications; but in 1960 the same author reduced this interval to 15 minutes.

A tendency to shorten the delivery interval is seen throughout the literature except Danielson (1960) who though it acceptable to wait for 2 hours.

The results from our study show that the perinatal mortality rate was related to the period of retention. The perinatal mortality rose sharply when the delivery interval between both twins was over 30 minutes.

Although the perinatal mortality rate of the retained twin in this study was related to the period of retention, the longest retained twin was 14 hours and was born as a vertex, apgar score 10 after artificial rupture of membranes. Of the 13 still borns after 30 minutes 6 were born before arrival to hospital. This factor emphasiyes that twin pregnancy as a high risk case and the need for hospital delivery of all twins. Of the 43 retained twins 4 were delivered by vacuum extraction and 2 were delivered by caesarean section and one macerated still birth by forceps delivery. Only one twin delivered by vacuum extraction was still born, the twin having been retained for 10 hours.

Anesthesia, which is quite often used in second twin delivery, and trauma have been blamed for the high perinatal mortality in the second twin (Wood, 1963).

Active intervention by way of operative procedure in cases of abnormal presentation with obstructed labour reduce the length of retention and the consequent perinatal mortality rate.

SUMMARY

1. The expected incidence of twinning calculated by Hellin's law was higher than the observed incidence. The twinning rates in the study group was about twice that in Western Europe and three times that in Jap an.
2. Clinical diagnosis and investigation of twin pregnancy is quite low. If premature births could be reduced by bed rest, then the undiagosed twins will miss this part of treatment.
3. Family history of twins on the maternal side will help to arouse suspicion on the possibility of twin pregnancy.
4. Operative delivery especially for the second twin may help in the reduction of fetal loss. When the indication for baesarean section is for a "bigbaby", one has to rule out twins first.
5. The incidence of prematurity in twin pregnancy is very high (64%).
6. Perinatal mortality for the second twin was high when the delivery interval of both twins was above 30 mnutes.

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B. GYNAECOLOGIC CASE COMMENTARIES

INCOMPLETE ABORTION EVACUATION OF PRODUCTS OF CONCEPTION

NAME: MRS. L.N.
AGE: 21 YEARS
REG. NO: 209124
ADDRESS: OYSTERBAY POLICE STATION, DAR ES SALA AM
ADMITTED ON: 26.6.80
EVACUTATION ON: 26.6.80
DISCHARGED ON: 27.6.80

SUMMARY

The patient was referred from a dispensary and a dianosis of incomplete abortion was made in our gynaecology ward. Evacuation of products of conception was done. Difficulties in diagnosis and dangers of evacuation are discussed.

HISTORY OF PRESENT ILLNESS

The patient was referred from Oysterbay Police dispensary because of vaginal bleeding and lower abdominal pain for 2 days following amenorrhoea of 2 months.

The pain was located in the lowe abdomen and was intermittent and radiating to the back. It was not aggravated by anything and it was not relieved by paracetamol tablets which were prescribed at the dispensary. The pain was followed with fresh, red, vaginal bleeding a few hours after the onset of the former.

The pain was not accompanied with fever, vomiting, dysuria or frequency of micturition. Her bowl movements were normal. On the day of admission the pain increased in intensity and the vaginal bleeding increased in intensity to the extent of passing blood clots per vaginum.

ABDOMINAL EXAMINATION

There were no scars, and no observable abdominal distensi
The lower abdomen was mildly tender, with no guarding or rebound tenderness. The uterus was not palpable. The ren angles were free of masses and non tender, the liver and spleen were not palpably enlarged.

VAGINAL EXAMINATION

Vaginal examination was performed as detailed in the introduction. Catheterisation of the bladder revealed 50mls of clear urine.

FINDINGS

1. The vulva and perineum were healthy.
2. There was blood clots in the vaginal.
3. There was no evidence of trauma to the vaginal walls or fornices on speculum examination.
4. The cervical os was open and products of conception were protruding from it.
5. The uterus was bulky corresponding to an eight to 10 weeks size of pregnancy. The uterus was mobile and non-tender.
6. There were no adnexal masses or tenderness.

DIAGNOSIS

On the basis of the above findings a dianosis of incomplete abortion was made.

INVESTIGATIONS

1. The haemoglobin level was estimated and found to be 10.4gm/100ml of blood.
2. Urine for microscopy didn't reveal any abnormalities.
3. The bloodgroup was "O" Rh - Positive.

OPERATION

Preparation

The patient was explained as to the diagnosis and the intended treatment procedure. The vulva and perinuem was washed with soap and water and shaved. She was then taken to the minor theatre (sideroom) where she was given injection Pethidine 100mg; and injection Diazepam 10mg. intravenously, slowly; and then placed in the lithotomy position.

Evacuation of the products of coneeption

The vulva and vaginal was cleaned with Savlon antiseptic, and the patient was drapped with sterile towels. The bladder was emptied with a plastic catheter aseptically and clear urine was obtained. Examination under pethidine and valium was done confirmed the previous vaginal findings.

Self retaining vaginal speculum was inserted and the cervix was grasped with a pair of volsellum forceps on the anterior lip. The products of conception were seen protruding from the dilated cervical os. By means of an ovum foceps the products of conception were removed. The uterine cavity was then explored by the right index finger while the left hand steadied and depressed the fundus of the uterus from the abdomen. Some products of conception were removed digitally, with a big sharp curette the uterus was gently but thoroughly curretted until a gritting sensation could be felt. The total amount of blood loss during the whole procedure was about 150mls. Injection Ergometrine 0.5mg was given intramuscularly and a sterile pad placed on the vulva. At the end of the operation the uterus was firmly contracted, and her blood pressure was 110/80 mm Hg and a pulse rate of 80 per minute.

Histology Report

Fegments of tissue. Decidua and chrionic villi demostrated.

Post - Operative treatment and Progress

The patient was taken to the ward where her blood pressure and pulse were monitored $\frac{1}{2}$ hourly for 2 hours, then 1 hourly for 4 hours, the 4 hourly in the next 16 hours. These remained within normal range thoughout 24 hours. Later her haemoglobin was checked and found to be 99m/100mls. There was no active 9 vaginal bleeding and the uterus was well contracted. The cervical was closed to the examining finger. She was discharged home on fersolate tablets 200mg three times a day for one week and advised to come for follow - up after 6 weeks.

Follow up

The patient was seen in the gynaecological outpatient 8 weeks after discharge from the hospital. Her menstrual period occoured 2 weeks before coming for follow up, lasted for 4 days and was normal flow. She was not anaemic and was afebrile. The abdomen was non tender. The cervical was closed and looked healthy. The uterus was of normal size, mobile and non tender. The adnexa were were free she was discharged home and advised to attend antenatal clinic early during her next confinement.

COMMENTARY

Abortion is a common cause of emergency admission to the gynaecology wards of Muhimbili Medical Centre.

The annual reports of the department of obstetrics and Gynaecology show that 50-60% of all admissions into gynaecology wards in the this hospital were due to abortion.

In the course of expulsion of the foetus and placental tissue or chorion frondosum, the patient may develop severe and at times exsanquinating uterine haemorrhage. Besides initial haemorrhage further intermittent bleeding with irregular and heavy bleeding may occur. Post abortal sepsis is a constant threat to the life the patient and future reproductive efficiency. It is because of these immediate complications of abortion that the uterus should be evacuated, as was done on this patient, as soon as the diagnosis has been made. However, in severely shocked patients due to incomplets abortion, vigorous resuscitation by restoring the ciculatry blood volume preferably with blood, should be done before evacuation of the uterus. Where bleeding is profuse, evacuation is done while resuscitating the patient. Evacuation of the uterus following abortion carries some risk. The immediate problems which may aris e are shock, severe blood loss, perforation of the uterus, and the risks of general anaesthesia which may be fatal to the patient. The use of diazepam (valium) and pethidine as in this case enables evacuation to be done under sedation along and hence avoid risks of general anaesthesia. The choice of the type of currette for curreting a pregnant uterus is a controvesial issue. With a blunt currette the operator tends to use force to dislodge products of conception from the uterine cavity and thereby stands a high chance of uterine perforation. A big sharp currette as was used in this case, minimizes the chance of uterine perforation and achieves a good result. The use of the sharp currette in routine evacuations of incomplete abortion has its own drawbacks. Denuding the endometrial cavity has the unfortunate result of the 'Asherman's syndrome and its aftermath. Occasionally the soft, pregnat uterus can be perforated using such a currette. Suction of the endometrial cavity with the Karman's cannula

followed by digital exploration of uterine cavity minimises such dnagers.

The patient made a quick and an un-eventful recovery.

SECONDARY INFERTILITY LAPARASCOPY AND DYE INSUFLATION

NAME: MRS. A. S.
I. P. No: 178983
AGE: 24 YEARS
ADDRESS: MAGOMENI MIKUMI, DAR ES SALAAM
ADMITTED: 20.7.80
DISCHARGED: 21.7.80

SUMMARY

The patient was referred from Magomeni dispensary on account of secondary infertility. Laparascopy was performed and revealed extensive fibrous tubal adhesions and right hydrosalpinx. Tubal insuflation with methylene blue revealed bilateral complete tubal block.

HISTORY OF PRESENT ILLNESS

The patient was referred from Magomeni dispensary to the Muhimbili gynaecological outpatient clinic because of failure to conceive. At the clinic she complained of failure to conceive for 4 years. Her last pregnancy was 4 years previously. After delivery the patient had fever and lower abdominal pain but no vaginal discharge. She got treatment at a local dispensary and the fever subsided, but the abdominal painpersisted to the time of referral to Muhimbili outpatient clinic. The pain was continuous, nonradiating and aggravated by menstrual periods.

PAST MEDICAL AND SURGICAL HISTORY

There was nothing relevant.

FAMILY HISTORY

There was no family history of hypertension, tuberculosis or diabetes mellitus in her family.

SOCIAL HISTORY

She was an unemployed housewife. Her husband worked as motor mechanic and had no other wife.

GYNAECOLOGICAL HISTORY

Her menarche was at 13 years with normal mesturation 3-4/30 days and regular. After her last delivery she had dysmenorrhoea before and during her mestrual periods.

OBSTETRIC HISTORY

She was para two with two living children. The last child was born 4 years previously. There were no ante or intra-partum complications. The puerperal period was complicated by lower abdominal pain and fever as described above.

EXAMINATION OF THE PATIENT AT THE GYNAECOLOGICAL OUTPATIENT CLINIC:

She was well nourished, afebrile and not anaemic. The pulse rate was 76 beats per minute, regular and of good volume. The blood pressure was 120/70 mm Hg. Examination of the cardiovascular, respiratory and central nervous systems were normal.

THE ABDOMEN

The abdomen was non tender. There was no hepatosplenomegally. The renal angles were free of masses.

VAGINAL EXAMINATION

Preparation and procedure of vaginal examination was done as described in the introduction. The patient was asked to empty her bladder before the examination.

Findings of the examination

The vulva and perneum were healthy. The cervical os was closed and there was no abnormal discharge. The cervix was firm and appeared healthy. The uterus was normal size, mobile, non tender and ante-verted. The adnexa were free of masses, and non tender.

DIAGNOSIS

From the above clinical findings a provisional diagnosis of secondary infertility following puerperal spsis was made.

INVESTIGATIONS

1. Urine was negative for sugars and proteins. Urine culture was sterile.
2. V.D.R.L. for Syphillis was negative.
3. Cerical smear was class 1 with no a typical cells. Microscopic examination of the cervical mucus showed no arborisation. Ferntest wasnegative.
4. Haemoglobin was 12gms percent and white blood cell count was 5400 with normal differential count.
5. Blood urea was 20mg percent.
6. Fasting serum blood sugar was 90mg per 100ml.
7. X-ray of the skull and chest were normal.
8. Husband's semen analysis - showed normal morphology with 70 - 80% forward progression. Volume of 4mls, normal looking seminal fluid. The count was 96.3 million per ml. of seminal fluid.

Management

Further examination of the husband revealed normal findings. It was decided to do a tubal patency test by dye insuflation under Laparascopic view, and endometrial curretage for histological evidence of ovulation on the endometrium.

Preparation for Laparascopy

She was given a cleansing enema, the night before the operation. Premedication and administration of anaesthesia was done as described in the introduction.

Operation

1. The patient was placed in the lithotomy position with thighs extended to about 45^{0} to allow access of the abdominal wall.
2. The abdominal skin was cleaned with iodine. The vulva, perineum and vaginal were prepared as described in the introduction for a vaginal operation.
3. The bladder was catheterised as eptically as described in the introduction.

   Bimanual pelvic examination was done and the previous findings were confirmed.
4. The cervical os was exposed by means of a sims speculum and the cervix grasped by a volsellum forceps. A standard self retaining patency cannula was inserted into the uterine cavity for manipulation of the uterus and dye insufflation.
5. One centimetre transverse incision was made just below the umbilicus. Through this incision a verres needle was inserted into the peritoneal cavity and carbon dioxide was continued to a volume of 2.5 litres when the liver dullness disappeared.
6. A trocar and cannula were inserted into the abdominal cavity in a direction of 45 degrees towards the concavity of the pelvis.

Post-operative Management and Progress

1. The condition of the patient remained good post-operatively. The blood pressure and pulse remained normal.

7. The trocar was removed and a the telescope inserted through the cannula, and a direct view of the pelvic cavity was obtained.

Findings

1. There were extensive bilateral fibrous peritubal adhesions.
2. The uterus appeared normal in shape and size.
3. A right hydrosalphix was viewed. Both fimbrial ends of the fallopian tubes were adherent to their respective ovaries.
4. The pouch of douglas was viewed but there were some adhesions.
5. 30 mls of methylene blue dye was injected through the fimbrial ends of the tubes. A diagnosis of bilateral tubal block was made.
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

While the patient was still under the anaesthetic, the uterine cannula was dislodged. The cervical canal was dilated gradually from No. 5 Hegar to No. 8 size Hegar's dilator.

The walls of the uterine cavity was then curetted with a sharp curette and the endometrial curettings sent for histology.

The sims speculum and volsellum forceps were then removed.

Post-operative Management and Progress

1. The condition of the patient remained good post-operatively. The blood pressure and pulse remained normal.

2. Histology of the endometrium showed normal secretory endometrium.
3. The condition of the pelvic organs was discussed with the patient. The prognosis after reconstruction operation of the tubes was considered to be poor but not hopeless. Because of the risks and likely success of the operation the couple decided against the operation.

COMMENTARY

Infertility is a common gynaecological problem at Muhimbili Medical Centre. It accounted for 3.9 percent of total gynaecological admissions in 1978 (1978 annual hospital report)

This patient complained of failure to conceive. Most commonly the patients' primary complaint is that of abdominal pain. It is only after direct questioning do these patients admit that their main problem is that of failure to conceive.

In most cases of secondary infertility with regular normal menstrual periods the disorder is usually secondary to pelvic infection, resulting into pelvic adhesions and tubal obstruction. This usually arises from perisalpingitis as a result of general pelvic peritonitis of appendicitis, postabortal, puerperal or postmenstrual sepsis. In the patient described the most likely cause of the pelvic pathology was puerperal sepsis.

Laparascopy is the most useful modality in complete evaluation of the infertile female as it gives an overview of the genital tract. A full idea about the uterus, tubes and ovaries can be obtained. Hydrotubation will show tubal patency. Laparascopy is the only modality by which the peritoneal factor of infertility can be assessed.

Patients presenting with infertility and tubal pathology should be made aware of the risks and likely success rat of the operation. Indeed, no woman should be persuaded have a tubal plastic operation for infertility; rather s the surgeon agree to do it at the pressing request of th patient.

Results of tubal surgery are known to be universally poo and hence the prevention of pelvic inflammatory disease should be the main approach to the problem of secondary infertility.

CYSTOCELE ANTERIOR COLPORRHAPHY

NAME: MRS. M. H.
AGE: 50 YEARS
REG. NO.: 198260
ADDRESS: FUNDIKIRA STREET, DAR ES SALAAM
DATE OF ADMISSION: 1.7.80
DATE OF OPERATION: 2.7.80
DATE OF BISCHARGE: 11.7.80

SUMMARY

The patient had a cystocele with trouble-some symptoms. Anterior colporrhaphy was done, and her symptoms disappeared. The non-surgical therapy in older patients is discussed.

HISTORY OF PRESENT ILLNESS

The patient was admitted through our Gynaecological out-patient clinic complaining of a feeling of mass in the vagina for one year.

The patient's symptoms started one year previously when she felt a mass in her vagina which progressively increased in size. The mass was more apparent when she strained, such as in coughing. The mass wasnever associated with pain or any discharges, but a month before coming to the outpatient clinic she felt eonsiderable discomfort. She also felt dysuria, frequency of micturition and difficulty in emptying the bladder fully. There was no history of incontinence, haematuria, pyuria, loin pains or fever. There was no history of vaginal bleeding and her bowel movements were normal.

PAST MEDICAL HISTORY

There was no history of chronic cough, constipation, vaginal operations or trauma. There was no history of veneral diseases or vulval swellings. She had never been admitted to hospital previously.

FAMILY HISTORY

There was no history of familial diseases or of similar complaints in her relative.

SOCIAL HISTORY

She was married, unemployed, and she neither took alcohol nor smoked tobacco. She did routine house work and she never involved herself in strenous activities.

OBSTETRICAL HISTORY

She was para 7 and had no abortions. There were no complications in the antenatal periods and no difficulties were encountered intraor-post-partum. Her last child was 14 years old.

RESPIRATORY SYSTEM

The chest was symmetrical in shape with good respiratory movements, the respiratory sounds were normal without additional sounds.

ABDOMINAL EXAMINATION

The abdomen was scaphoid without scars. There were no demostrable massess or free fluid. The liver, spleen and kidneys were not palpable. Hernial sites were normal.

VAGINAL EXAMINATION

The vulva looked normal. No stress incontinence could be demostrated on coughing. A reducible mass was felt on the anterior vaginal wall, it was non tender, non pulsatile. This mass was more apparent on straining (coughing). On introduction of the sims speculum this mass could be held back.
The cervix appeared healthy and was not descended. On bimanual examination the cervix was firm, and the cervical os was closed. The uterus was anteverted and non-tender. The adnexa were free. There was no evidence of enterocele or rectocele.

RECTAL EXAMINATION

The anal sphincter was of normal tone and the rectum was empty without abnormalities detected. The pouch of douglas was free.

DIAGNOSIS

Cystocele without uterine descent or cervical hypertorphy.

MANAGEMENT

Anterior colporrhaphy was planned on 2.7.80 under general anaesthesia.

INVESTIGATIONS

1. Haemoglobin 13.1%mg.
2. Urine was negative for sugar and protein, urine culture didn't grow any bacteria.
3. Chest X-ray was normal.

PRE-OPERATIVE PREPARATIONS

The patient was prepared for vaginal operation as described in the introduction. The peribeum was cleaned with soap and shaved. She was given enema on the night before operation.

ANAESTHESIA

The operation was done under general anaesthesia which was administered as described in the introduction.

PROCEDURE

The patient was placed in the lithotomy position. The vulva, vaginal and perineum were cleaned with savlon and then with hibitane in sprit and drapped with sterile towels. The bladder was emptied and about 100 mls of clear urine removed. Examination under anaesthesia was done and the previous pelvic findings were confirmed.

ANTERIOR COLPORRHAPHY

The labia folds were separated and stitched laterally to the skin to provide better exposure. Volsellum forceps wereplaced on the cervix and drawn down.

The urethral meatus was identified and a stitch marker was placed about 1 cm, procimal to it. 4 artery forceps were placed on each side of the midline of the vagina. The forceps were held in traction and a midline incision was made which stopped about 1 cm from the bladder sulcus. At the cervical end of the incision lateral incisions were made. The vesico-vaginal space was then identified. By means of the blunt dissection, with gauze wrapped around the index finger the vaginal fascia was separated from the vesical fascia laterally, this procedure exposed the urethra, urethovesical junction and the bladder was thus mobilised from the cervix. The bladder was dislogated from the cervix and pushed upwards carrying the ureters with it and thus excluding it from the risk of inclusion in the subsequent suturing of the fascia.

Three mattress sutures were applied from both sides so that the lateral pillars of pubovesical and suburethral faciae were approcimated medially. The redudant vaginal wall was escised and a series of No. 0 chromic catgut sutures were passed throug the edges at intervals of about 1cm.

At the end of the operation the vaginal was firmly packed with gauze rolls which were removed after 48 hours.

A self retaining catheter (Foley) was inserted. The anaesthesia was then reversed and the patient recovered from anaesthesia without any complications.

POST-OPERATIVE MANAGEMENT

1. The patient had continous bladder drainage for 7 days
2. Prophylactic Nitrodurantoin 100mg 8 hourly for 7 days was given
3. Her blood pressure and pulse were closely monitored for 24 hours and the vaginal observed for bleeding.
4. Pethidine 100mg injections were given intramusculary 6 hourly for 24 hours.
5. Chloramphenicol 500mg intramuscularly were given for 5 days.

The vaginal pack was removed on the 3rd post-operative day On the 4th post-operative day the haemoglobin was chedked and found to be 12mg% and the urine showed no epithelial cells and culture was sterile. The self retaining cathete was removed on the 5th post-operative day and she subsequently passed urine well without dysuria, frequency or stress incontinence.

The patient was discharged on the 8th post-operative day when the wound was well healed and with a haemoglobin of 13mg% with normal micturition.

FOLLOW UP

The patinent was seen in the gynaecology outpatient clinic 8 weeks after discharge from hospital. She was in good general condition and she was not anaemic. She was passing urine normally. The previous symptoms of feeling a mass per vaginum and micturition symptoms had disappeared. The vaginal walls looked normal and there was no mass palpable. Urine was sterile upon culture.

COMMENTARY

In this patient the cystocele produced urinary symptoms and a feeling of a mass per vaginum by the patient. Cystocele develop slowly and when small rarely produce more than minor symptoms. Some of the complications of cystocele include:

1. Angulation of the urethra during straining, causes difficulty in emptying the bladder resulting in hypertrophy and trabeculation of the bladder walls.
2. The downward movement involves the lower end of ureters, which become attenuated and constricted in the ureteric canals at the sides of the uterus. Back pressure from the bladder and obstruction of the lower ureter ultimately lead to hydroureter and hydronephrosis.
3. If the pouch of a cystocele is low it may not be emptied during micturition. The residual urine favours growth of organisms and cystitis. There may also be pyelitis and pyelonephritis especially if the upper urinary tract is dilated. The final outcome is renal failure.

Although urine of this patient was sterile by culture, patients with cystocels are frequently associated with urinary tract infection due to stasis.

4. Stress incontinence is also a common problem in patients with cystoceles due to distortion of the urethro vesical angle. Our patient did not have stress incontinence, probably because the urethro-vesical angle was intact.

Unless the patient is having repeated bouts of urinary tract infection, there is no urgency in advising surgery in a patient with symptomless cystocele. This is particularly true of the younger patient who may have more children which would destroy the surgical repair. Elective caesarean section is indicated in most of the patients who had a cystocele repaired, during delivery.

The repair of the cystocele in this patient was advised because:-

1. The patient was having distressing symptoms
2. The cystocele was becoming larger and
3. The patient was past the reproductive, age. In old patients where there is some contraindication to surgery such as an intercurrent disease, conservative treatment by using pessaries is advisable. On the other hand pessaries are useless if there is so much relaxation of the outlet as they are promptly expelled during coughing or at the act of defecation. Contraindications to surgery should be based on medical grounds rather than age alone as old patients, such as this one, are capable to undergo vaginal surgery and the minor complications that may go with it.

RUPTURED TUBAL PREGNANCY LEFT SALPINGECTOMY

NAME: C.A.
AGE: 34 YEARS
REG. No.: 163939
ADDRESS: MCHIKICHINI, DAR ES SALAAM
OCCUPATION: UNEMPLOYED
ADMITTED ON: 25.7.79
OPERATED ON: 25.7.79
DISCHARGED ON: 6.8.79

SUMMARY

This patient was referred from Mnazi Mmoja Dispensary and admitted through the casualty as an emergency case with a history of sudden onset of lowe abdominal pain and dark slight vaginal bleeding for one day.
A ruptured ectopic pregnancy was suspected. At laparatomy a left ruptured tubal pregnancy was found with haemoperitoneum. Left salpingectomy was done. The post operative period was uneventful and the patient was discharge on the 10th day post operatively.

HISTORY OF PRESENT ILLNESS

The patient was admitted in Ward 18 on 25.7.79 at 9pm. She was referred from Mnazi Mmoja Dispensary because of severe lower abdominal pain, cutting in nature non radiating since the previous day, slight dark vaginal bleeding for one day, and episodes of momentary loss of consciousness for one day. She also vomited once on the daz of admission, but there was no history of fever,.frequency of micturition dysuria, loin pains shoulder tip pains or bowel disturbance.

PHYSICAL EXAMINATION

She was obese, her general condition was satisfactory. was moderately anaemic but not jaundiced.
There was no oedema, and she was not dehydrated. She wa afebrile.

CARDIOVASCULAR SYSTEM

The pulse rate was 100 per minute, moderate volume and regular. The blood pressure was 90/70 millimeters of Me The Jugular Venous Pressure was not raised. The Heart s I and II were heard and were normal with no added murmur

RESPIRATORY SYSTEM

The rate of respiration was 42 per minute. The chest mo with respiration symmetrically. The trachea was central positioned. There was good air entry and lungfields were clear.

BREASTS

Were active, normal looking, without any abnormal lumps. The niples and areolae were normal.

ABDOMINAL EXAMINATION

The abdomen was moving with respiration and not distended There was minimal guarding. There was generalised mild tenderness but no rebound tenderness. Shifting dullness was elicited but there was no fluid-thrill. The liver, spleen and kidneys were not palpable. There were no palpable masses.

VAGINAL AND BIMANUAL EXAMINATION

The perineum and vulva were normal. There was a dark blo stained vaginal discharge, small in amount but not foul smelling. The Bartholin's glands were not palpable. The vagina was normal.

MENSTRUAL AND GYNAECOLOGICAL HISTORY

Her menarche was at 15 years. The cycles were regular or 28 days duration and lasting 5 - 7 days. There was no history of dysmenorrhoea and flow was normal. The last menstrual period was on 9.6.79. There was no history of use of contraceptives. There was no history of dyspareunia, post coital bleeding or vaginal discharge.

OBSTETRIC HISTORY

She was para 4 0 abortion. The first pregnancy was in 1963 and delivered a male baby at home. The second pregnancy was in 1964 and delivered a female baby at home. The third pregnancy was in 1966 and delivered a male baby at Ocean Road Hospital. The fourth pregnancy was in 1972 and delivered a male baby at Ocean Road Hospital.

She denies any history of ante - or post natal complications, and she attended antenatal clinic only in the last 2 pregnancies.

PAST MEDICAL AND SURGICAL HISTORY

She was married since 1963. She was unemployed. There was no history of any familial illnesses.

The cervix looked healthy with no growth, it was firm parous but tender on movement in all directions. The pouch of douglas was boggy and very tender, but no adnexal masses were felt. The uterus was not well defined because of tenderness.

PROVISIONAL DIAGNOSIS: Ruptured Ectopic Pregnancy

MANAGEMENT

1. The haemoglobin was found to be 8 grammes.
2. Her urine was negative for sugar and proteins.
3. The blood group was "A" - Rhesus positive
4. Three units of blood were crossmatched and an intravenous infusion of normal saline was set up.
5. The planned surgical treatment was explained to the patient and the patient's consent obtained.
6. The patient was premedicated with 0.6 mg. of atropine intramuscularly.
7. The abdomen was prepared for laparatomy as described in the introduction.
8. An indwelling bladder catheter was inserted as described in the introduction.

OPERATION: Salpingo - Oophorectomy (Left)

The patient was taken to the operating theatre. Administration of anaesthesia, preparation of the operating site, and opening of the abdomen was done as described in the introduction.

THE FINDINGS AT LAPARATOMY

1. Haemo peritoneum of dark blood and blood clots, about 2500 mls.
2. A distended and ruptured left fallopian tube in the region of the ampulla.
3. Both ovaries and the right fallppian tube were normal. The corpus luteum was found in the left ovary.

4. The uterus was enlarged to a size corresponding to 6 - 8 weeks gestation. It was soft and freely mobile.

5. Other abdominal viscera were inspected and found to be normal. On gross appearance there was no evidence suggestive of chronic pelvic inflammatory disease.

PROCEDURE

The right hadn was introduced into the abdominal cavity to the pelvis and the uterus lifted upwards and delivered a friable mass in the left adnexae.

The infundibulopelvic ligament was identified and doubly clamped with Kocher's artery foceps the ligament was divided between the two clamps and doubly ligated with Number - 0 chronic catgut. The remainder of the broad ligament was clamped and divided up to the uterine end of the tube.

The fallopian tube and the ovarian ligament were excised from the uterus. The excised ends were ligated with chromic catgut. The cornual end was closed with a figure of 8 suture with number 0 chromic catgut. The raw area was peritonelized after ensuring good haemostasis.

During the time the above procedure was performed, blood and blood clots were removed from the abdominal cavity by using the sunction machine and abdominal mops.

- Instrument and swab count was confirmed correct and the abdomen was closed in layers as described in the introduction.

- At the end of the operation the patient had already received one litre of normal saline, one litre of dextrose - saline intravenously and one unit of group 'A' Rhesus positive blood transfusion.

POST OPERATIVE MANAGEMENT

The post operative blood pressure was 120/70 millimeters of mercury and the pulse rate was 92 per minute. These together with respiratory rate were monitored $\frac{1}{2}$ hourly for the first 6 hours then 2 hourly for 24 hours.

Sedation: Intramuscular injection of Pethidine 100mg - 6 hourly for 24 hours was given. She was given one more unit of group 'A' positive blood transfusion in the ward and 2,500 millilitres of Dextrosesaline in the following 24 hours. A strict input, output chart was maintained.

POST OPERATIVE PROGRESS

Intravenous fluids were discontinued after 48 hours when bowel sounds were heard.

The patient was up and about after 48 hours and hemoglobin checked on the 4th post operative day was found to be 9,5 grammes. On the 7th post operative day the wound was found to be dry and clear and stitches were removed on the 8th day.

On the 10th day she was discharged and asked to attend the gynaecological clinic after 6 weeks. She was given ferrous sulphate tablets 200mg twice daily for 2 weeks.

FOLLOW UP CLINICAL EXAMINATION

The patient reported at the gynaecological clinic after 6 weeks. Her general condition was good and a hemoglobin of 11 grammes.
The abdominal scar was well healed, and abdomen was nontender.

VAGINAL EXAMINATION

There was no abnormal vaginal discharge. The vaginal and perineum were normal. The cervix was healthy nontender firm. The uterus was normal size, mobile anteverted and the fornices were free.

The patient was reassured and advised to attend family planning clinic for contraceptive advice.

COMMENTARY

In this patient ectopic pregnancy was suspected because of attacks of abdominal pain, a period of amenorrhoea, dark vaginal bleeding, and periods of syncope.
Diagnostic puncture of the pouch of Douglas was not attempted. The method is undoubtedly useful including the diagnosis of a pouch of Douglas haematocle. A "dry" puncture does not rule out the possibility of an intact tubal gestation, or of a haematoma occupying a high position. In other cases scanty amount of blood may be obtained; and such a case would have come from elsewhere. In addition the procedure has a risk of introducing infection. Laparascopic examination was not performed in this case as a haemoperitoneum was suspected. Its usefulness lies in the diagnosis of unruptured tubal pregnancy or in cases of tubal pregnancy before any significant intraperitoneal bleeding has occured.

Unfortunately autotransfusion could not be done as the blood in gross appearance looked altered and what had remained was in the form clots. This life saving measure has the advantage of speed and simplicity, as blood grouping is unnecessary. The method is intended for patients with sudden, recent haemorrhage. Blood from the peritoneal cavity has increased Fibrinogen - Fibrin - Degradation products and has reduced clotting factors. The citrate used in the reception bottle for autotransfusion may reveal the potential danger of blood coagulation post operatively.

A CASE OF

HYDATIDFORM MOLE DETECTED BY

ULTRASONOGRAPHY

NAME: MRS. T.M.
I.P. NO.: 205149
AGE: 24 YEARS
ADDRESS: MAGOMENI, DAR ES SALAAM
DATE OF ADMISSION: 2.6.80
DATE OF DISCHARGE:

SUMMARY

The patient was referred from a dispensary with a history of amenorrhoea, vaginal bleeding and abdominal pain. The Human Corionic Ganodotropin levels were high. The ultrasonographic appearances of the uterine contents were characteristic of hydatidformu mole. The mole was evacuated surgically and by the use of oxytocics. The patient made on uneventful recovery. The pregnancy test was negative 3 months later, up to one year.

HISTORY OF PRESENT ILLNESS:

The patient was referred from Magomeni dispensary with a history of amenorrhoea of 4th month duration, followed by vaginal bleeding and lower abdominal pains 3 days prior to admission in Muhimbili Hospital.

Abdominal pain was located in the lower parts, colicky and localised. There was no associated diarrhoea, vomiting, dysuria, frequency of micturition or fever. The vaginal bleeding was bright red with no clots.

GYNAECOLOGICAL HISTORY

Menarche was at the age of 12 years. The cycles were every 28 days lasting 5 days,r regular normal flow and there was no associated dysmenorrhoea. Her last menstrual period was on 15.2.80, so that at the time of admission she had 15 weeks of amenorrhoea. There was no history of intermenstrual bleeding or post coital bleeding.

There was no history of the use of contraceptives.

OBSTETRIC HISTORY:

The patient had 3 full term normal deliveries in 1974, 1976 and 1978 respectively. All her children were female were alive and well. There was no history of obstetric complications.

PAST MEDICAL AND SURGICAL HISTORY

There was nothing significant.

FAMILY AND SOCIAL HISTORY

She was married in 1974 and divorced in 1979. She re-married in 1980 and now lives with the present husband. She was unemployed and she neither took alcohol nor smoked cigarettes. There was no family history of twins, diabetes, hypertension or tuberuclosis in the family.

PHYSICAL EXAMINATION

She was in good general condition. She was moderately anaemic but not jaundiced and she had no oedema. Her temperature was 37.5^{o}C.

CARDIOVASCULAR SYSTEM

The pulse rate was 88 beats per minute and of good volume. The blood pressure was 130/80 mm Hg. There was no cardiomegally and the heart sounds were normal.

RESPIRATORY SYSTEM

The chest movements were normal. The trachea was centrally situated. The percusion note was resonant and the tactile vocal fremitus was similar on the left and right sides of the chest. The breath sounds were vesicular and there were no added respiratory sounds.

ABDOMINAL EXAMINATION

The lower part of the abdomen was uniformly distended. The abdomen was non tender, there was no guarding or rebound tenderness. The fundal height was equivalent to 20 weeks of gestation, while she had 15 weeks of amenorrhoea. No fetal parts were identified. The renal angles were free and non tender. The liver and spleen were not palpable.

VAGINAL EXAMINATION

There was a slight blood vaginal discharge at the vulva otherwise the vulva was normal. Speculum examination revealed normal vaginal walls, the cervix was healthy and the cervical os was closed.

On Bimanual examination the cervix was found to be soft, long and the cervical os was closed. The uterus was enlarged to the size of 20 weeks pregnancy, non tender and smooth. The adnexa were free of masses.

DIGNOSIS

From the above clinical findings a provisional diagnosis of threatened abortion was made. The differential diagnosis was that of Molar pregnancy.

Postoperatively the patient received two units of blood and the syntocinon infusion was continued for the following 6 hours. Post operative blood pressure and pulse rate were. Monitored and were normal.

The uterine size decreased to about 12-14 weeks of gestation and there was minimal vaginal bleeding. There was no adnexal tunnors clinically.

PROGRESS OF THE PATIENT IN THE WARD

The patient's general condition remained good. The blood pressure and pulse rate were normal. The uterus was only slightly bulky and there was no vaginal bleeding.

On the 7th postoperative day the haemoglobin was logms per cent and the human chorionic gonadotropin (H.C.G.) litres was 1000 l.u. She was given ferrous sulphate tablets 200mg thrice daily. The pronosticon planotest was negative three times at weekly intervals before the patient was discharged home. She was asked to refram from sexual intercourse.

FOLLOW UP OF THE PATIENT

The patient was seen in the gynaecology outpatient 2 weeks after discharge from the ward. She had no complaints. She denied any history of cough, chest pains or vaginal bleeding. She was not anaemic. A thorough examination of the respiratory and cardiovascular systems were normal. The abdomen was non tender and there were no masses felt. There was no vaginal bleeding and the uterus was of normal size.

The prognosticon - planotest was negative and a chest X-ray was normal.

She was started on oral contraceptives and asked to come to the gynaecology outpatient clinic monthly for 3 months then 3 monthly for 1 year and 6 monthly thereafter. The patient was however lost for follow up after one year. During these follow up visits there was no abnormality detected on physical examination and the pregnancy test remained negative.

COMMENTARY

The chief value of detection methods employing ultrasound tests is that it is not necessary to resort to radiation detection methods. The classic ultrasonic pattern in molar pregnancy helps to differentiate between a hydatidform mole and an early pregnancy in addition to whether the pregnancy is multiple, ectopic or in the process of aborting. Although ultrasound is helpful in differentiating between a mole and either a normal or abnormal pregnancy, it is of no value in assessing malignant change in the hydatidform mole. Confusion arises when a normal pregnancy occurs in a uterus containing a leiomyoma. The appearance in the scan is much the same as that of a mole.

Quantitative determinations of the amount of circulating chorionic gonadotropin is of limited practical value when used as the only criterion of an accurate diagnosis of hydatidform mole. There is too much individual variations in the trophoblastic diseases to rely on such information completely. The amount of H.C.G. recovered depends on how much trophoblast is present and how active it is. Since some moles may be inactive or incapable of producing large amounts of hormone, it is probable for a patient to have a hydatidform mole even though quantitative tests show less than the normal amount of H.C.G. Some normal pregnancies at ten weeks produce levels of H.C.G. in excess of those

found in a mole. Multiple pregnancy and other complications of pregnancy such as permicious vomiting are associated with high levels of H.C.G. titer.

Therefore the mere presence of a high level of H.C.G. neither makes nor rules out a diagnosis of hydatidform mole. If twoo much stress is put on such findings, there is a danger of a normal pregnancy being interrupted or that the diagnosis of hydatidform mole may be missed.

A number of clinics are now experimenting with/prophylacti~~xxxxx~~ chemotherapy in the treatment of the hydatidform mole preceding and following its expulsion. In this way they hope to improve the cure rate there is the theoretic chance that the disease may already have extended beyond the uterus to other regions of the body such as the liver and the lungs.

It has long been recognised that metastatic or invasive disease is more likely to follow a molar pregnancy if the time taken for the gonadotropin titre to fall following evacuation of the mole is prolonged. If the patient is not pregnant again and continues to bleed vaginally, and if monitoring shows elevated H.C.G. titres, in all probability she has either an invasive mole or choriocarcinoma some authors consider that they can avoid such a situation if they give a fiveday course of chemotherapy (methotrexate + actinomycin D) at the time of the initial evacuation of the mole and follow at regular interrals with H.C.G. determinations. Other therpists have questioned the advisability of giving prophylactic chemotherapy for hydatidform moles, noting that there are distressing, sometimes dangerous side effects from methotrexate and actinomycin D. They question the accuracy of histologic grading in selecting the patients most likely to benefit from prophylactic chemotherapy.

The place for crysterectomy is another source of controversy. In the past hysterectomy was performed to control excessive bleeding in a patient who had incomplete evacuation of a malignant mole present in a large interns following curretage. Today suction curretage has largely replaced curettement in many centres suction curetage is both effective and safe. The indications for hysterectomy include excessive uncontrollable bleeding, perforation or spontaneous rupture of the interns. For the most part the question of whether a hysterectomy is done would depend on the size of the uterus but also on the age of the patient and her parity. One would be more inclined to do a hysterectomy. If the above conditions prevarled in a patient who had on treatment not delivered any tissue, when the uterus was 14 to 16 weeks size, partcularly if she has completed her family or is unlikely to have a baby because of age or lack of desire.

She used Lyndiol in 1968 for 2 months but stopped because of intermenstrual bleeding. Since then she had never used any other forms of contraception.

There was no previous history of dilatation and curretage or any vaginal operations.

SUMMARY OF PAST OBSTETRIC HISTORY

She was para 9 abortion 2 with 7 living children. The first pregnancy was in 1961 and the last was in 1975.

In 1962, 1970, 1971 and 1975 sha had recurrent episodes of antepartum haemorrhage. She had 3 premature deliveries in 1966, 1970, 1971 and 1975. During the last pregnancy she developed intrapartum eclampsia, the male baby which weighed 1360 gms is alive and well. Since then she had been treated for hypertension. She has been on Aldomet, lasix, brinerdrim and valium.

PREVIOUS MEDICAL AND SURGICAL HISTORY

There was no history of any previous operation. She has been treated for hypertension since 1975.

SOCIAL FAMILY HISTORY

She was married since 1960. She is employed as an MCH aid but has worked as a nurse since 1957. She is a non smoker and doesn't take alcoholic drinks.

There is no family history of hypertension or diabetes mellitus, her grandfather died of pulmonary tuberculosis.

PHYSICAL EXAMINATION

Her general condition was good. She was not anaemic, a-febrile and there was no oedema.

3. Blood group O and Rh factor positive
4. Stool examination showed no abnormality
5. Papanicolau smear Hc 1157/80

for cytology: Shows benign squamous cells showing moderate dyskaryosis. There are also many red blood cells in the back ground. No malignant cells seen. Conclusion moderate dsyplasia.

FURTHER MANAGEMENT

Because of the appearance and the firm/hard consistency of the cervix a cone biopsy was requested.

PREPARATION FOR CONE BIOPSY

The patient was prepared for vaginal operation as described in the introduction.

PRODEDURE FOR CONE BIOPSY

On 22.10.80. The patient was placed in the lithotomy position and the vulva and vaginal was swabbed with savlon antiseptic and drapped with sterile towels. The bladder was catheterised in the manner described in the introduction. A full pelvic examination was made and the features of the pelvic examination as described before, confirmed.

The anterior lip of the cervix was grasped with a volsellum well above the area to be excised for biopsy. A mark was placed at the "12 O'clock" position. A circular incision was made with a bladed knife. As the volsellum on the cervix exerted traction in upward direction, the incision was deepened with circular sweeps until the region of the internal os was reached. This point formed the apex of the the cone. After removal of the haemorrhage from the cervical branch of the uterine artery. The cavity which was left was closed by a double Sturmdorf suture.

After completion of the operation, the anaesthesia was reversed and patient observed in the recovery room as described in the introduction.

POST OPERATIVE CARE

Blood pressure and pulse rate remained normal 24 hours post operatively. There was only slight vaginal bleeding.

The patient was discharged on the 3rd post-operative day and she was asked to come to the gynaecology outpatient for cone biopsy histology results.

HISTOLOGY RESULTS

Were available on 1.11.80 Path. No. HP. 6443/80 reported.

"In the histology there is almost no normal epithelium. It varies between moderate, and severe dysplasia and carcinoma in situ. In two areas is just a rupture of the basal membrane making it an early invasion. This epithelium is extending on both sides of zour excision.

CONCLUSION

Early ivasive squamous cells carcinoma in cone. Not in total removed."

MANAGEMENT

1. A full blood picture was requested and it was normal
2. Urine for proteins and albumin was negative and culture was sterile.

The patient was readmitted to the ward and scheduled to start radiotheraphy.

COMMENTARY

Detention of false negative smear is done by determining the disease in the whole population annually to see if a case has been missed by the laboratory in the past. The current and previous cytology is then reviewed and any

past error is then detected.

In the British Columbia cytology laboratory 8% false negative cases were found among the pre-clinical carcinoma between 1968-1972. Of the false negative smears 78% were atypical squamous cells.

The false negative rate for clinical invasive carcinoma is not too important if it is made clear to the physician that cytology is a poor method of investigation of obvious disease and that a biopsy should be done regardless of cytological finding.

False negative smear could be due to

1. Faulty technique in making the smear, for example insufficient material obtained, or the material being collected from incorrect site.
2. Observer error during screening and interpretation of the smear.
3. "Inherent error" in the tumor cells.

This patient had antepartum haemorrhage during most of her pregnancies starting from 1962 for which no obvious cause was ascertained. In 1975 a "pap" smear was taken and showed grade II smear, like dysplasia, carcinoma in1 stitu is not always a progessive lesion but may remain stable, neither progressing nor regressing for many years. Since progression from the "pap" smear report of grade II to microinvasive carcinoma in this patient cannot be fully explained. More so is the fact that even in the last "pap" smear which was reported as moderated dysplasia and yet the cone biopsy histology revealed microinvasive carcinoma. The false negative result could be due to an oserver error but an inherent error could also have played a role in the difficulty of early detection of malignant cells in this case.

It is known that some cancer cells have strong intercellular cohesive forces and therefore do not exfoliate. The frequency of such "non exfoliating" lesions of the cervix has been estimated to be around 6-10% cases. Could this patient have belonged to this group? This case emphasises histological examination in all cases of suspected cervical malignancy. Some of cancers of the cervix will obviously be missed if we rely entirely on interpretation of the smear. As a screening device the vaginal smear simply alerts the gynaecologist to the possibility that epithelial change may be taking place in the cervix. Since treatment is based on histologic interpretation of tissue removed by biopsy, the question arises as to where the biopsy should be taken. The shiller's iodine test and colposcopic evaluation of the cervix have throuwn light in answering the above question the schiller's test which involves painting the cervix with schillers solution (iodine + potassium iodide) is a useful diagnostic tool for it aids the gynaecologist in the decision of where to take the biopsy. When glycogen is present in the cervical cells the normal epithelium stains a deep mahogany color. The suspicious areas that should be biopsied are those that fail to take the stain.

Pathologic changes other than neoplasia may produce the same appearance. The test is good only for those areas of the cervix that can be seen consequently a negative test does not rule out cancer, for the true foeal area carcinoma in situ may rest entirely in the endocervix. When the sclillers test is used in conjuction with a smear, accuracy runs as high as 80 per cent.

The main field in which colposcopy has been increasingly used is in the interpretation and management of the abnormal smear. In many departments the first step in the follow up of women with an abnormal cervical smear would be a diagnostic conisation as was done in this patient. With the guidance of the colposcope however it is easier to determine the site and type of biopsy that is necessary. It should be emphasised however that expliative cytology is the best screening device for the early detection of cervical cancer, but invaluable information may be obtained by the simultameons use of colposcopy. Without colposcopy, an unnecessarily radical procedure may be sometimes used to treat a relatively trivial lesion.

The diagnosis and management of early cancer of the cervix is clouded with a lot of controversy.

In the management of stage I carcinoma of the cervix, gynecologists have put forward conflicting claims for the superiority of their own methods of treatment. To some gynecologists "Microinvasive" means the stage of invasive cancer in which the diagnosis is made only those lesionss in which neoplastic cells have extended no further than a certain distance in the stroma. This distance has been variously considered to be 2mm, 5mm, 9mm by different investigators. Differences also arise according to the Significance of involvement of lymphatic channels, vascular channels, or the presence of growth patters termed "confluence" similarly there is no agreement as to whether the measurement should be made from the surface of the epithelium, the basement membrane, or the nearest endocervical gland involved with cancer changes.

The debate continues as to the efficacy of irradiation therapy in these lesions. Proponents of both modalities have good results with low complication rates. Radical surgery has the disadvantage of being a major operative procedure with possible genitourinary complications. It cannot be utilised in all patients. Surgery has the advantage of preserving overian function and allowing evaluation of the extent of the disease.

Radiation therapy has the advantages of being almost universally applicable to all patients or requiring minimal anaesthesia, and of lacking immediate major complications. However late radiation complications in the bones, bowel, and genitourinary tract can be very serious.

It is obvious therefore that no one single form of treatment will be adequate to overcome all the problems presented by stage IA cerrical cancer. There is general agreement that the degree of invasive penetration into the sorrounding stroma is the deciding factor in choosing therapy Vascular and lymphatic involvement play important roles, as does the appearance of similar carcinomatons areas in different parts of the specimen simple hysterectomy with removal of the upper part of the vaginal is considered by most gynaecologists to be adequate treatment for carcinoma in situ and stage IA with invasive penetration of less than 3 mm. depth. Somefeel that a simple hysterectomy is adequate if the tumor in question is sorrounded by 0.5cm. of healthy tissue. A few will contend that a well performed cone will be sufficient. With tumor invading the stroma to 3 to 5mm or more, a cone or simple hysterectomy would be considered as inadequate by most gynaecologists.

UTERINE FIBROID TOTAL ABDOMINAL HYSTERECTOMY

NAME:	MRS. T.M.
AGE:	50 YEARS
REG. NO.:	179488
ADDRESS:	ILALA, DAR ES SALAAM
ADMITTED:	22.2.80
OPERATED:	25.2.80
DISCHARGED:	5.3.80

SUMMARY

The patient complained of lower abdominal pain, swelling, and excessive menstrual periods. The diagnosis was of large multiple uterine fibroids causing menorrhagia. She had a total abdominal hysterectomy and had an uneventful recovery. Differential diagnosis and extent of surgery are discussed.

HISTORY OF PRESENT ILLNESS

The patient was seen in our gynaecological outpatient clinic with complaints of an abdominal swelling and lower abdominal pain for 2 years and painful excessive periods for 1 year.

Two years previously the patient noted an abdominal swelling which increased in size progressively. This swelling was associated with a dull ache in the lower abdomen which did not radiate and had no relieving factors. The pain was intensified during her menstrual periods.

She had no history of fever, dysuria, haematuria, dyspareunia, vaginal discharges or postcoital bleeding. She had not lost weight and her bowel habits were normal.

GYNAECOLOGICAL HISTORY

Her menarche was at 15 years of age. The cycles were of 28 days lasting 3 to 4 days, painless and of normal flow. Since one year previously her menstrual periods changed to 10 days in every 28-30 days, heavy flow with clots and moderately severe dysmenorrhoea before and during her menstrual periods. Her last menstrual periods started on 10.2.80.

OBSTETRIC HISTORY

She had 3 full term normal deliveries at Ocean Road Hospital. Her last child was 25 years old. There was no history of abortions or of using contraceptives.

PAST MEDICAL HISTORY

She gave no history of any major illness or operations; she had never been admitted to hospital before.

FAMILY AND SOCIAL HISTORY

She was married since 1950, and she was still living with the same husband. She neither smoked nor too alcohol, and there was no history of any familial diseases.

PHYSICAL EXAMINATION

She was in good general condition; she was slightly anaemic but not jaundiced. She was a febrile and there was no oedema or hymphadenopathy.

CARDIOVASCULAR SYSTEM

There was nothing significant. It was a normal chest with good bilateral air entry. The breasts were normal size without any lumps or secretions.

OPERATION

PRE-OPERATIVE PREPARATION

1. Three units of cross matched group O Rh "D" positive blood were requested for the operation.
2. Preoperative preparations, premedication and general anaesthesia were all given in the usual manner as described in the introducing chapter.

EXAMINATION UNDER ANAESTHESIA

This was done as described in the general introduction after preparing the vaginal and emptying the bladder. The vaginal was painted with gentian violet. Skin preparation and opening of the abdomen was as described in the introduction

FINDINGS AT LAPARATOMY

1. The uterus was enlarged to about 26 weeks pregnant size with multiple subserous and intramural fibroids. It was firm and mobile. There were a few adhesions between the sigmoid colon and the uterus.
2. Both ovaries and right fallopian tube were normal. The left fallopian tube was fixed to the posterior part of the uterus.

TOTAL ABDOMINAL HYSTERECTOMY AND BILATERAL SALPINGOOPHORECTOMY

i) A myomectomy screw was inserted into the fundus and the uterus pulled upwards out of the pelvis.

ii) The intestines were packed off with moistened abdominal packs.

iii) The ureters: on either side and the fundus of the bladder were indentified.

iv) The left round ligament was then clamped and divided. The stumps were transfixed with catgut chromic No. 2. The upper border of the broad ligament including the ovarian ligament and the left fallopian tube were clamped and divided near the uterine cornus and the broad ligament opened up. The same procedure was done to the right round ligament, broad ligament, right ovarian ligement and the right fallopian tube.

v) From the opened up broad ligament a transverse cresent shaped incision was made joining the two round ligaments anteriorly on the vesico-uterine peritoneum which was carefully reflected downwards with gauze covered finger to mobilize the bladder and the ureters away from the cervix.

vi) The uterine vessels came into view. They were clamped close to the uterus divided and transfixion ligatures of No. 2 chromic catgut applied to the stumps. Other appendages were also transfixed. The same procedure was done to the left as to the right uterine vessels.

vii) The right and left utero - sacral ligaments were clampted divided and ligated close to their carvical attachments. The cardinal ligaments on each side together with vascular plexus adjacent to it were grasped close to the lateral border of the cervix, divided and securely ligated.

viii) The anterior vaginal wall was opened with a knife and incision extended around the cervix with clamps applied to the vaginal vault and total hysterectomy performed. The vaginal vault was closed with mattress catgut sutures. The angles of the vaginal vault were secured with separate haemostatic sutures.

ix) The raw surface were then covered with peritoneum and the uterosacral and cardinal ligaments together with the round ligament were fixed with transfixition sutures to the lateral angles of the vaginal vault.

x) The removed uterus was opened up and macroscopically there was no evidence of malignancy.

xi) The abdominal packs and retractors were removed and the abdomen closed in layers as described earlier, in the introduction. The uterus was sent for histopatholog

POST OPERATIVE CARE AND PROGRESS

The patient recovered from anaesthesia without any complications. She received 3 units of blood(1500 millilitres) and 100 mls of normal saline in the following 24 hours. Blood pressure and pulse were checked every $\frac{1}{2}$ hour for 4 hours then hourly and were normal. She passed 900 mls of urine in 24 hours and she was afebrile.

On the second post operative day she passed flatus and bowel sounds were heard, so the intravenous drip was removed and early ambulation encouraged. On the 3rd post operative day her haemoglobin was 9.5gm per 100 mls and the urine was sterile on culture.

On the 8th post operative day all stitches were removed and on the 5th March 1980 she was discharged and advised to report at the gynaecological outpatient clinic after 6 weeks.

FOLLOW UP

The patient reported to the gynaecological outpatient clinic about 8 weeks after operation. She was in good general condition with a haemoglobin of 10.5%. Speculum and vaginal examination revealed no abnormality in the vaginal vault and in the pelvis. Histology results: Path No. HP 1105/80: "revealed benign leiomyomas. There is no evidence of malignancy".

COMMENTARY

This patient presented with the main complaint of menorrhagia. In her case the menorrhagia was probably caused by:-

1. An increase in size of the endometrial cavity and of the bleeding surface.
2. Increased vascularity of the uterus

The symptoms of low abdominal pain was ascribed to pelvic inflamatory disease and adhesions.

The surgical treatment of total abdominal hysterectomy was decided upon because of the menorrhagia and large size of the uterus. Myomectomy was not considered because:

1. The tumour size was large (corresponding to 26 weeks of gestation).
2. She was 50 years old and the need of the uterus for reproductive function was non existent.
3. The uterus could be the seat of malignancy. Papanicolaou smear from the cervical os and posterior fornix and endometrial curretage were not done. This was considered as a serious omission despite the apparent clinical picture which was not suggestive of such malignant change. The histological examination for the uterus after hysterectomy showed benign changes, however.

What should be done with normal adnexa at hysterectomy for benign disease is a traditional source of gynaecologic controvesy. A few gynaecologists at opposite ends of the spectrum advocate either routine removal or routine conmeservation, but the vast majority are probably in the middle. Those who believe on conservation, argue on the great benefits to the patient of continued ovarian function in post menopausal women. In addition only 1.4% of patients

require subsequent operation for adnexal pathology (Funt et al 1977) and none of them was malignancy or other serious disease found.

On the other hand many gynaecologists believe that 45% of women aged 45 years may develop ovarian malignancy and therefore there is a strong point for removal of the ovaries. It is felt that this patient was denied the chance of removal of potential source of malignancy, according to the belief of the latter group of gynaecologists.

REFERENCE

Funt, M.I. Benedict B.B.; Thompson, J.

Am. J. Obstet, Gynecol. 129 : 251, Oct. 1, 1977.

POSTCOITAL LACERATION OF THE POSTERIOR FORNIX

NAME:	MRS. S.M.
IP. NO.:	16687
AGE:	16 YEARS
ADDRESS:	TEMEKE, DAR ES SALAAM
DATE OF ADMISSION:	17.8.79
DATE OF REPAIR:	17.8.79
DATE OF DISCHARGE:	21.8.79

SUMMARY:

The patient was referred from Temeke dispensary on account of vaginal bleeding. Clinical examination revealed a posterior vaginal fornix laceration. Restoration of the cardiovascular volume was achieved followed by repair of the laceration under general anaesthesia. She made an uneventful recovery.

HISTORY OF PRESENT ILLNESS:

The patient was referred from Temeke dispensary on account of heavy vaginal bleeding for one day. The patient gave an initial history of sudden onset of vaginal bleeding on the day of admission. She later admitted that the vaginal bleeding followed sexual intercourse 6 hours before admission. The bleeding was continuous and was not associated with pain. She denied ever having had sexual intercourse before that incident.

GYNAECOLOGICAL HISTORY

Menarche was at the age of 13 years. The cycles were 4/28 regular and of normal flow. There was no history of dysmenorrhoea. The last menstrual period started on 9.8.79.

OBSTETRICAL HISTORY:

She had never been pregnant before.

SOCIAL AND FAMILY HISTORY

She was married to a fisherman two days from the date of admission. There was no history of any familial diseases.

PAST MEDICAL AND SURGICAL HISTORY

There was no previous history of admission to hospital or of undergoing any form of surgical operation. There was no history suggestive of a bleeding tendency.

PHYSICAL EXAMINATION

The patient was apprehensive, very anaemic but afebrile. The radial pulse was 110 per minute, small volume but regular. The blood pressure was 90/50 mm Hg. Further examination of the cardiovascular and respiratory systems were normal.

ABDOMINAL EXAMINATION

The abdomen was non tender. There ware no palpable masses or free fluid. The liver, splsen and kidneys were not palpable.

VAGINAL EXAMINATION

Preparation and manner of vaginal examination was done as described in the introduction.

Findings

1. Blood clots and fresh vaginal bleeding.
2. Removal of blood clots was done with sterile swabs and revealed a healthy cervix. The cerrical os was closed with no bleeding from it.
3. A longitudinal laceration was seen extending from the posterior fornix of the vaginal to the adjacent posterior vaginal wall. This laceration measured about 4-5 centimetres and was bleeding actively.

The vaginal was packed with sterile gauze, to cont
further haemorrhage, temporarily.

Diagnosis: From the above clinical findings a diagnosi
posterior fornix laceration following coitus was made.

MANAGEMENT:

1. Resuscitation of the patient:

(a) The patient was given a rapid intravenous infu
of normal saline 1000 mls followed by 500 mls
plasmagel.

(b) Blood was sent for grouping and crossmatching.
One hour later three units of group O positive
blood was available and blood transfusion start

(c) The blood pressure and pulse rate were monitore
half hourly. After administration of the intra
fluids the blood pressure was 110/70 mm Hg and
rate was 92 per minute regular and good volume.

As the above measures were being taken, the ptient
prepared for repair of the vaginal laceration under gene
anaesthesia. The preoperative preparation of the vagina
and perineum and premidication was done as described in
introduction.

Repair of the vaginal laceration under general anaesthes

General Anaesthesia was given as described on page

Procedure:

The patient was put in the lithotomy position and th
perineum cleaned with Savlon (1 in 200) and flavine in 70
alcohol. The vaginal packs were removed, and the vaginal
similarly cleaned with antiseptic. She was then drapped
with sterile towels. Catheterisation of the bladder, rev
about 100 mls of clear urine.

After insertion of the auvard speculum the laceration, which was noted before, was revealed. The laceration was bleeding actively. The extent and location of the laceration during examination under anaesthesia was similar to that noted earlier. The carunculae myritiformed was also torn.

Post operative Care and Pregress:

1. Blood pressure and pulse rate were recorded one hourly for 48 hours and were normal.
2. Fluid balance chart was kept and was normal.
3. She was started on Chloramphenicol 500 mg intramuscularly for 24 hours followed by 500 mg oral tablets for 6 days. crystalline penicillin was given 2 mu. intravenously for 5 days
4. Haemoglobin was checked on the third post operative day on ferrous sulphate 200 mg twice daily for 2 weeks.
5. The patient was discharged home on the 4th post operative day on ferrous sulphate 200 mg twice daily for 2 weeks.

Follow up:

The patient was seen at the gynaecological outpatient clinic 6 weeks later. She was in good general condition and had her menstrual period a week earlier and it was normal.

She was afebrile and not anaemic. Pelvic examination revealed a wellheald laceration with minimal fibrosis. Further examination of the abdomen and genital organs were normal.

OVARIAN CYST REMOVED AT LAPARATORY:

COMMENTARY:

Coital laceration is an uncommon gynaecological problem in the patient admitted in Muhimbili Medical Centre. Rough coitus can result in serious tears involving the perneum and vaginal wall. These injuries are most likely in the young virgins and in old women with atrophied tissues. The patient described was only 16 years old. Invariably a misleading history and a failure of adequate examination may lead to a wrong diagnosis. Examination under anaesthesia is essential to establish the diagnosis and blood transfusion is necessary as most of the patients who have coital laceretion bleed profusely. The patient was accordingly resuscitated before repair of the laceration was done. Upper vaginal lacerations usually occurs in women with previous coital experience in this newly wed patient could not be obtained.

OVARIAN CYST REMOVED AT LAPARATOMY:

NAME: MISS S.M.
REG. NO.: 194238
AGE: 23 YEARS
ADDRESS: MWANANYAMALA, DAR ES SALAAM
ADMITTED ON: 13.6.80
OPERATED ON: 16.6.80
DISCHARGED HOME ON: 26.6.80

SUMMARY

The patient presented clinically with ann ovarian cyst which was confiemed at the time of laparatomy. Histology of this ovarian cyst showed a benign serous cystadenoma. The possibility of malignancy and treatment of such a tumor is discussed.

HISTORY OF PRESENT ILLNESS:

The patient was referred from Raithatha Dispensary to our gynaecolocial patient on 30.4.80 because of lower abdominal pains and a swelling in the same area. She noted periodic lower abdominal pains, non radiating for 3 months. The pains were worse during her periods, but were relieved with analgesic tablets. There was no associated history of dysuria, frequency, loin pains, fevers of altered bowel movements.

GYNAECOLOGICAL HISTORY

The patient had her memerche at the age of 14 years. Her last menstrual period was on 14.4.80 and her cycles were of 28 days lasting 5 days, regular and normal loss. She had dysmenorrhoea, since about 5 years previously, before during and after her periods.

OBSTETRIC HISTORY

The patient had never conceived before. She was married 6 months previously.

PASTMEDICAL SURGICAL HISTORY

There was nothing significant.

PHYSICAL EXAMINATION

She was not anaemic, afebrile. The pulse rate was 80 beats per minute regular and good volume. The blood pressure was 100/70 mm Hg. Further examination of the cardiovascular and respiratory systems were normal.

ABDOMINAL EXAMINATION:

There were no scars. There was uniform distension in the lower abdomen. The abdomen was non tender and there was no guarding of rebound tenderness. There was a soft, fluctuant, round regular mass in the lower abdomen. It was freely mobile, non tender and was of the size corresponding to a 20 week gestation. No other masses were palpable in the abdomen.

VAGINAL EXAMINATIONS:

The preparation for vaginal examination was done as described int the introduction. The vulva and vaginal were normal. Speculum examination revealed a healthy looking cervix with no growth and the cervical os was closed. On bimanual examination, the cervix was firm, non tender and the cervical os was closed. The uterus was of normal size, anteverted mobile and non tender. A midline cystic mass was felt which was non tender freely mobile and of an size corresponding to a 22 week gestation. No other mass was palpable bimanually.

DIAGNOSIS:

A provisional diagnosis of ovarian cyst was made because of the solitary cystic nature of the mass. The possibility of a pedunculated fibroid was also borne in mind.

MANAGEMENT:

Because of the above clinical findings, a laparatomy was advised.

INVESTIGATIONS

1. Haemoglobin 9.7gm/100ml
2. Blood group - O - Rhesus-D-positive
3. Urine for sugar - NIL
4. Urine for albumin - NIL

LAPAROTOMY

Preoperative preparations:

2 Units of crossmatched blood was reserved for the operation. The vulva and abdomen were shaved. Consent for the operation was obtained. Premedication was given as described earlier in the introduction.

Examination under anaesthesia:

This was done as described in the general introduction after preparing the vaginal and emptying the bladder. The previous findings were confirmed.

EXPOSURE:

The abdomen was then opened in layers through a subumbilical incision.

Findings:

A smooth cystic tumor with a glistening capsule was found involving the whole of the left ovary but lying in the midline. The ovarian tumor measured about 14 centimeters and was tethered by mild adhesions to the uterus and sorrouding structures. Both fallopian tubes and the right ovary were normal.. The uterus was of normal size, anteverted and mobile. The appendix, liver and spleen were normal.

REMOVAL OF THE OVARIAN TUMOR:

The tumor was freed from adhesions by peeling with a swab covered finger. The freed tumor was delivered out of the abdominal wound and held by an assistant who applied traction on it. Two clamps were applied first below the tumor at the infundibulopelvic ligament. The tumor was excised off between the two clamps and the remaining stump stitched with catgut and hemostasis maintained. The removed tumor was excised and slippery fluid escaped to leave a collapsed tumor with thin walls. The mass was then sent for histological examination. The abcomen was closed in layers.

Macroscopic examination of the cyst: The cyst measured 14 centimeters in size. The capsule was thin and smooth. The fluid was straw colored with no papillary ingrowths.

Post operative management and progress:

The patient recovered from anaesthesia without complications. The general condition pulse and blood pressure were monitored hourly. She received 2 units of blood, and 2000mls of Dextrose - saline in the first 24 hours. Her urine out put was normal and she remained afebile. On the second post operative day the intravenous drip was discontinued after bowelsounds were heard. On the third day her haemoglobin was 10.4 gm/100 mls and on the 8th day all stitches were removed. She was discharged on the 10th postoperative day.

FOLLOW UP

The patient was seen 6 weeks later in the gynaecology out patient clinic. She was in good general condition. She was afebrile and not anaemic. The abdominal examination showed a well healed subumbilical scar, with no other abnomalities noted. Pelvic examination was normal.

Histology results: Benign serous scystadenoma.

COMMENTARY

A case of a benign ovarian serous cystadenoma, of a moderate size, in a young woman has been described.

The tumor was unilateral, with a normal contralateral ovary. The macroscopic examination of this tumor showed absence of papillomatous ingrowth, and hence less potential formalignancy.

This neoplas appears in all age groups and it is frequently bilaterial; and it is primarily a pappilary growth. At the time of operation, the benign nature of the tumor is suggested if the cyst wall is thin and the papillary excrecences are small and discrete. If, however, bloody ascitic fluid is found together with peritoneal implants and there are solid areas of infiltration in the cyst wall or fication of the neoplasm to neighboring structures, then malignancy should be highly suspected.

The treatment of benign ovarian neoplasm depend on many factors, the main ones are parity and age. In patients over the age of 40 years a complete hysterectomy and bilateral salpingo-cophorectomy should be performed. Even in younger women the presence of bilateral involvement, peritoneal implants, ascites or external excrescences demands radical therapy. In this patient the clinical findings at the time of laparatomy didn't warrant such a radical procedure.

A CASE OF BARTHOLIN'S ABSCESS TREATED BY MARSUPILIZATION:

NAME: MRS. Z.L.
AGE: 21 YEARS
IP. NO: 192117
DATE OF ADMISSION: 19.2.80
DATE OF DISCHARGE: 20.2.80

SUMMARY

The patient was referred from Mnayi Mmoja Dispensary because of a painful vulval swelling. She was found to have a left Bartholin's abscess for which marsupiliyation was done under general anaesthesia. She was discharged 24 hours after operation.

HISTORY OF PRESENT ILLNESS

The patient noticed a small swelling on the left medical aspect of the vulva one week prior to admission. The swelling progressively became larger and painful and a day before admission the swelling made walking difficult.

There was no history of dysuria or frequency of micturition, but there was a foul smelling vaginal discharge. She reported at Mnayi Mmoja Dispensary and was referred to Muhimbili Hospital for further management.

GYNAECOLOGICAL HISTORY

Her menarche was at the age of 15 years. The mentrual cycles were 3/28 days, regular and normal flow. Her last menstrual period started on 15.2.80. There was no history of the use of contraceptives.

OBSTETRIC HISTORY:

She had never been pregnant before.

PAST MEDICAL AND SURGICAL HISTORY:

There was nothing relevant.

FAMILY AND SOCIAL HISTORY:

She was not married. She worked as a bar maid in Kariakoo. There was no history of any familial diseases.

EXAMINATION ON ADMISSION:

She was well nourished, not anaemic, afebrile, and had no lymphadenopathy. The pulse rate was 72 per minute, regular and good volume, and the blood pressure was 110/70 mm Hg. The cardiovascular, respiratory system, and abdominal examinations were normal.

VAGINAL EXAMINATION:

Preparation of the patient and procedure of vaginal examination was as described in the gynaecological introduction. There was a foul smelling purulent vaginal discharge at the vulva. The urethral orifice was normal with no abnormal discharge from it.

A swelling approximately 6 cm in diameter was seen beneath the posterior part of the left labium majus extending inwards to the base of the labium minus was seen. The swelling was warm, tender andfluctuant. The overlying skin was shiny and the surrounding tissues were indurated and oedematous.

The cervix was closed but purulent yellowish discharge was seen from the external os. The cervix was firm on palpation and tender. The uterus was normal size, anteadnexa, but no masses were palpable.

DIAGNOSIS:

Bartholin's abseess.

PLAN OF MANAGEMENT:

1. Investigations:

(i) Bacterilogical:

(a) Pus swab from cervical os Gramstain: intracellular gramnegative diplococci. Culture yielded Nisseria gonnorrhoea, sensitive to chloramphenical andpenicillin, resistant to tetracycline erthromycin and contrimoxazole.

(b) Pus from the abscess (at operation) yielded a heavy mixed growth of Escherichia coli and Nisseria species.

- E. colii sensitive to chloramphenicol, trimoxazole resistant to tetracycline and ampicillin.

- Nisseria sp. sensitive to penicillin and chloramphenicol resistant to tetracycline.

(c) Mid stream urine was sterile on culture.

(ii) Serological tests for syphillis were negative

(iii) The haemoglobin level was 11.7 gm per 100 mls of blood.

2. MARSUPIALIYATION:

The preoperative preparations, premedications, preparation of the operation site and general aneesthesia were as detailed in the instroduction.

OPERATION:

The patient was put in the lithotomy position and a 5 cm vertical incision made on the left vaginal side of the hymeneal ring. About 80 mls of thick, yellowish, foul smelling pus was drained off. The edges of the skin and cyst wall were secured with Allis forceps and a series of interrupted sutures of fine cutgut No. 2/0 applied circumferentially at 1 cm intervals. The abscess cavity was left open and dressed with sofratulle.

POST OPERATIVE TREATMENT

1. Antibiotics;

   (a) Crystalline penicilline 2 mu intramuscularly was administered 6 hourly for 24 hours followed by intramuscular injections of P.P.F. 1.2 mu daily for 5 days.

   (b) Chloramphenicol 500 mg three times a day orally for 5 days.

2. Daily eusol dressing on the operated site.

3. Health education on the sourse and spread of venerial diseases, their symptoms and dangers.

4. She was asked to report to the gynaecological out-patient Clinic after one week, but the patient never turned up.

COMMENTARY:

Abscess of the Bartholin's gland is a common cause of emergency admission at Muhimbili Hospital. In 1978 a total of 175 patient were admitted inthe gynaecology wards for this condition.

The Gonoccocus is the probable cause in the majority of cases, though this is not easy to prove. Invariably definitive tratment by surgery has to be instituted before any laboratory results are available. The surgical treatment must ensure ample drainage during the process of healing. It is with this objective that the edges of the abscess are sutured circumferentially with catgut to ensure patency of the abscess cavity during the process of healing by granulation. Mere incision and drainage of the abscess will often be followed by recurrence of the abscess with inconvinience to the patient and necessity for readmission and repeat incision.

Whereas the prevention of gonorrhoea is a difficult problem early and late complications of this venereal disease can be minimised if those affected seek and obtain adequate tratment promptly. The abscence of symptems in most women with gonorrhoeal infection complicates the problem still further.

ABORTIONS IN MUHIMBILI MEDICAL CENTRE

INTRODUCTION

Abortion was the commonest cause of admission in our gynaecology wards and the leading cause of death among the patients in 1977 and 1978.

According to annual reports from the Department of Obstetrics and Gynaecology, abortions accounted for 53.9% of all gynaecological admissions in 1977 and 61.4% in 1978. The work load imposed to the Department of Gynaecology in Muhimbili Medical Centre is further evidenced by noting that incomplete abortions requiring evacuation of the uterus accounted for 71% of all gynaecological operations in 1977 and 65.2% in 1978.

The number of pregnancies which end in abortion as a natural phenomenon is difficult to assess accurately in a community. It is even more difficult to determine the incidence of induced abortions in a country like Tanzania where induced abortions are illegal and a large population of patients are not motivated enough to seek medical care until complications occur.

A study was conducted to establish some of the salient features of abortion as seen in patients at the Muhimbili Medical Centre. The objectives of the study were:-

(a) To find out the incidence of abortion in relation to maternal age, and parity, marital status and previous gynaecologic history.

(b) To establish the possible causation of abortions in Dar es Salaam.

(c) To find out the common complications of abortion in Dar es Salaam.

DESCRIPTION OF THE STUDY

The study which was a descriptive retrospective - prospective (non concurrent of TROHOC) type, involved all women who were admitted to the gynaecology wards with a diagnosis of abortion between 1st September and 31st October, 1980, inclusive.

The patients were referred from various dispensaries in Dar es salaam to Muhimbili Medical Centre casualty before being admitted to the gynaecology wards. In the ward, the patients were first seen by the intern who took a detailed history and performed physical examination of the patient. An initial diagnosis was then made from the clinical findings which was then reviewed by the resident or specialist. Most of the patients who had an incomplete abortion were discharged within 24 hours of evacuation of the uterus. Those who had threatened abortion were observed for up to 5 days for vaginal bleeding, while on bed rest and sedation.

Patients who had repeated early abortions were examined by ultrasonography before or after abortion to detect any anomalies of the ovo-fetus. Those who aborted after 12 weeks of pregnancy had ultrasonography for detection of uterine anomalies.

A haemoglobin was estimated after completion of the abortion or before the patient!s notes and recorded on the Proforma attached on a daily basis (see Appendix A).

RESULTS

Table 1: Maternal age distribution in patients who had abortion in Muhimbili Medical Centre from 1st September and 30th October, 1980

Age (Years)	Number of patients	Percentage
15 - 19	56	25.1
20 - 24	83	36.8
25 - 29	43	19.1
30 - 34	29	12.8
35 - 39	10	4.4
40 - 44	4	1.7
Over 45	0	0.0
T O T A L	225	100.0

The distributionof the patients who had abortion according to age was studied in 225 patients. The age ranged between 15 - 44 years 61.9% of all patients who had abortion were between 15 - 24 years. This reflects the age - population distribution of Tanzania (See Appendix B).

Table 2: Distribution of the 225 patients who had abortion according to parity

Parity	Number	Percentage
0	48	21.3
1	70	31.1
2	30	13.3
3	18	8.0
4	29	12.8
5	13	5.7
6	10	4.4
7	7	3.1

TOTAL	225	100.0

The table above showing the incidence of abortion according to parity, indicates that primigravidae have a high incidence of abortion. The largest group of women who deliver in Muhimbili Medical Centre are second gravidae followed by third gravidae and primigravidae in that order (Kaisi, 1980).

Table 3: Showing the number of previous abortions which the patients had in thes study group

Previous abortion	Number	Percentage
0	172	76.4
1	27	12.0
2	20	8.8
3	4	1.7
4	2	0.8
TOTAL	225	99.7

Most of the patients in the study Group had never had an abortion before. Those who had 2 or more abortions before constituted 11.4% of the 225 patients studied.

Table 4: Gestational age of the abortion in the study group

Gestation in weeks	Number of cases	%	
6 - 8	68	30.2	30.2
9 - 11	49	21.7	
13 - 14	56	24.8	-56.2
15 - 16	22	9.7	
17 - 19	4	1.7	-13.2
20 - 22	26	11.5	
TOTAL	225	100.0	99.6

The duration of gestation, or the menstrual age of the pregnancy as calculated from the last menstrual period to the completion of the abortion in the patients is shown in this table. The last column on the hand shows the gestation in weeks according to 3 categories (Litzenberg, 1921). Two patients who had abortion at 14 and 16 weeks of gestation were found on ultrasonography to have uterine malformations (bicornuate uterus). There were 26 patients out of the 225 patients in the study group who had had two or more previous abortions at the time of admission to hospital. The distribution of these patients according to gestational age is shown in the table below.

Table 5: Gestational age at which abortion occured in the 26 patients who had 2 or more previous abortions

Gestation in weeks	Number	Percentage
6 - 8	13	50.0
9 - 16	11	42.3
17 - 22	2	7.7
TOTAL	26	100.0

Table 6: Clinical types of abortion in Muhimbili Medical Centre between 1st September to 31st October, 1980

Clinical type of Abortions	Number	Percentage
Incomplete	160	71.1
Threatened	46	20.4
Inevitable	10	4.4
Complete	6	2.6
Missed	3	1.3
TOTAL	225	99.8

The various clinical types of abortion according to the diagnosis made at the time of discharge from hospital of the 225 studied patients is shown in the order of frequency in the table above. Two or more diagnoses were sotimes made eg. threatened abortion which later became incomplete. Only the final diagnosis at the time of discharge from hospital was, however, recorded.

Table 7: Marital Status in relation to clinical type abortion in the study group

Clinical type of abortion	Married		Unmarried		
	Number	%	Number	%	TOTAL
Incomplete	115	71.8	45	28.2	160
Threatened	31	67.3	15	32.7	46
Inevitable	8	80.0	2	20.0	10
Complete	3	50.0	3	50.0	6
Missed	3	-	0	-	3
TOTAL	160	71.1	65		225

Married women constituted 71.1% of all patients who had an abortion in the study group. Out of 160 married women who had abortion 23.0% had threatened abortion, while the corresponding percentage in the unmarried group was 19%.

Table 8: Haemoglobin levels in 134 patients who had abortion in Study group

Level of Haemoglobin	Number of Patients	Percentage
Less than 40%	32	14.3
40 - 50%	60	26.6
50 - 67%	23	10.2
Over 67%	19	8.4
Not estimated	91	40.4
TOTAL	225	99.9

This table shows that 40.4% of the patients in the study group didn't have a haemoglobin. Of the 134 patients who had a haemoglobin estimation, 51% had a haemoglobin level below 67% and were considered anaemic.

DISCUSSION

The distribution and incidence of abortion, according to age were studied in 225 patients, the results are shown in table 1. About 25% of the women were of young age (15 - 19 years). The primigravidae were also found to have higher incidence of abortion, Compared to other gravidae. This could be due to a higher incidence of chromosomal abnormalities of embroys in mothers in the extreme age groups.

An attempt was made in this study, to inspect the abortuses with the view of detecting obvious anatomical abnormalities. No abnormality was noted in the few abortuses that were inspected. Patients who came with incomplete abortions did not bring along with them the conceptuses which had been expelled prior to admission. It is evident that in order to have an idea of the role played by chromosomal abnormalities, the public should be educated about the importance of preserving the conceptus for examination on arrival in hospital. Using a magnifying glass or the naked eye one can obtain invaluable information (Exalto, 1976).

As has been stated earlier, patients who had a history of 2 or more previous abortions, and who were admitted with threatened abortion were subjected to ultrasonography in order to detect the presence of a blighted ovum. Three cases of blighted ovum were detected in the study group. The importance of this finding lay in the management of the case, in that bed rest was not prescribed in these patients.

Hormonal imbalance has been blamed for spontaneous abortion in extreme ends of the reproductive periods (Javert, 1957). It is to be expected that such hormonal abnormalities as may be responsible for causing an abortion have their toll in the earliest stages of pregnancy, as they would originate from luteal dysfunction. This is presumed to be the case because the placenta from the early stages produces large amounts of hormones compared to those from the corpus luteum. In this study 50% of patients who had 2 or more previous abortion prior to missing two menstrual periods (i.e. below 8 weeks). These might well be due to hormonal imbalance, and might have benefited from hormonal therapy (progestins) if this was started prior to missing a period (Csapoetal 1973). This is however practically impossible as diagnosis of pregnancy is usually not made before a woman misses her menstrual period.

Induced abortion has been blamed (Lwanga, 1979) to be the main underlying factor of abortion in the younger age group. In this study 5 patients out of the 160 (3.1%) who had incomplete abortion were noted to have evidence of cervical lacerations or tears, indicating a possible attempt to termination of pregnancy. All of the 5 patients were nulliparae, 4 of whom were schoolgirls one was an unmarried typist. Of the 225 patients 8 (3.5%) had symptoms of fever, abdominal pain and pus discharge per vaginum. These patients were in the 15 - 24 year age group.

Induced abortion is a global problem of epidemic proportions and deaths from unskilled abortion play a considerable role in maternal mortality. In most countries undergoing rapid urbanisation and some degree of economic development, the incidence of abortion is increasing.

Of the spontaneous abortions no cause either local or general can be found in more than half the cases.

Uterine haemorrhage and sepsis are the commonest complications of abortion and important causes of death (Donald, 1979). In a study conducted in Mulago Hospital Uganda, (Lwanga 1979), out of the 1377 cases studied, 82 had evidence of infection of the uterus while 137 patients bled excessively as to require at least two units of blood transfusion. Many women suffer years of ill health following an abortion (Donald, 1979) and follow up supervision is therefore important. The patient may have very great difficulty in restoring a normal haemoglobin level. Post-abortion anaemia may reduce her health and efficiency for years to come and may easily prejudice the outlook in a further pregnancy. The detection and correction of anaemia are, therefore, the most important items of after care.

About half of the patients whose haemoglobin was estimated in the study group were anaemic, (a haemoglobin level of less than 67%). Table 8 further shows that about 40% of the patients in the study group didn't have a haemoglobin checked during the hospital stay. While most patients with incomplete abortion stay in the hospital for only 24 hours because of lack of bed space, this period is enough for labortory diagnosis of anaemia. As anaemia during pregnancy is very common in our community, one of the opportunities for its detection and correction is at the time when the patient presents with abortion.