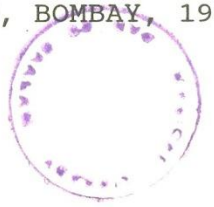
OBSTETRICS AND GYNAECOLOGY CASES AND COMMENTARIES

By

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A DISSTERTATION SUBMITTED IN PARTIAL FULFILMENT FOR THE DEGREE OF MASTER OF MEDICINE (OBSTETRICS AND GYNAECOLOGY) OF THE UNIVERSITY OF DAR ES SALAAM

1992

DECLARATION

I SOLEMNLY DECLARE THAT TO THE BEST OF MY KNOWLEDGE THIS DISSERTATION HAS NOT BEEN SUBMITTED BY ANYBODY AT ANY UNIVERSITY FOR THE AWARD OF ANY DEGREE

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DEDICATED TO MY FATHER PRATAPSINH. RAMAIYA FOR HIS SACRIFICE MY MOTHER INDUMATI FOR HER STRONG EMOTIONAL SUPPORT, MY EVER LOVING & CARING WIFE MINAL, MY BROTHERS DEEPAN & ATUL & MY LITTLE ONE TORAL FOR THEIR LOVE, PATIENCE AND UNDERSTANDING DURING THIS VERY TRYING PERIOD

DR CHETAN P. RAMAIYA

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DR. C.P. RAMAIYA

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DR. C.P. RAMAIYA

ABSTRACT

THIS DISSERTATION IS SUBMITTED AS PART OF THE REQUIREMENTS FO THE AWARD OF THE DEGREE OF MASTER OF MEDICINE (M.MED) OF THE UNIVERSITY OF DAR ES SALAAM.

IT CONSISTS OF THREE PARTS THE FIRST SECTION CONSISTS OF TEN GYNAECOLOGICAL CONDITIONS WHICH ARE IMPORTANT PROBLEMS NOT ONLY AT MUHIMBILI MEDICAL CENTRE BUT OTHER CENTRES AS WELL.

THE SECOND PART COMPRISES OF TEN OBSTETRIC CONDITIONS. THE MANAGEMENT OF ALL THESE TWENTY CONDITIONS WAS DONE ACCORDING TO THE STANDARD MANAGEMENT PROTOCOL. DUE TO LIMITED FACILITIES IN SOME OF THESE CASES FURTHER INVESTIGATIONS COUL NOT BE DONE IN THE MANAGMENT OF THESE PATIENTS.
AFTER EACH PRESENTED CASE THERE IS A COMMENTARY ABOUT IT. RECOMMENDATIONS AS TO THE MANAGEMENT OF SUCH PATIENTS UNDER IDEAL CONDITIONS AND WHEN FACILITIES ARE LIMITED IS DISCUSSEI

PART THREE IS A RESEARCH PAPER ON PREGNANCY INDUCED HYPERTENSION IN PRIMIGRAVIDAE CONDUCTED AT MUHIMBILI MEDICA CENTRE MATERNITY CLINIC. HYPERTENSION IN PREGNANCY IS THE SECOND COMMONEST CAUSE OF MATERNAL MORBIDITY AND MORTALITY NEXT TO ANAEMIA IN DEVELOPING COUNTRIES. THIS IS ALSO SUPPORTED BY FIGURES FROM MUHIMBILI MEDICAL CENTRE. THERE I EVIDENCE SUGGESTING THAT ASPIRIN IN LOW DOSES FAVOURABLY INFLUENCES THE COURSE AND OUTCOME OF PREGNANCY IN PRIMIGRAVIDAE WITH HIGH RISK OF DEVELOPING PREGNANCY INDUCE HYPERTENSION. THOSE AT HIGH RISK OF DEVELOPING PREGNANCY INDUCED HYPERTENSION WERE SCREENED USING THE ROLL OVER TEST

THE ROLL OVER TEST PROVED TO BE OF VALUE IN SCREENING PRIMIGRAVIDAE WHO WILL DEVELOP PREGNANCY INDUCED HYPERTENSION AND THAT ASPIRIN AT LOW DOSES HAD A PROTECTIVE VALUE.

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BARTHOLIN'S ABSCESS

MARSUPIALISATION

Registration No: 661352

Name: Miss Z.S.

Age: 23 years old

Parity : PO+1

Residence: Temeke, Dar es Salaam

Date of admission: 18/6/91

Date of discharge: 20/6/91

SUMMARY

Miss Z.S. was a 23 years old unemployed and umarried woman referred from a peripheral dispensary on account of right sided painful labial swelling over a period of seven days. She had taken various antibiotics without any relief. Examination revealed a right sided Bartholin's abscess. Adequate drainage and marsupialization was done. She recovered uneventfully and was discharged home in good condition.

HISTORY OF PRESENT ILLNESS:

The patient presented with a gradual onset of a painful swelling on the right labia majora which had increased in si over the past seven days. The pain was so severe as to restrict her movements and she just managed to walk with difficulty. This was associated with fever and malaise for the last 4 days. She had consulted a doctor at a local dispensary where she was prescribed oral antibiotics with no relief and was subsequently referred to Muhimbili Medical

Centre. She denied history of dysuria or frequency of urine. There was no history of trauma.

PAST OBSTETRIC AND GYNAECOLOGICAL HISTORY

She had had a spontaneous abortion at about 10 weeks of gestation necessitating uterine evacuation a year ago. She attained menarche at the age of fourteen years had regula menstruation lasting 2-3days in cycles of 26-28 days. She ha no dysmenorrhoea. She had been treated in the past for foul smelling vaginal discharge on two occasions without any investigations. She had experienced superficial dysperunia : the past followed by a similar swelling on the opposite labia which had spontaneously drained at home. She had not taken any subsequent medical help. She had not used any form of contraception. Her last normal menstrual period was a week ago.

FAMILY AND SOCIAL HISTORY

She consumed 3-4 bottles of beer on alternate days. She was unemployed and unmarried residing with her father.

PHYSICAL EXAMINATION:

She was healthy looking, well nourished but in obvious pain. She was febrile with a temperature of 38^{o}C. She was not pal nor jaundiced. She had no lymphadenopathy. Her pulse was 104/min regular and her blood pressure was 130/80mmHg.

The breasts were normal. The cardiovascular and respiratory systems were normal. The abdomen was scaphoid. Liver spleer and kidneys were not palpable.
Pelvic examination revealed a swelling involving the right labia majora 4 x 2 cm warm tender and fluctuant. The opening of the Bartholins duct on the labia minora was easily seen. Inguinal and femoral lymphnodes were not palpable. No areas of ulcerations were noted.

Digital and speculum examination were deferred in view of severe tenderness

PROVISIONAL DIAGNOSIS:

Bartholin's abscess.

Management plan:

With the diagnosis of a Bartholin's abscess, she was prepared for an emergency drainage and marsupialization.

Baseline investigations:

1. Haemoglobin 9.6 grams/dl
2. WBC count was 13,000/mm^3 with a neutrophilia of 8,000/mm
3. ESR was 50 mm at the end of one hour
4. Mid stream urine for culture and sensitivity and microscopy was negative.
5. Pus swab taken from the urethra and endocervix were negative. The pus swab taken from the abscess was cultured positive for Neisseria gonorrhoeae.

6. VDRL and TPHA were negative

Pre operative preparations

1. After discussing with the patient the nature of her problem an informed consent was taken for anaesthesia an surgery.

2. The perineum was washed with soap and shaved.

ANAESTHESIA:

Induction:

She was given 1mg of atropine and 375mg of thiopentone.

Maintanance: She was maintained on a mixture of oxygen and ether with an open mask.

OPERATION:

She was put in a lithotomy position. The perineum was cleane with savlon 1:20 and weak iodine (10%) solution. The perineu was draped using sterile towels. No obvious urethral discharge noted on milking the urethra. Pus swab was collected from the urethral meatus. Bladder was catheterized obtaining 150mls of clear urine which was sent for culture an sensitivity.

A vertical incision was made at the mucocutaneous junction on the most prominent part of the abscess and about 20mls of fou smelling pus was drained under pressure. Pus swab for aerobi and anaerobic culture was taken. Using No. 2/0 chromic catgu the edges of the abscess cavity were everted with an

interrupted suture This enabled a better drainage and preventing recurrence.

An endocervical swab was taken and sent for culture sensitivity. Digital examination revealed a normal sized midline mobile uterus with normal adnexae. The Pouch of Douglas was normal. On rectal examination both parametria were healthy. Blood loss was about 25 mls.

She was observed briefly and recoverd well from anaesthesia and later transferred to the gynaecology ward.

POST OPERATIVE CARE:

1. Her blood pressure pulse and respiratory rate were monitored half hourly and than later four hourly.

2. She received 100mg pethidine intramuscular as a stat dos followed by acetylsalicylic acid tab 600mg four times daily for 3 days.

3. Warm sitz bath containing 1% potassium permanganate crystals, 8 hourly for 24 hours.

On the next day her temprerature was 37^{O}C and she was well. She could walk without much difficulty. There was a serosanguinous discharge on the base of the ulcer. No bleeding was noted. She was discharged home in good conditic with instructions to come back a week later to the gynaecolog outpatient department.

FOLLOW UP VISIT:

She was in good general condition and not in pain. The wound was healing and a scar was also seen on the right labia majora. The opening of the Bartholins duct was not seen. Th pus swab taken for the abcess cavity was positive for Neisseria gonorrhoeae. She was given Cotrimoxazole 1920mg i.e. (4 tab septrin) 12 hourly for 48 hours, along with her sexual consort. She was subsequently discharged from the clinic after counselling on the hazards of sexually transmitted disease and protected sex in view of the more hazardous and fatal acquired immunodeficiency syndrome.

COMMENTARY:

Bartholin's abscess is an acute gynaecological condition deserving immediate attention. The incidence in Tanzania is unknown. It comprised of 2.6% of all gynaecological admissions in the year 1979[5]

The most common organisms being Neisseriae gonorrhoea, E coli and Streptococcus feacalis. Although one should remember it can even be caused in the absence of any causative organisms by the blockage of the duct with inspissated mucous material Gumodoka (1980) found streptococcal faecalis as the commonest offending organism[6].

Optimal management comprises of incising and adequate drainag with marsupialization so as to exteriorize the cavity encouraging healing as was done here. This helps the wound t

granulate from the ulcer crater and prevents recurrence as if it were to drain spontaneously or only incision and drainage is done. In view of the increasing incidence of the Penicillinase producing Neisseria gonorrhoeae (PPNG) strains reported at our Centre and reported elsewhere world wide an alternative antimicrobial was given in the form of Cotrimoxazole. This regime reportedly has consideralby less failure rate at our Centre[7]. The incidence of PPNG strans ha been increasing and about 35% of isolates from patients seen at first level of health care dispensary in Dar es Salaam hav these strains[7]. WHO recommends that penicillin should not be used as a first line for treating gonorrhoea in a community where more than 10% of patients with gonorrhoea have PPNG strains.

This woman had no other clinical manifestations of an ascending pelvic infection however with her existing sexual behaviour she could end up with tubal blockage in future life Being unemployed uneducated and of low socioeconomic status, she may be economically dependent on her male consorts. This vicious cycle can only be broken with adequate counselling ar help from the society at large for a satisfactory alternative employement

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RUPTURED CORNUAL ECTOPIC GESTATION WITH HAEMORRHAGIC SHOCK. LAPAROTOMY, WEDGE RESECTION

Registration No: 631286

Name: Mrs. A.M.

Residence: Mtoni Dar es Salaam

Parity: G_3 P_{2+0}

Age: 25 years

Date of admission: 30/10/90

Date of discharge: 7/11/90

SUMMARY

Mrs A.M. was a 25 years lactating mother G_3 P_{2+0} referred the casualty department of Muhimbili Medical Centre from a peripheral clinic with complaints of sudden onset of dull lower abdominal pain for the past 4 hours which was later followed by shoulder pain and fainting. She had an amenorrh of six weeks. Examination revealed a young sick looking lad She was pale with tachycardia and severe orthostatic hypotension. She had marked abdominal guarding and rigidity and free fluid was demonstrated in the abdomen. Pelvic examination revealed a soft blue cervix. A provisional diagnosis of a ruptured ectopic gestation was made and laparotomy performed. A left sided ruptured cornual ectopic pregnancy was found. Left total salphingectomy with a wedge resection was done. Autotransfusion of 1000ml of blood was done. She recovered well postoperatively and was discharged home in good condition on the 6th postoperative day to the Gynaecological outpatient department.

HISTORY OF PRESENT ILLNESS

Mrs A.M. was a young parous housewife with two living children all delivered normally. Her lastborn was nine month old and was breast feeding regularly.

On the day of admission around noon she experienced a sharp dull pain on the left side of lower abdomen. This was followed by a feeling of dizziness. On attempting to go to the bathroom she fell down and regained conciousness after some time. She was later referred to the casualty department of Muhimbili Medical Centre in shock. There was positive history of amenorrhoea of six weeks.

OBSTETRIC AND GYNAECOLOGICAL HISTORY

She had had two normal deliveries the last child being nine months of age. Her puerperium was uneventful. She was breas feeding normally. She denied any history suggestive of pelvi inflammatory disease in the past. She had resumed her menstrual cycle about two months before and reported a normal flow lasting 4-5 days. Her last normal menstrual period was six weeks earlier. She was not using any form of contraception.

Her past medical history was not contributory. She denied history of TB contact. Her social and family history were unremarkable.

PHYSICAL EXAMINATION

Examination revealed a young sick looking lady in severe pain She had marked palor with cold clammy skin and sweat on the forehead.

Her pulse was 120 per minute regular but low volume with a blood pressure of 80/60mmHg. in supine and 60/40mmHg in sitting position. She had a respiratory rate of 18 - 20/minute and the chest was clear. The heart sounds were normal.

Abdominal findings revealed a distended tender lower abdomen with a dull percussion note in the flanks. Shifting dullness was demonstrated indicating free fluid in the abdomen. Pelvi examination revealed a soft closed cervix. Digitally it was not possible to appreciate the uterus and adnexae due to tenderness and guarding. A provisional diagnosis of a ruptured ectopic gestation was made and the patient prepared for laparotomy immediately.

Baseline Investigations

1. Blood was collected for grouping and crossmatching and 1000mls of compatible blood obtained.

Resuscitation

1. Intravenous fluids, 2000mls of normal saline was administered fast using a No. 16 gauge canula.

2. Head down position by lifting foot end of bed.

Pre-operative preparation:

1. Abdomen was cleaned and shaved with soap and water.

2. A signed informed consent obtained for a laparotomy and she was taken to the emergency operating theatre.

ANAESTHESIA:

INDUCTION

She was induced with ketamine hydrochloride 100mg and a short acting muscle relaxant Suxamethonium hydrochloride 100mg after receiving 0.8mg of atropine. She was intubated with No. 8.5 cuffed endotracheal tube. She was maintained on 2% Halothane and oxygen at 6 litres/minute.

OPERATION

The abdomen was cleaned with savlon 1:20, (10%) weak iodine solution and spirit.

A left paramedian incision was made and the abdomen opened. On reaching the peritoneum a bluish tinge was noted. Massive haemoperitoneum of 1500ml was found. On lifting the uterus out of the pelvis a left sided ruptured cornual ectopic pregnancy was noted. The right tube appeared normal. Both the ovaries were normal in size and appearance. The uterus was about 10 weeks size.

About 1000ml of blood was scooped out and transferred to the anticoagulant bottles containing (acid citrate and dextrose) and subsequently transfused. Using Kocher's forceps serial clamps were applied on the left tube. The tube was subsequently excised. Each stump was stich ligatured using NO. 1 chromic catgut and complete haemostasis achieved. Wedg resection of the cornual end of the ruptured site was carried out followed by a matress suture in the substance of the uterine muscle.

This was followed by peritoneal irrigation using warm normal saline ensuring that all the clots in the Pouch of Douglas, the para-colic gutters and the retropubic space were removed. The abdomen was closed after satisfactory haemostasis and ensuring a correct swab count. Nylon No. 1 was put to rectus and silk No. 0 to skin. She recovered well from anaesthesia and sent back to the gynaecology ward.

POST OPERATIVE CARE

1. IV fluids 5% Dextrose 1000ml alternating with normal saline 1000ml, four litres were given in 24 hours.

2. Intramuscular injection of pethidine 100mg six hourly f 24 hours.

3. 500 mls of fresh blood was given.

4. Her vital signs were monitored half hourly for 6 hours than 1 hourly for 4 hours. When stable monitored 4 hourly.

5. Fluid balance chart was kept and she produced about 1000ml clear urine in 24 hours.

Her vital signs remained normal. She was fully awake and breathing well. She recovered well and was discharged on the sixth postoperative day on haematinics. Her Haemoglobin on discharge was 8.5gm/dl.

FOLLOW UP

She was reviewed again at the gynaecology outpatient six week post operative. She was not pale and had resumed her menstruation. She was counselled for family planning methods and agreed to use oral contraceptives. She was told to report early on missing her periods. She was discharged from the gynaecology out patient department to the MCH clinic.

COMMENTARY

The term ectopic pregnancy is applied to pregnancy following implantation of the fertilized egg on any tissue other than the mucous membrane lining the uterine cavity. It is a potentially life threatening acute emergency. Its incidence varies between 1:300-500 normal delieveries in the literature. Higher incidences are reported in the African population possibly due to untreated or wrongly treated pelvic

infections. At our Centre one encounters at least four to five admissions a week.

Patients almost always report some degree of pelvic and abdominal pain. It may be chronic and dull or sharp and colicky as was in this woman. Shoulder pain is reported infrequently, when present is often accompanied by other sigr of peritoneal irritation, as was present here. There is no menstrual history which by its nature can exclude a tubal pregnancy from the differential diagnosis. Periods of amenorrhoea over twelve weeks may occur in up to 15% of patients, but the same number may have amenorrhoea of less than four weeks. Patients with a recurrent ectopic pregnancy often described accurately that they "feel like before" and this should be taken seriously by the clinician.

The patient is rarely febrile. Hypovolaemic shock resulting from massive intraperitoneal haemorrhage is found in about 5% of patients as was the case here. During speculum examinatic the cervix may look gravid as was noted here, but most often does not. Bimanual examination is described as normal in about 10% of patients. The uterus is enlarged as a generalised response to the gestation. An enlarged tender adnexal structure is recorded in about one third of patients. This is especially significant if palpated seperate from and in between the ovary and uterus. In most cases, however it i not possible to distinguish a potential tubal pregnancy from haemorrhagic corpus luteum or other adnexal pathology. Ther

may be a bulging in the posterior vagina or a doughy or discrete mass palpable in the cul-de-sac.

Making a quick and accurate diagnosis of ectopic pregnancy is desirable, but often difficult. Although many patients initially present severely ill, the clinically stable patient continue to pose a diagnositic challenge. Even if pregnancy can be confirmed by a pregnancy test a viable intra-uterine pregnancy may have an associated haemorrhagic corpus luteum.

One may do a culdocentesis which means a transvaginal needle aspiration of fluid from the posterior culdesac of Douglas. positive "tap" means at least 0.5ml of non clotting blood is aspirated. A negative result means at least 0.5ml of serous fluid is obtained. If no fluid at all is aspirated the test is inadequate. 70% - 90% of culdo centesis performed on patients with an ectopic pregnancy are postive. The haematocrit of this aspirated fluid is usually over 15%. Othe causes for a positive tap include a haemorrhagic corpus luteum, tubal reflux of intra-uterine blood or a previous attempt at culdocentesis, but the haematocrit of the aspirate fluid in these cases is usually less than 15%. A positive ta in conjuction with a positive pregnancy test predicts the presence of an ectopic pregnancy in over 95% patients.
The management plan depends upon the patients desire for future fertility, the status of ipsilateral and contralateral tube.

Operative management continues to be the conventional approac to a tubal pregnancy. As was in this case the contralateral tube was healthy and the desire to have more children present so a total salphingectomy with wedge resection of the cornual end was done. Wedge resection enables as much as residual trophoblastic tissue to be removed. The incidence of a repea ectopic pregnancy is reported in about 13% of patients. The mother was instructed to report immediately on skipping her period so as to confirm or rule out an extrauterine pregnancy She was counselled to use family planning to space her family and she settled with oral contraceptive pills.

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CARCINOMA CERVIX STAGE IB.

CURATIVE DOSE RADIOTHERAPY

Registration No: 624289

Name: Mrs S.R.

Age: 50 years

Parity: P8+1

Residence: Magomeni, Dar es Salaam

Date of admission: 11/4/91

Date of discharge: 12/5/91

SUMMARY

Mrs S.R. was a 50 years P_{8+1} post-menopausal woman referred t the gynaecology outpatient department at Muhimbili Medical Centre on account of post coital vaginal bleeding for a year which was later followed by foul smelling vaginal discharge for about 6 months.

Examination revealed a small exophytic growth of less than 3 centimetre diameter involving the cervix and bleeding easily on touch. The vaginal wall was healthy with a normal uterus and adnexae. Bimanually both the parametria were free of tumor. Punch biopsy of the tumour mass revealed on histology a Large Cell Nonkeratinizing Squamous Cell Carcinoma of the Cervix uteri. She was referred to the radiotherapy unit where she underwent curative dose of radiotherapy. On the final evaluation she had no evidence of tumour on the cervix. She was subsequently discharged and was reviewed after 12 weeks later with no clinical evidence of tumour recurrence.

HISTORY OF PRESENT ILLNESS

Mrs S.R. was well till an year ago when she noticed worrisome post coital vaginal bleeding for which she sought help at a local dispensary where she was prescribed antibiotics with apparently temporary relief. Six months later she experience foul smelling vaginal discharge for which she changed her underpants four to five times daily. There was no associated dysuria or haematuria.

OBSTETRIC AND GYNAECOLOGICAL HISTORY:

She attained menarche at the age of 13 years had regular menstruation lasting 5-6 days in cycles of 26-28 days. She had no such symptoms as vaginal discharge dysmenorrhoea or dysperunia before onset of this illness. She was married at the age of sixteen and had her first baby at 17 years. She was remarried after her fifth baby as the previous husband died of an unknown illness. She had never used any contraceptive methods. She was menopausal for the past three years.

She had eight full term normal deliveries with an uneventful puerperium. She had a spontaneous abortion at about 14 weeks gestation which necessitated uterine evacuation.

FAMILY AND SOCIAL HISTORY:

She was a housewife staying with her husband. There was no history of tuberculosis in the family.

'HYSICAL EXAMINATION:

;he was of average built and healthy looking. She was not in)ain. She was not pale nor jaundiced and had no enlarged .ymph nodes. There was no oedema of her lower extremities. 3reasts were normal looking with no palpable lumps or axillar 1odes. Cardiorespiratory systems were unremarkable. Her :esting pulse was 80 per minute. Her blood pressure was 130/80mmHg. Abdominal examination was unremarkable. The Liver, spleen and kidneys were not palpable. There was no ascites. No other abdominal masses were felt.

?elvic examination revealed a normal vulva with an obvious foul smelling yellowish discharge from the vagina. Speculum examination revealed normal vaginal mucosa with an obvious exophytic fungating mass on the cervix of about 2-3 centimetres in diameter, bleeding easily on touch on the posterior lip of the cervix. The anterior lip seemed well preserved. The external os was partially visible. The adjacent forniceal mucosa were not involved.

Digital examination revealed no obvious discharge on milking the urethra. The cervix was friable but firm and bulky. The uterus was normal sized in midline and there were no palpable adnexal masses. Bimanually the parametria were soft and non tender. The utero-sacral ligaments were free of any masses. The rectal mucosa was smooth.

A punch biopsy was taken which at histology revealed an invasive large cell non keratinizing squamous cell carcinoma of the cervix uteri.

FINAL DIAGNOSIS:

Stage IB (FIGO) Large Cell Nonkeratinizing Squamous Cell carcinoma of the Cervix uteri.

After discussing with the patient the nature of her problem she was worked up for curative dose radiotherapy.

MANAGEMENT PLAN:

Base line investigations

1. Haemoglobin level: 10.2gm/dl.
2. Full blood picture was within normal limits with a normochromic normocytic film.

3. Mid stream urine for microscopy and culture was normal.
4. Serum creatinine was 75umol/litre within normal range.
5. Xray chest was normal.

6. Pelvic and abdominal ultrasound: revealed a bulky cervix of 35mm x 45mm with a normal sized uterus. Adnexae were normal. Both the kidneys were normal sized and the live was normal. There were no para aortic nodes seen and nc ascites.

She had the following plan for radiotherapy:

A. Initially external beam radiation for total of 24 grays. This was for the lower abdominal and pelvic lymph nodes; along with the growth. This would be followed by,

B. Intracavitary radiotherapy for a total of 40 grays. Thu making a total dose of 24+40=64 grays with a curative intent.

With the above workup she started off by receiving external beam radiation using the THERATRON cobalt 60 machine. She received a daily dose of 2 grays for twelve days making a total dose of 24 grays via anterior and posterior opposing fields of 15 cm x 15cm square centred 2cm above the pubic symphysis. She tolerated the radiotherapy well.

At interim evaluation after completing the teletherapy she wa noted to be healthy with no signs of dehydration. She was nc pale nor jaundiced.

Speculum examination revealed a smooth healthy vaginal mucosa with some granulation on the posterior lip of cervix of less than a centimetre. The cervical os was well visualized.

It was not bleeding on touch Bimanually both parametria were soft and not indurated. The uterus was normal sized with normal adnexae. This was a very good response to the externa beam. Thus she was a planned for brachytherapy, (intracavitary).

The Buchler intracavitary radiotherapy machine houses a caesium 137 isotope which is electronically remote after loaded through a single uterine tandem. She was put in a lithotomy position after emptying her bladder. Under aseptic

conditions after exposing the cervix with a Speculum it was grasped with a tenaculum and the uterine cavity sounded. The utero cervical length was 5cm. The internal os. was dilated to Hegars no 6 easily. The appropriate intracavitory applicator was selected. After measuring the vaginal length an assembly of the applicator and teflon vaginal cyclinder wa inserted in the vaginal canal. Depending on the patients anatomy and the pattern of cervical growth a dose distributic programme is selected and dialled into the machine control panel. The same programme is executed by the machine electronically by variable oscillation of the caesium source in the tandem. The typical dose delivered at point **A** was 85(rad per insertion. Each insertion lasted for 38 minutes. Sh received five such doses at weekly intervals on outpatient basis, making a total of 850 x 5 = 4250 rads or 42.5gray.

The final evaluation done a month later was quite remarkable. She was in good general condition and had gained weight Speculum examination revealed a smooth vaginal mucosa with nc discharge or bleeding. Uterus was atrophic. The vaginal mucosa was normal looking and the vagina admitted two fingers It had a depth of about 9cm and width of 4cm. It was not easily stretchable. Bimanually both the parametria were fre of tumor masses.

She was discharged home to come again after 12 weeks for follow up. At the first follow up she was in good general condition. There were some adhesions between the portio, posterior lip and vaginal mucosa. The cervix had no tumor

masses. There was no ulceration noted. No discharge or bleeding noted. Both parametria were soft and free of masses No abdominal masses were palpable. There was no ascites The lymph nodes were not palpable. Thus there was no evidence of recurrence. She was advised to come again after 12 weeks for further follow up for a duration of 1 year and later at 6 months interval for five years.

COMMENTARY:

Cervical cancer is the commonest malignancy seen at the Muhimbili Medical Centre[1]. We see about 300 to 350 new cervical cancer patients every year at the Muhimbili Medical Centre the main referral hospital in Tanzania. The typical cervical cancer patient in Tanzania is a rural peasant, overwhelming lacking substantial formal education aged from 35-45 years, and has lived through six to seven pregnancies as was present in this case. There is striking contrast in the occurrence of cervical cancer in the Developing and Developed Countries where health education as well as back up facilitates are readily available for the effective screening by the Pap smear technique in asymptomatic women. The most important risk factor is now generally regarded as early age at the time of first sexual intercourse and multiple sexual partners[1]. Such women should never be missed for screening. There seems a strong correlation between infection with Human papilloma virus eg (HPV type 16 and 18) of the cervical epithelium and subsequent development of cervical dysplasia.

Irregular vaginal bleeding and discharge are the most common presenting complaints as was in this case. Disease symptoms had been present for 6 months to 1 year. Small tumour volume like this one of 3cm in most studies have been reported to have a better outcome as was the case here. About 85% of cervical carcinomas are squamous cell as was the case here. This was a Large Cell Nonkeratinizing type which is reputed t carry the best prognosiss while the Small Cell Nonkeratinizin tumour has the lowest 5 year survival rate.

There are two effective methods of treatment for the stage IE cancer of the cervix. Radical hysterectomy and node dissection or radiotherapy. The five year survival rate of cervical cancer by this operation (Wertheims) is as a good as with irradiation in Stage I disease. The modality of treatment chosen here was radiotherapy.

In the treatment of cervical cancer both external and intracavitary radiation are generally used. As a general principle external radiation of the pelvis is emphasised as was done in this case. Squamous cell carcinoma clinically confined to the cervix involves the regional pelvic lymph nodes in 15-20% of patients[3].

In the Radiotherapy unit at our Centre in 1987 a total of 128 evaluable patients were treated by the intracavitary programm with curative intent. Of the group 37 were in stage I, 70 in stage II, 21 in stage III. Evaluation of disease status at the conclusion of radiotherapy showed that 74 were complete

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SERTOLI LEYDIG CELL TUMOR OF THE OVARY (ARRHENOBLASTOMA)

PALLIATIVE SURGERY FOLLOWED BY CHEMOTHERAPY

Registration No: 624288

Name: Miss R.K.

Age: 28 years

Parity: Nullipara

Residence: Iringa Region

Date of admission: 10/7/90

Date of discharge: 12/9/90

SUMMARY

Miss R.K. was a 28 years unmarried nullipara who was referred at the gynaecology outpatient department from a peripheral hospital with symptoms of excessive hair growth and a slowly growing abdominal swelling over the past one year.

Examination revealed features of hirsutism masculinizing external gentalia (Virilism) with a lower abdominal swelling. A provisional diagnosis of a virilizing ovarian tumour was made. Laparotomy revealed stage I C (FIGO) right sided ovarian tumor. A right sided salphingooopherectomy with omentectomy was done. She was put on Cyclophosphamide post operatively for a total of five courses. Histology revealed the diagnosis of an undifferentiated arrhenoblastoma. She wa discharged home in good condition.

HISTORY OF PRESENT ILLNESS

She had noted unusual excessive hair growth over the face and extremities for a period of one year. Six months later a

deepening of her voice was noted by her family members. A month before she came to Dar es Salaam she noted a sudden onset of distension of her abdomen which gave her difficulty in breathing. This necessitated tapping of the abdominal fluid on admission to the ward. There was no history of cough, chest pain or fever. She had no history of tuberculosis in the past.

GYNAECOLOGICAL HISTORY

She attained menarche at the age of thirteen and had regular menstruation lasting 4-5 days in cycles of 26-28 days. She had no symptoms of dysmenorrhoea or dysperunia. At the age o 23 years, she noted periods of amenorrhoea of 3-4 months with no pregnancy symptoms. There was no associated galactorrhoea, blurred vision or headache. She underwent dilatation and currettage (D & C) procedures thrice for this disturbing symptom with no relief. At the age of 27 years sh had a bout of heavy vaginal bleeding lasting for a month and was subsequently managed with combined contraceptive pills with good effect. She had not used any form of contraceptior in the past except for the above pills.

Past medical history was not contributory.

FAMILY AND SOCIAL HISTORY:

She was a third born in a family of seven with 3 sisters and four brothers. All were well.

PHYSICAL EXAMINATION:

She was a young lady with marked orthopnoea. She was not pale, not jaundiced nor wasted. The inguinal, supraclavicula and axillary lymph nodes were not palpable. There was no oedema of the lower extremities.

Hirsutism was evident on the face chin, abdomen and lower extremities. The breasts were flattened. The overlying skir and nipples were normal. No discharge was noted on squeezing

The thyroid gland was normal size. The pulse was 94/min regular and the blood pressue was 110/70mmHg Jugular venous pressure was normal. There was marked tachypnoea. The trachea was central. The heart sounds were normal with no murmurs. No basal crepitations were noted. Abdominal findings revealed a markedly distended abdomen with an everte umbilucus. There were no distended veins. A dull note was demonstrated in the flanks with shifting dullness and an ill defined mass was arising from the pelvis of about 30 weeks gestation with restricted mobility. Pelvic examination revealed an enlarged clitoris and nornal vulva. Speculum examination revealed healthy vaginal walls and a nulliparous pink cervix.

Digitally the cervix was firm and closed. Exact uterine size could not be assesed, due to ascites. The pouch of Douglas was empty and no hard nodules were felt.

PROVISIONAL DIAGNOSIS

With above history and physical findings a diagnosis of virilising ovarian tumor was made.

Management plan:

Baseline investigations

1. Haemoglobin 11.0graml/dl

2. Full blood picture showed a normochromic normocytic film

3. Mid steam urine for culture and sensitivity was negative

4. Serum creatinine was in normal range 79 umol/litre.

5. Ascitic fluid obtained during tapping revealed a straw coloured clear fluid. A cell cytology revealed hyperchromatic features with altered nuclear cytoplasmic ratio. No pus cells or AFB were seen.

6. X ray chest showed no pathology

7. Ultrasound scan revealed a multicystic lesion with ascitic fluid in the abdominal cavity. The tumor mass had some echogenic areas.

8. Serum alphafoetoprotern was negative.

9. Carcino embryonic antigen was negative.

10. Serum androstenedione levels were within normal limits.

Samples for 9 and 10 were sent overseas for analysis.
She was informed fully about the nature of her problem and a
informed consent was taken for a laparotomy.

PRE OPERATIVE PREPARATIONS:

1. Blood grouping and crossmatching was done and 1000mls of
compatible blood was ready.

2. Informed consent was taken.

3. Abdomen was cleaned and shaved with soap and water.

4. A soap enema was given the evening before operation.

ANAESTHESIA:

INDUCTION: She was given 1mg atropine 375mg thiopental, 100m
suxamethonium and intubated using a 7.5mm cuffed endotracheal
tube.

MAINTANANCE:

She was maintained on 1% halothane and 6 litres of oxygen/mir

OPERATION:

Abdomen was cleaned with savlon 1:20 and a weak iodine
solution (10%) and spirit.

Abdomen was drapped with sterile towels. Abdomen was opened by a left paramedian incision in layers. Laparotomy revealed a large quantity of straw coloured ascitic fluid. After sucking about six litres of ascitic fluid a large right sided solid ovarian tumor measuring about 26 x 20 x 6 centimetres, whitish yellow in colour with omental adhesions to the capsule was noted. The capsule of the tumor ruptured during mobilization. Soft pinpoint nodules measuring 1 to 2mm were found in the pouch of Douglas and over the rectum.

The uterus, left ovary visceral and parietal peritoneum were normal. The liver both leaves of the diaphragm together with the para aortic nodes had no evidence of tumor deposits. With the above findings she was staged as IC by the FIGO classification.

A right sided salphingo oopherectomy with omentectomy was done. No attempt was made to strip off the nodules from the pouch of Douglas and rectal peritoneum. The specimen was submitted for histology. The results confirmed diagnosis of an undifferentiated arrhenoblastoma.

She was observed briefly in the recovery room and later transfered to the gynaecology ward.

POST OPERATIVE CARE:

1. Her blood pressure, pulse and respiratory rate were monitored half hourly till they were stable than four hourly. They remained stable.

2. Intravenous 1000ml normal saline alternating with 5% Dextrose were given 3 litres in 24 hours.

3. Injection Pethidine 100mg intramuscular six hourly for 2 hours.

4. Injection Ampicilin 500mg intravenous six hourly for 48 hours.

5. A fluid balance chart was kept. She produced 1300mls of clear urine in 24 hours.

6. Adjunctive chemotherapy was started in the form of Cyclophosphamide in the dose of 150 mg daily for five days. She subsequently had five such courses. The interval between the courses being ten days.

She convalesced well. The sutures were removed on the tenth day in view of delayed healing in malignant states. The woun had healed well. She had no detectable ascites.

Ten days following the last dose of the 1st course of chemotherapy, she had the following haematological, renal, and hepatic profiles.

1. Haemoglobin : 9.0gram/dl
2. Platelet count: 125,000/mm^3 within acceptable range.
3. Red cell morphology: microcytic hypochromic film.
4. Serum creatinine was 90umol/dl within normal range.

5. SGOT and SGPT: 140 IU and 80 IU karmen units within normal range.

The above parameters were within acceptable range. Thus a second course of chemotherapy was resumed. Her histology report was ready by the tenth day and she was discharged to come back after 10 days. Omentum was free of any pathology on histology. She had regular haematological, renal and hepatic profiles after each course of chemotherapy. They remained in normal range. She did not lose hair from the scalp but had develop chelitis and stomatitis.

FOLLOW UP

She had resumed her mensus a month after surgery. The hirsutism was reduced. She had no palpable abdominal masses or ascites. Her haematology renal and hepatic parameters were within normal range. Speculum examination revealed a normal cervix and vaginal mucosa. Digitally the cervix was firm and closed, the uterus was normal sized in midline rather fixed. The adnexae and pouch of Douglas were free of any palpable masses. She was followed up as an outpatient, monthly for six months . She subsequently decided to go back to Iringa region. During the last follow up her breasts and skin texture were well developed. Her voice had the same tone and she was menstruating regularly.

COMMENTARY:

Sertoli Leydig cell tumors (SLCT) are sex cord tumors that exhibit a testicular direction of differentiation and were originally designated by Meyer as Arrhenoblastomas. The rarity of these tumors make it difficult for any one centre t examine a large series of cases in a uniform manner. These tumors account for about 0.2% of all ovarian tumors.

Young and Scully in their series of 207 cases found that the patients ranged in age from 2-75 years and about 75% of them being under 30 years of age as was the case here. A third of their patients presented due to unequivocal evidence of androgen excess while most of the remainder complained of an abdominal swelling and pain. This patient had features of androgen excess with features of hirsutism, virilisation together with an abdominal swelling. Laparotomy findings of stage I were in consistence with studies of Young and Scully. They found 97.5% of tumors as stage I and in about 1.5% of cases, the contralateral ovary was involved. The gross appearance of (SLCT) is typically yellowish and lobulated wit tumor size varying between 25 x 20cm as seen in previous series. 54% of these tumors were undifferentiated as in this case. Jeffocoate describes that menstruation soon resumes after excising the tumor as was noted here. He also noted reversal of hirsutism and virilising signs with return of breast tissue as was also noted here. Four of his cases had conceived after surgery.

Optimal treatment for ovarian malignancy is resection of the primary tumor as much as possible along with total abdominal hysterectomy, bilateral salphingo oopherectomy, and Omentectomy[5]. Some authors in specialized centres were facilities are available have recommended extensive tumor debulking of the involved organs such as bowel resection, bladder refashioning ureteric transplantation etc with an aim of leaving less than 1-2cm of residual tumor volume. This extensive surgery along with adjunctive chemotherapy have achieved better results in good Centres[5] Since she was a nullipara with a reproductive desire and in view of special surgical techniques required to strip off the nodules for the pouch of Douglas a conservative approach was favoured. Here the author did a palliative surgery and did not attempt removing the nodules from the rectum and Pouch of Douglas. The unavailability of tumor markers at our Centre such as Ca-125 antigen and limited availability of Chemotherapy it was rather difficult to judge the number of courses of Chemotherapy Combination Chemotherapy in good Centres has a better outcome. So only five courses were instituted. Since these tumors exhibit a wide range of patten and their differential diagnoses inlcudes other primary and metastatic ovarian tumors, these problems have made it difficult to collect reliable data concerning prognosis[1].

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SECOND DEGREE UTERO-VAGINAL PROLAPSE WITH CYSTOCOELE AND RECTOCOELE.

VAGINAL HYSTERECTOMY WITH ANTERIOR COLPORRHAPHY AND POSTERIOR COLPOPERINEORRHAPHY.

Registration No: 683170

Name: Mrs H.H.

Age: 56 years

Parity: P 8 + 0

Residence: Iringa

Date of admission: 4/12/91

Date of discharge: 10/12/91

SUMMARY

Mrs H.H. was a fifty six years, menopausal, para eight woman referred from Iringa on account of a protrusion of a mass through the vagina over a period of a year. She had no urinar symptoms. Examination revealed a second degree utero vagina prolapse with a healthy looking elongated cervix. She was worked up for surgery including a normal Pap smear and norma renal function. She underwent a vaginal hysterectomy with a Kelly's suture and an anterior colporrhaphy along with a posterior colpoperineorrhaphy. She recovered well and was discharged in good condition on the sixth day postoperative with good urinary and bowel control.

HISTORY OF PRESENT ILLNESS

The patient first noticed something coming down the vagina o lifting heavy objects, coughing or straining on daefecation,

ten years ago. Initially the swelling would spontaneously reduce at rest, but at the time of admission it remained at the vulva but was manually reducible. This was associated with marked backache and occasionally with vaginal discharge There was no urinary incontinence on straining but she could not hold on to the urine for a long time. She had had a significant bacteruria and was treated in Iringa with antibiotics. She denied history of chronic cough in the past

PAST OBSTETRIC AND GYNAECOLOGIC HISTORY

She had had eight normal deliveries. Her babies weighed between 3.5-4kg. The last one being fourteen years of age. There was no history of difficult labours. There was no history of pelvic surgery.

She attained menarche at the age of thirteen years and had regular menstruation lasting for 3-4 days, in cycles of 26-28 days. She had no dysmenorrhoea, dysperunia or contact vagina bleeding.

FAMILY AND SOCIAL HISTORY

She was a housewife staying with her husband. She did not smoke. She had no member in her family with a similar problem.

PHYSICAL EXAMINATION:

An upper middle aged lady in good nutritional status. She wa not pale nor jaundiced. Her pulse was 78/min regular good volume and blood pressure was 130/80mmHg with a normal

jugular venous pressure. Cardiovascular and respiratory status were unremarkable.

Abdominal examination revealed no obvious masses or free fluid. Hernial orifices were normal. Liver, spleen and kidneys were not palpable. After making her walk for about 5 minutes a pelvic examination in the lithotomy postion reveale normal vulva with partial keratinization of prolapsed atrophi vaginal walls.

The cervix was elongated but healty looking, lying outside th vagina. There were no decubitus ulcers noted. One could not reach above the fundus of the uterus. There was no leakage o urine noted with a full bladder on straining in the erect position. No enterocoele was noted on examining in the Sims position.

There was an obvious cystocoele noted and small rectocoele. The tone of the anal sphincter was normal with normal parametria. There were no pelvic masses noted. The tone of the perineal body was rather poor. A Pap smear for cytology was done.

DIAGNOSIS

Second degree uterovaginal prolapse with an associated cystocoele and rectocoele.

MANAGEMENT PLAN:

Baseline investigations

1. Haemoglobin level: 12.0gm/dl
2. Midstream urine for microscopy, culture and sensitivity showed no growth
3. X-ray chest was normal
4. Serum Creatinine was 80 umol/litre, within normal limits
5. Pap smear was normal
6. Intravenous urography could not be done due to logistic reasons.

After discussing with the patient the nature of her problem a decision to do a vaginal hysterectomy with colporrhaphy and posterior colpoperineorrhaphy was made.

PRE-OPERATIVE PREPARATIONS

1. Blood grouping and cross matching was done and 1000mls c compatible blood obtained.

2. The abdomen and perineum were cleaned with soap and shaved in the ward.

3. A signed informed consent was obtained for vaginal hysterectomy and anterior colporrhaphy and a posterior colpoperineorrhaphy.

4. A soap enema was given in the evening before the operation

ANAESTHESIA

She was given a spinal anaesthesia using 2mls of 5% lignocain which was injected under aseptic conditions between L3 and L4

She was sedated using diazepan 10mg and pethidine 100mg intravenously. She tolerated the anaesthesia well.

OPERATION:

The perineum, vagina and the prolapse were cleaned using savlon 1:20 and a weak iodine solution. The bladder was catheterized and about 50mls of clear urine obtained.

A second degree uterine descent was noted with an associated cystocoele and rectocoele. There was no evidence of an enterocoele. No other pelvic pathology was noted.

The labia minora were retracted and held by sutures which wer fixed on the skin of the thighs. The cervix was then held by means of a volsellum and pulled down. Ten mls of 1:100,000 adrenaline was injected underneath the vaginal skin on the anterolateral aspects of the cervix and near the bladder. A semi circumferential incision was made a centimetre away from the anterior lip of the cervix on the anterior vaginal wall. Then a vertical incision was made (about 1cm) from the external urethral meatus down to the semicircumferential incision. The flaps of the vaginal skin were then dissected away off the anterior aspect of the cervix by means of McIndo scissors cutting close to the vaginal skin, with the concavit of the scissors towards the skin. After adequate exposure ha

been made a metallic catheter was inserted into the bladder whose limits were then defined. An incision was then made about a centimetre below the lower limit of the bladder cutting the cervico vesical ligament in the midline. Using blunt dissection, the bladder was pushed off from the cervix. The vesico uterine fold of peritoneum was then identified and clamped with two forceps and opened transversely and a stay suture was applied. The semicircumferential incision was now completed and midline, vertical incision was made posteriorly

The vaginal skin was dissected away posteriorly from the cervix and the peritoneum in the pouch of Douglas was identified, opened transversely and a stay suture was applied The finger was inserted into the peritoneum through the anterior opening and the uterus was hooked out into the vagina.

Using Victor Bonneys technique hysterectomy done and respective pedicles were transfixed as follows.
Proceeding in the retrograde direction the utero sacral ligaments were double clamped with Kochers forceps cut and transfixed using No 1 chromic catgut on each side. Then the cardinal ligaments on both sides were clamped cut and transfixed. The uterine arteries at the level of the interna os were similarly clamped, cut and similarly transfixed on each side. The tubes round and ovarian ligaments were similarly relieved and the uterus was delivered out. Peritoneum was closed and the stumps extraperitonized. The vaginal mucosa was trimmed accordingly and the bladder was

pushed up behind pubic symphysis and kelly's suture applied t the pubocervical fascia using No 1 polyglycolic acid (PDS) interrupted sutures. The redundant vaginal mucosa of the posterior vaginal wall was similarly trimmed away. Levator muscles were similary approximated posteriorly in midline wit no 1. polyglycolic acid (PDS) interrupted sutures. The vaginal mucosa was approximated anteriorly and posterioly wit no 2/0 PDS polyglycolic acid. Two fingers could easily be introduced in the vagina.

Satisfactory haemostasis was achieved. A vaginal gauze was left in situ to be removed six hours later.
An indwelling Foley's catheter kept in the bladder for two days. Estimated blood loss was 200 mls.

She recovered well from anaesthesia and after a brief observation in the recovery was transferred to the gynaecological ward.

POST OPERATIVE CARE:

1. Her blood pressure pulse and respiratory rate were monitored half hourly till stable then four hourly. The remained stable.

2. Intravenous fluids 5% dextrose (1000mls) alternating wit normal saline 1000mls, 3 litres were given in 24 hours after which oral fluids were started.

3. Intramuscular pethidine 100mg six hourly for 24 hours.

4. In view of the potential for infection the following antibiotics were instituted.

(a) Injection Ampicillin 500mgs intravenous six hourly for 2 hours followed by oral capsule for five days.

(b) Injections chloramphenicol 500 mg intravenous six hourly for 24 hours then orally for five days.

5. A fluid balance chart was kept she produced 1200mls of clear urine in the first 24 hours.

She fared well and was ambulant on the second day to be discharged on the 7th day post operative. She had normal urinary control on discharge. Catheter specimen of urine for microscopy, culture and sensitivity was negative at discharge

FOLLOW UP:

She was seen four weeks later in good general condition. She had no vaginal discharge nor had experienced vaginal bleeding There was no history of urinary incontinence. Speculum examination revealed a well healed vault. Vaginal walls had healed well. There was no evidence of vault haematoma or abscess. The vagina was capacious easily admitting two fingers and about 5-6 centimeters deep. Her midstream urine for culture was negative. She was subsequently discharged from the clinic to the local hospital in Iringa.

COMMENTARY

Uterine prolopse refers to the descent of the cervix and uterus along the axis of the vaginal canal. In order to descend the uterus becomes slightly retroverted to lie in the axis of vagina.

Congenital or developmental weakness of supports is most important of all factors and it operates in multiparous as well as nulliparous prolapse. It may explain why prolapse often follow easy rather than difficult labours. Sometimes during the examination of a young nulliparous woman, it will be noted that the vaginal wall is atonic and that uterine supports are weak, it is then possible to foretell that, if she ever has a baby she may develop a prolapse.

The clinical factors concerned in the aetiology of genital tract prolapse are well recognized to be the damage sustained in pregnancy and the weakening of pelvic floor muscles seen a menopause. Measurements of urethral closure forces show a marked reduction after vaginal but not after abdominal delivery. EMG and histochemical studies in patients with the descending perineum syndrome and facecal incontinence has shown evidence of partial denervation of the pelvic floor and the anal sphincter. Smith (1985) in a large study of women with genital tract prolapse has shown by histochemical and EM technique that in these women the levator ani is partly denervated. This could be an important event predisponding t prolapse in this particular woman. In 95 percent of prolapse cases the patient is multiparous and the implication is that

childbearing is an important causal factor. The part played by childbirth should not be over emphasized.

The amount of discomfort and inconvenience experienced by the patient is extremely variable. Some women suffer from complete procidentia for many years without being seriously incapacitated and without having to restrict their activities On the other hand some women complain bitterly when they suffer only a moderate degree of uterine or vaginal descent a was seen here. The difference may in part be explained on th basis of resistance offered by the supporting ligaments. Little resistance as seen in gross uterovaginal prolapse mean little discomfort. Urinary symptoms depend on descent of anterior vaginal wall and displacement of urethra and bladder The patient finds it difficult to empty the pool of urine in large cystocle and the more she strains the greater the difficulty. Thus when she relaxes at what she believes is th completion of the act she has a desire to pass urine again immediately as was the case here.

Some sort of surgical procedure is nearly always the best treatment for established prolapse but is only necessary if the condition is causing symptoms or intefering in the womans activities as was the case here. In assesing and correcting general health of the patient before operation particular attention should be paid to the urinary system. Urinanalysis including bacterial culture and serum creatinine levels are essential in all cases as was done here. If found the urinar tract infection be eliminated lest it shows an exacerbation

postoperatively. If the vaginal walls are senile and atrophi as was found in this one some workers have administrered low doses of oestrogens orally or in the form of creams locally t improve healing, 2-3 weeks before surgery. This is thought t improve local vascularity and hence promotes healing. Howeve this is controversial and no controlled studies have so far been done to prove its value.

The choice of suture material is important. Since a fibroblast takes 120 days to mature many authors view that catgut could be an inappropriate suture material to hold together the reconstructed genital tract supports, in view of the potentially infected tissues. The author used polyglycolic acid (PDS) which is absorbed after 150 days for reconstructive surgery, restricting catgut only for the vaginal epithelium.

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diaphragm were normal, with no palpable para aortic lymph nodes. No ascites was noted. She recovered well from anaesthesia and made good post operative recovery. She was discharged home in good condition to the outpatient clinic. Follow up at six weeks, 3, 6 and 9 months revealed no evidenc of tumor recurrence locally at the vault or systemically.

HISTORY OF PRESENT ILLNESS

Mrs H.Z. was well till nine months ago when she started experiencing scanty vaginal bleeding. The bleeding was associated with backache and lower abdominal discomfort. There was no associated vaginal discharge or post coital bleeding. She denied any substantial weight loss, cough, urinary or bowel symptoms.

OBSTETRIC AND GYNAECOLOGICAL HISTORY

She attained menarche at the age of fourteen had regular menstruation lasting for 4-5 days in cycles of 26-28 days. She had no dysmenorrhoea, vaginal discharge or dysperunia.

She was postmenopausal since last eight years. She had not used any form of contraception. During the first six months of her menopause she had experienced episodes of hot flushes, insomnia, anxiety and irritability. These were markedly reduced an year later. She had taken some sedatives for the above symptoms. She was not given any form of hormonal therapy. She had a single full term normal delievery about fourty years ago.

PAST MEDICAL HISTORY

She had no history of diabetes in self or in family. She was hypertensive since the last 10 years.

PHYSICAL EXAMINATION

She was an obese woman who looked younger than her age. Her skin was smooth in appearance for her age. Breasts were not atrophic, and were normal looking. No obvious lumps were noted. She was neither pale nor jaundiced. Supraclavicular, axillary and inguinal lymph nodes were not palpable. Her bloo pressure was 200/110mmHg. with a pulse of 90/min regular and normal volume. Jugular venous pressure was normal. Her cardio-respiratory status was unremarkable. The liver, splee and kidneys were not palpable. The uterus was just palpable about 14 weeks size non tender and mobile.

Pelvic examination revealed a normal looking vulva and vagina Speculum examination revealed well oestrogenised vaginal mucosa normal fornices and normal looking healthy cervix. Digitally the cervix was firm and closed with no areas of irregularity. The uterus was of fourteen weeks size, midline mobile and non tender. The pouch of Douglas was clear, there were no nodules felt. Per rectal examination revealed health parametria. A Pap smear was taken.

PROVISIONAL DIAGNOSIS

1. Endometrial carcinoma with hypertension
2. ? Endocervical carcinoma
3. ? Endometrial polyp

After discussing with the patient the nature of her problem ar informed consent was taken for a fractional curettage.

MANAGEMENT PLAN

1. Haemoglobin 11.8 gram/dl.
2. Full blood picture was within normal limits, normochromi film.
3. Midstream urine for culture and sensitivity showed no bacterial growth.
4. Blood glucose profile, with oral glucose tolerance test was within normal range, 6 m.mol/litre at 1 hour and 4 m.mol/litre at 2 hours.
5. Serum creatinine was 79 umol/litre within normal range.
6. Electrocardiogram was within normal limits for her age.
7. X-ray chest showed no obvious cardiac pathology. Lung fields were clear.
8. Serum Electrolytes were within normal range. Serum sodium 142meq/litre. Serum potassium was 4.2meq/litre.
9. Fractional curettage:

(i) The endocervix was curretted using a small sharp curette obtaining very scanty tissue.

(ii) The internal os was gradually dilated to Hegars dilator size No. 7. The posterior wall, left and right lateral walls and the fundus of the uterus were curetted seperately in that sequence. Fluffy looking endometrial tissue were obtained. The specimen were sent for histological evaluation in different containers. The uterine cavity was smooth, and the utero cervical length

was 12cm. Histology of the endometrium revealed proliferated atypical cells in closely packed tubular glands that were back to back. There was marked cellula atypia and frequent mitosis. Tissue from the endocervix revealed no pathology. Tissue receptor studies for progesterone and oestrogen are not possible at our Centre.

10. Pap smear was normal

She was put on Methyldopa 500 mg (tab) three times a day and frusemide 40mg (tab) on alternate days. Her blood pressure settled in a week. After explaining to her the nature of her problem she was scheduled for a total abdominal hysterectomy and bilateral salphingo oopherectomy, with a diagnosis of histologically proven endometrial carcinoma grade (2) and of stage IB (FIGO)

PRE-OPERATIVE PREPARATIONS

1. Blood grouping and cross matching was done and 1000 mls of compatible blood was obtained.

2. The abdomen was cleaned with soap and shaved in the ward

3. A signed informed consent was obtained for total abdominal hysterectomy and bilateral salphingo-oopherectomy.

4. A soap enema was given in the evening before operation

ANAESTHESIA:

INDUCTION: She was given atropine 1mg thiopental 325mg, suxamethonium 100gm IV and than intubated using 7.5mm cuffed endotracheal tube.

MAINTANANCE: She was maintained on long acting muscle relaxant pavulon 4mg and oxygen at 6 litres/minute with IV infusion of 1000ml isotonic sodium chloride solution

OPERATION: The abdomen was cleaned with salvon 1:20, a weak iodine solution (10%) and spirit.

A wick of wet gauze dipped in iodine was inserted in the endocervix to prevent possible spillage of malignant cells intraoperatively near the vault. A left paramedian incision was made and the abdomen opened in layers. A bulky mobile uterus of 14 weeks size with multiple subserous uterine fibroids ranging between 2.5cm to 4cm in diameter were noted. The serosa was healthy looking.

- Both the tubes were occluded with kochers forceps at the cornual end preventing possible retrograde spill of tumor cells.

Both the ovaries were atrophic with no evidence of tumor deposits on them. There were no seedlings noted in the pouch of Douglas, or on the pelvic wall. The omentum was systematically examined and was free of any nodules.

- Both tubes and round ligaments were normal looking
  The para - aortic nodes were not palpable. Peritoneal
  washings were sent for cytology.

The liver spleen and both leaves of diaphragm were normal. There was no ascites. With the above findings the author proceeded to do a total hysterectomy and bilateral salphingo oopherectomy, by the modified Richardson's technique; as described.

A self retaining retractor was inserted and the bowels were packed away by moist abdominal packs. The left round ligamer was divided between two Kochers clamps about a centimetre frc the uterus thus opening the anterior left of the broad ligament. The stumps were transfixed using chromic catgut Nc 2. The broad ligament was then opened and the ureter was viewed at its base. An avascular area in the posterior leaf well above the ureter was incised open thus enabling to tripl clamp the infundibulo-pelvic liagment just below the tube anc ovary. The tip of each clamp placed through the open window in the broad ligament. It was then divided between the first (laterally) and the other two clamps and doubly ligated with chromic catgut No 2. The same procedure was repeated on the right side. Next the reflection of the bladder peritoneum onto the uterus was freed by extending the incision in the anterior leaf of the broad ligament to join the two windows. The bladder was then pushed far down from the anterior cervical and vaginal wall. The exposed uterine vessels on both sides were then triply clamped bilaterally with curved

Kocher clamps and cut with scalpel and doubly ligated using chromic catgut No 2. The uterus was then retracted forward and upward to demonstrate the stretch of the utero sacral ligaments. A transverse incision was then made through the uterine reflection of the cul-de sac and the cervix and vagi dissected from the anterior wall of the rectum. The utero sacral ligament were clamped cut and ligated.

The remaining portions of the cardinal ligaments on each sid of the cervix were clamped with straight artery forceps, not hugging to the cervix, excised and ligated. The anterior vaginal fornix was opened up with a scalpel and the vagina circumscribed by sharp knife dissection thus removing the uterus. An iodinated gauze was inserted in the vagina.

The vaginal margins were closed with a series of figure of eight sutures starting at the angles. Haemostasis was satisfactory and the stumps were extra peritonized with No 0 chromic catgut. The abdomen was closed using a series of figure of eight sutures for rectus with chromic catgut No 2. Blood loss was 300mls and the vaginal gauze was removed. The uterus was later dissected revealing multiple subserous and intramural fibroids. The fundal area of the endometrial cavity was suspicious of malignancy. The myometrium seemed healthy and the serosa was normal. The sample was sent for histology.

She recovered well from anaesthesia and after a brief observation in the recovery room was transfered to the gynaecology ward.

POST OPERATIVE CARE:

1. Her blood pressure, pulse and respiratory rate were monitored half hourly for four hours, 1 hourly for the next 4 hours and than 4 hourly. They remained stable.

2. Intravenous 5% dextrose (1000mls) alternating with normal saline (1000mls) 3 litres were given in 24 hours after which oral fluid were started.

3. Intramuscular pethidine, 100mg 6 hourly for 24 hours.

4. Injection Ampicilin 500 mg intravenous 6 hourly for 48 hours.

5. Tab Metronidazole 400 mg 8 hourly for 5 days, from the second post operative day.

6. A fluid balance chart was kept. She produced 1500ml of clear urine in 24 hours, on the first postoperative day. She recovered uneventfully.

Skin stiches were removed on the eigth postoperative day and she was discharged the next day with instructions to come to the gynaecology outpatient department six weeks later. Haemoglobin on discharge was 10.5grams/dl. Histology of the

uterus re-confirmed the initial diagnosis. The myometrium an serosa of the uterus were not involed. Peritoneal washings were negative for tumor cells.

FOLLOW UP

She was seen at the Gynaecological outpatient department six weeks later. Speculum examination revealed a healthy vault with some pink granulation tissue. Vaginal vault smear was taken for cytology which was negative for tumor cells. Her chest X-rays and abdominal scan of the liver and paraaortic nodes was normal. She was instructed to return for follow up at gynaecology out patient after every three months, for a period of two years. This would than be at six months for another three years. She was seen at six and nine months in the gynaecology department and had no evidence of vaginal or vault metastasis with tumor deposits.

COMMENTARY:

In general a woman has about one percent chance of developing endometrial cancer during her life time. The peak incidence of onset is in the sixth and seventh decades as was in this case, but 5 percent occur before the age of 40.

Estrogen levels are not high in the postmenopausal women, but it is believed that the continous low level estrogenic stimulation of the endometrium unmodified by the cyclic effec of progresterone leads to endometrrial hyperplasia and in the suseptible patient to carcinoma. It is this concept of "unopposed oestrogen" which ties together the above pathology It has been calculated statistically that the relative risk c

developing endometrial cancer was 3.5 times greater in women who were 30% above the upper limit of ideal weight as was in this case. Since androstenedione made in the adrenal gland i converted to estrone and oestrogen in adipose tissue, perhaps the obese women have higher levels of estrone leading to endometrial hyperplasia and in some to carcinoma.

It is also noted statistically that there was 1.9 fold increased risk among nulliparous woman.
The most important symptom is abnormal postmenopausal bleedin as was here. Among all women with postmenopausal bleeding, uterine malignancy is the cause in 15-25% according to most studies.

A diagnositic fractional curettage is the only reasonably certain method of making the diagnosis. Care is necessary in peforming the operation because a thin senile uterus invaded by growth is easily perforated. The curettings are subjected to histological examination but their naked eye characteristics can be diagnostic to the expert. Malignancy is suggested if the curettings are profuse and appear as cheesy lumps as was in this case.

On the whole endometrial carcinoma offers better prospects fo cure than any other malignant growth in any site in the body. This is because the cancer is often indolent contained for long periods by thick myometrium, and spread to lymph nodes is relatively late. The most important factors governing the outlook for a particular patient are stage of disease and

degree of anaplasia and myometrial invasion. As in this case she had stage one B with a moderately differentiated adeno carcinoma of the uterus with no myometrial invasion which have figures of 65-69 per cent 5 years survival rate, in good Centres.

Hysterectomy with bilateral salphingo oopherectomy is the mainstay of treatment for Stage I endometrial carcinoma. Evidence of superficial to deep myometrial invasion at histology calls for an adjunctive post operative radiotherapy It has been reported in previous studies that vaginal recurrence rate following radiation in cases with myometrial invasion falls to 2-3% as compared to 10% of cases who had no radiation. Also the pelvic and parametrial spread is considerably reduced following intravaginal and external beam radition from 12.7 to 1.9% indicating its value in the local control of tumor. In cases of undifferentiated (G3) adenocarcinoma radiotherapy can be given pre-operatively with some advantages and disadvantages. Preoperative radiotherapy sterilizes tumor in 50% of cases prevents vaginal recurrence and treats nodal and adnexal micrometastasis. On the other hand it destroys valuable prognostic pathological information overtreats many patients and surgery be peformed in an irradiated field.

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STRESS INCONTINENCE OF URINE FOLLOWING VVF - REPAIR STAMEYS SLING APPLIED WITH GOOD OUTCOME

Registration No: 356672

Name: Mrs S.M.

Age: 24 years

Parity: P1+0

Residence: Handeni, Tanga Region

Date of admission: 25/9/91

Date of discharge: 14/10/91

SUMMARY:

Mrs S. M. was a twenty four years old unmarried para one who had a home delivery about four years ago in Handeni. She had labored for about 72 hours followed by a still birth and in the process sustaining a vesico vaginal fistula. She was later referred to the Kilimanjaro Chrstian Medical Centre Moshi, where she was found to have a juxtaurethral fistula measuring 2 x 3cm in diameter. She was succesfully treated two years later with a wide flap tension free repair using a Martius graft from the right labia. However she had a residual stress incontinence of urine for which she underwent a Stameys sling procedure with significant improval. She was later discharged home in good condition.

NB: The author was responsible for the management of stress incontinence using the sling procedure while doing his elective term in surgery and urology at the KCMC hospital Moshi.

HISTORY OF PRESENT ILLNESS:

Mrs S,M. was a 24 years old parous woman coming from Handeni District who complained of involuntary loss of urine on coughing, sneezing or lifting of heavy weights since the last two years. She had increased frequency and urgency of urine following the initial surgery for a vesico vaginal fistula. The subjective symptoms had been considerably reduced following bladder training and pelvic floor exercises over th next six months. However the symptoms of stress incontinence had persisted necessitating further medical help.

PAST OBSTETRIC AND OPERATIVE HISTORY:

She had laboured for 72 hours at home and finally delivered a still birth by a TBA, weighing about 3.0kg. She was then transferred to a district hospital where she received some injections and oral medicatious to be discharged two days later. She was not catheterized. She had not attended antenatal clinic. She noted to have an involuntary continuou leakage of urine per vagina seven days later and returned bac to the district hospital from where she was referred to the KCMC hospital. She underwent a succesful repair an year late via the vaginal approach with a tension free flap repair interposed with a Martius graft. She was subsequently discharged 3 weeks later, to Kibosho hospital which is a convalescent hospital for KCMC. She had an evaluation 3 months later and no residual fistulae were found. She was taught pelvic floor exercises and discharged home with

symptoms of stress incontinence. She could not come for follow up over the next two years.

GYNAECOLOGICAL HISTORY:

She attained menarche at the age of thirteen years, had regular menstruation lasting 3-4 days in cycles of 28-30 days She had no dysmenorrhoea or vaginal dischage. She had only resumed normal mensus 3 months after the VVF repair.

FAMILY AND SOCIAL HISTORY

She was the third born in her family. Her elder sisters had uneventful home deliveries. There was no history of diabetes in her family.

PHYSICAL EXAMINATION:

She was in good nutritional status. She was not pale nor jaundiced. She had a height of 148 centimetres.

The thyroid gland was normal. Her pulse was 88/min.and regular. Her blood pressure was 120/60mmHg. Breasts were normal. Cardiorespiratory status was normal. Abdominal examination revealed a normal scaphoid contour with no palpable masses. The liver, spleen and kidneys were not palpable. There was no suprapubic or renal angle tenderness. The spine was normal. No other neurological deficit was present. She had a normal gait.

Tests done to demonstrate stress incontinence on a full

coughing, or arising from supine to erect posture. Bonneys test was done by placing two fingers on each side of the urethra and an upward pressure against the subpubic angle exerted. She was asked to cough again with no leakage of urine. Thus the test was positive and making a strong indication for successful operative correction.

Pelvic examination revealed a normal vulva. There were no excoriations or ammonical smell noted. There was a horse sho fibrous band in the posterior vaginal wall, hence an adequate speculum examination could not be done.

Digital examination revealed a firm closed cervix with a normal sized midline and rather fixed uterus. The adnexae were not palpable. The pouch of Douglas was empty. There wa a horse shoe fibrous band in the posterior vaginal wall.

Rectal examination revealed a normal sphincter tone and norma rectal mucosa. Both parametria were normal. The perineal body had poor tone.

PROVISIONAL DIAGNOSIS:

1. Stress incontinence of urine following repair of an obstetric vesico-vaginal fistula.

MANAGEMENT PLAN:

Baseline investigations

1. Haemoglobin level : 12.5gram/dl

2. Red cell morphology revealed a normochromic normocytic film.

3. Mid stream urine for culture and sensitivity was negativ for bacterial growth done weekly for 3 consecutive weeks

4. S. Creatinine was 75 umol/litre in the normal range.

5. Intravenous urographic studies revealed normal kidney ureters and bladder. There was no evidence of bladder stone . Lateral cystourethrography was not done due to logistic reasons.

6. Cystoscopy done under local anaesthesia revealed normal looking bladder mucosa, bladder capacity of about 400mls normal ureteric orifices and trigone. There was no evidence of cystitis, bladder stone or of any fistula.

PRE-OPERATIVE PREPARATIONS

1. The abdomen and perineum were cleaned with soap and shave in the ward.

2. A signed informed consent was taken after discussing with the patient the prognosis of the surgery.

3. She was bled 2 days before surgery and 500mls of her bloc was stored for possible autologous transfusion.

4. A soap enema was given in the evening prior to the day o surgery.

ANAESTHESIA:

INDUCTION:

She was given atropine 1mg thiopental 375mg and suxamethoniu 100mg intravenous and intubated using a 7.5mm cuffed endotracheal tube.

MAINTANANCE:

She was maintained on ether and 6 litres of oxygen/minute.

OPERATIONS:

She was put in a lithotomy position. Abdomen and perineum were cleaned using savlon (1:20) and iodine (10%) solution. The abdomen and perineum were draped using sterile towels an bladder was catheterized obtaining 100mls of clear urine.

A suprapubic transverse incision was made on the abdomen of about 5cm, exposing the rectus sheath. An inverted T incisi was made in the anterior vaginal wall at the level of mid-urethra and a vaginal flap was raised by the assistant. A long needle (Stameys) was passed through the anterior rectus fascia towards the undersurface of pubic symphysis and into the vaginal incision just lateral to the bladder neck.

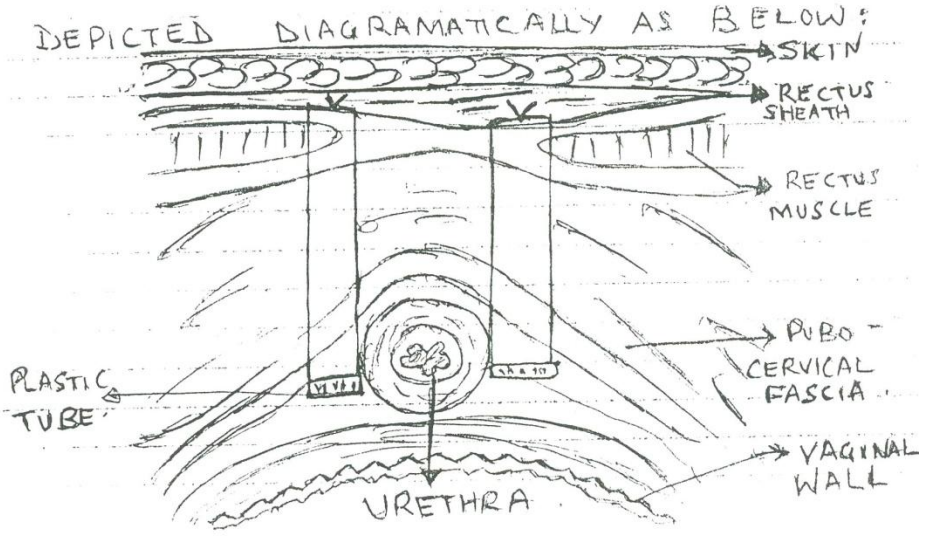
While the assistant was observing Cystoscopically the surgeo moved the needle medially and laterally to assure that the needle is in the peri-urethral tissues at the level of bladde

neck. Once it was confirmed under cystoscopic guidance that the needle was in the correct position and there was no damag to the urethra or bladder a No. 2 monofilament Nylon suture was threaded through the eye of the needle and needle withdrawn through the suprapubic incision. The needle was then passed 2cm lateral to the previous puncture site in the rectus fascia and was guided into the vaginal incision 1cm distal to the previous peri-urethral site. The other end of the same monofilament suture was placed in the eye of the needle after it was threaded through a 1cm segment of a 5mm plastic tube of giving set. The needle was again withdrawn t the suprapubic incision. The plastic tube (ideally a Dacron graft) act as a buttress in the periurethral tissue when the suture was secured over the rectus fascia.

The procedure was repeated on the opposite side.

Cystoscopically, closure of bladder neck was observed during upward traction of both suprapubic sutures. The vaginal incision was closed using chromic catgut No. 0. The Nylon suture were tied firmly to each other with considerable tension over No. 4 Hegars dilator in the urethra. The abdominal incision was closed with silk No. 0.

She was observed briefly in the recovery room and later transferred to the urology ward.



POST OPERATIVE CARE:

1. Her pulse, blood pressure and respiratory rate, were monitored half hourly till they were stable than four hourly. They remained stable.

2. Injection Ampicilin 500mg intravenous six hourly for 4 hours prophylactically.

3. An indwelling Foleys catheter was kept for 48 hours because of possibility of urinary retention due to pa and oedema to local tissues. She produced 1200mls of clear urine in the first twenty four hours.

4. Intravenous fluids 1000mls 5% Dextrose (1000mls) alternating with normal saline 2 litre over 12 hours t followed by oral feeds.

5. Injection Pethidine 100mg intramuscular six hourly for 24 hours.

The catheter was removed on the third day and she had some difficulty in passing urine on that day. She could void comfortably the next day and the urinary leakage on coughing had reduced considerably. The skin sutures were removed in the sixth day post operative. Residual urine obtained on catheterization after voiding was a few mls and she was discharged to Kibosho hospital. Catheter specimen of urine for microscopy, culture and sensitivity was negative.

FOLLOW UP

She was seen four weeks later in the urology outpatient department and was subjectively satisfied with her continence There was no leakage of urine on coughing with a full bladder She was subsequently discharged to her village with instruction to report as early as possible to a hospital upon conception.

COMMENTARY:

Obstetric fistulae remain a special problem of the Developing World. The exact incidence is unkown, but one encounters referrals from different regions time and again. Urinary incontinence, creates serious social and psychological stress for the patient as well as therapeutic problems for the Surgeon.

An obstetric fistula to a woman is next to maternal death. She readily becomes a social outcast and may be neglected by the husband and society. In rural Africa where most of the deliveries occur at home assisted by the TBA^{S}. It is high time to review into their local practice and suggest them alternatives on high risk factors. A training curriculum prepared for the TBA's by the district health team and conducted by nurse midwives could improve the situation. Thu a close rapport be established between the largest service providers i.e TBAs and the traditional midwife. A Community based approach could thus serve as a launching pad to attack the problem at the grass root level.

Hamlin and Nicholson reported that 16% of their patients with repaired obstetric fistulae involving the bladder neck as was seen here had a residual stress incontinence. In juxta urethral fistulae the sphincter is usually damaged. It is desirable that fistulae in this region be repaired in the north south direction to reinforce the internal urinary sphincter.

Unfortunately this form of repair is only possible if the fistulae is small in midline and not adherent to the pelvic wall as could be the case here. Thus a closure in the east west direction of such fistulae carry the worst prognosis for stress incontinence. With time, control of micturition improves in many cases, presumably the bladder becomes more distensible and the supplementary action of the external voluntary sphincter develops to reinforce the defective

internal sphincter. Further surgery to correct urethral incontinence should therefore be deferred for at least 3 months as was done here. If the perineal body is grossly deficient as was the case here a perineorrhaphy may be useful but there is a danger of re-opening the juxta urethral fistula. Tightening of the bladder neck from infront, throug the cave of Retzius is less hazardous. Thus justifying the "Stameys sling" through the same approach. In 1980 Stamey in his personal series of 203 cases reported a sucess rate of 91%.

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BILATERAL OVARIAN DERMOID CYSTS

LAPAROTOMY WITH BILATERAL OVARIAN CYSTECTOMY

(OVARIAN CONSERVATION)

Registration No: 624289

Name: Mrs Z.S.

Age: 25 yea:

Parity: 1 + 0

Residence: Lugoba, Bagamoyo District

Date of Admission: 31/8/90

Date of discharge: 6/9/90

SUMMARY

Mrs Z.S. was a 25 years para one, married woman with one living child aged 3 years. She had been admitted to the gynaecology ward on 31st of August 1990 with complaints of gradually increasing lower abdominal swelling over a period o 6 months and colicky abdominal pain for the last 3 months. Examination revealed a firm freely mobile lower abdominal mas of about 20 x 18cm in diameter. On pelvic examination, the mass appeared to arise from the right adnexa. A provisional diagnosis of an ovarian tumor was made. Laparotomy revealed bilateral ovarian tumors with an intact capsule and no ascites. Enucleation of both the tumors was done, hence conserving ovarian tissue on both sides. Cut section of the tumor revealed hair, bone and cartilagenous tissue suggestive of a mature cystic tetatoma. The patient recovered well from anaesthesia and made good post operative recovery. Histology

revealed a mature cystic teratoma. She was discharged to the outpatient clinic in good condition.

HISTORY OF PRESENT ILLNESS

Mrs Z.S. was well till six months ago when she started noting progressively increasing lower abdominal swelling which was not painful to start with but gave her some anxiety. This wa followed by episodes of colicky lower abdominal pain lasting few minutes and relieved by changing position.
She had no pregnancy symptoms however she had also developed irregular cycles for the past three months. She denied any substantial weight loss, respiratory, urinary or bowel symptoms.

OBSTETRIC AND GYNAECOLOGICAL HISTORY

She attained menarche at the age of fourteen had regular menstruation lasting for 5-6 days in cycles of 28-30 days. She had no dysmenorrhoea,vaginal discharge or dysperunia. During the last 3-4 months she had noted periods of oligomenorrhoea with no pregnancy symptoms. She had not used any oral contraceptive pills. She had a full term normal delivery three years earlier, the baby was well and alive wit an uneventful puerperium.

FAMILY AND SOCIAL HISTORY

She was a housewife staying with her husband. There was no history of tuberculosis contact in the family.

PHYSICAL EXAMINATION

She was a young healthy lady. She was not in pain. She was not pale nor jaundiced and had no enlarged lymph nodes. The thyroid gland was normal sized. Her resting pulse was 76 per minute. The cardiovascular and respiratory systems were unremarkable. Breasts were normal.

Abdominal examination revealed an obvious fullness in the hypogastrium. There were no distended veins or any scars noted. The liver spleen and the kidneys were not palpable. No free fluid was noted. There was a smooth freely mobile firm non tender mass about 20 x 18cm arising from the pelvis.

Pelvic examination revealed healthy vulva and no obvious discharge from the vagina. Speculum examination revealed normal vaginal walls with a healthy parous cervix. No obviou discharge was noted on milking the urethra. Digital examination revealed a firm cervix and bulky uterus of 10 weeks gestation which was freely mobile and non tender. A seperate swelling was noted on the right adnexa which was freely mobile cystic and non tender. The left adnexae appeared normal. A Pap smear was taken.

PROVISIONAL DIAGNOSIS

1. Benign Ovarian tumor.
2. Pedunculated fibroid as a differential diagnosis.

After discussing with the patient the nature of her problem a informed consent was taken for a laparotomy.

MANAGEMENT PLAN

Baseline investigations

1. Haemoglobin level: 13.0gm/dl.

2. Full blood picture was within normal limits.

3. Mid stream urine for culture and sensitivity showed no growth.

4. Ultrasonography confirmed the diagnosis of bilateral solid to cystic ovarian tumors of 25 x 20 centimetre. The liver, kidney and para aortic nodes were normal.

5. X-ray chest was normal.

6. Pelvic X-ray showed calcification within the tumor masses

PRE-OPERATIVE PREPARATIONS

1. Blood grouping and cross matching was done and 1000mls o compatible blood was obtained.
2. The abdomen was cleaned with soap and shaved in the ward
3. A signed informed consent was obtained for ovarian cystectomy and if necessary total abdominal hysterectomy with bilateral salphingooopherectomy.
4. A soap enema was given in the evening before operation.

ANAESTHESIA

INDUCTION: She was given atropine 1mg, thiopental 375mg suxamethonium 100mg IV and than intubated using 7.5mm cuffed endotracheal tube

MAINTANANCE: She was maintained on 1% halothane and oxygen a 6 litres/min.

OPERATION

The abdomen was cleaned with savlon 1:20, a week iodine solution and spirit.

A Right Paramedian incision was made and the abdomen opened i layers. Bilateral ovarian tumors with an intact capsule with no ascites were found. The para-aortic lymph nodes were not palpably enlarged.

On the right side about 25 x 15cm tumor with variegated consistency and no adhesions was found. On the left side two swellings were found 15 x 10 cm and the other 5 x 5cm. The uterus was normal sized and both the tubes healthy. The capsule of all the swellings were found intact. No ascites was found. The pouch of Douglas had no seedlings. Omentum bowels, liver, spleen and both the leaves of diaphragm were found to be normal. The bowels were packed away. Peritoneal washings were taken for cytology.

An incision was made on the tumor on the right side and the capsule was neatly enucleated from the tumor mass. While

mobilizing the base of the tumor, it gave away and we found greenish yellow material with fatty tissue, bone and hair which was neatly isolated from the operative field. There wa no intraperitoneal spillage into the peritoneal cavity.

Similarly on the left side both the tumors were enucleated successfully intact. The remaining ovarian tissue was closed in two layers with no 3/0 chromic catgut and haemostasis achieved satisfactorily. The blood loss was about 150ml. Th abdomen was mopped dry and closed in layers after ascertainin correct instrument and swab count. Nylon No. 1 to rectus sheath and silk No. 0 to skin.

She recovered well from anaesthesia and after a brief observation in the recovery room was transferred to the Gynaecological ward.

POST OPERATIVE CARE

1. Her blood pressure, pulse and respiratory rate were monitored half hourly for four hours, 1 hourly for the next 4 hours and than 4 hourly. They remained stable.

2. Intravenous 5% dextrose (1000ml) alternating with normal saline (1000ml) 3 litres were given in 24 hours after which oral fluids were started.

3. Intramuscular pethidine 100mg 6 hourly for 24 hours.

4. A fluid balance chart was kept. She produced 1200ml of clear urine in 24 hours, on the first post operative day She recovered uneventfully. The stiches were removed on the sixth postoperative day and she was discharged home in good condition the same day.

FOLLOW UP:

She was seen at the Gynaecological outpatient clinic six weeks after discharge. She was healthy looking with normal abdominal pelvic findings. Histology comfirmed the diagnosis of a mature teratoma. Peritoneal washings were negative for tumor cells. She was subsequently discharged from the clinic.

COMMENTARY:

Tumours consisting of tissues representative of all three primary embryological layers are thought to arise from the ovum itself and the general view is that they do so as a result of parthenogenesis. By this is meant a disorderly attempt by an ovum to produce an embryo without first being fertilized. It has been suggested that a stimulus comparable to that of a spermatozoon is provided by a neighbouring male directed cell, but many authorities believe that it is unecessary to postulate this phenomenon and that varied differentiation of a totipotent cell is an adequate explanation. Whatever be the mechanism of origin of teratomas it is remarkable that in the benign ones at least the tissues which develop appear to be those normally found in the cranial end of the foetus i.e. hair, skin, teeth, cartilage of the

trachea and neural tissue as was found in this particular case.

The commonest teratoma is the benign dermoid cyst which makes up about 10-15% of all ovarian tumors, and tends to occur at a relatively early age as in this patient. For this reason it is not uncommon to find it complicating pregnancy. They are bilateral in 12% of cases and may be multiple in one ovary as seen in this patient.

Common clinical presentations include colicky lower abdominal pain due to torsion of the pedicle which ocassionally is the first indication of the presence of an ovarian tumor as was in this case. This complication is more common with tumors of small or moderate size than with tumors of the very large size. The incidence of torsion varies from one series to the next but Peterson's large series yielded a 16% incidence. The twisting of the pedicle is generally in the clockwise fashion. It may be slight or so extreme that several complete twists of the pedicle are demonstrable. The circulatory disturbance produced by the torsion usually effects chiefly the veins with intense venous stasis, so that the cyst becomes dark bluish or even black.

It is usually possible with a little bit of surgical care to resect a dermoid cyst from the ovary without removing the entire ovary. One can usually find at one side of the tumor what represents most of the ovarian structure compressed against it. Careful technique as was carried out in this

This is particularly important when one considers the fact when dealing with bilateral cysts in young patients desirous of child bearing. The likehood of bilateral involvement when the opposite ovary is obsolutely normal at operation is much less and most clinicians have abandoned its routine resection

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PROLAPSED ENDOMETRIAL POLYP

POLYPECTOMY AND CURETTAGE

Registration No. 620279

name: Mrs H.A.

Age: 35 years

Parity: P5+0

Residence: Msasani, Dar es Salaam

Date of admission: 24/10/91

Date of discharge: 26/10/91

SUMMARY

Mrs H.A. was a 35 years parous woman with five normal deliveries. She was referred to the gynaecology outpatient department on account of an excessive vaginal bleeding during her menstruation for the past six months. Examination revealed a prolapsed polypoidal growth through the cervix. A provisional diagnosis of an endometrial polyp was made. Polypectomy was done by avulsing the growth followed by a uterine curettage. She recovered uneventfully and was discharged home in good condition. Histology revealed features of a proliferative benign adenomatous polyposis.

HISTORY OF PRESENT ILLNESS:

Mrs H.A. was well till six months ago when she noted excessive vaginal bleeding during her periods. This was accompanied by severe colicky abdominal pain. Three months later she noted a foul smelling vaginal discharge.

She later developed intermenstrual bleeding over the last 2 month and could not identify her normal menstrual pattern. She experienced a feeling of faint and diziness. She had no dysuria or haematuria. She was treated at a local dispensary with some injections without relief.

OBSTETRIC AND GYNAECOLOGICAL HISTORY

She attained menarche at the age of fourteen had regular menstruation lasting 3-4 days in cycles of 28-30 days. She had not used any form of contraception. She had experienced recent onset of dysmenorrhoea accompanied by the excessive vaginal bleeding.

She had five previous normal deliveries. The last born being six years of age.

FAMILY AND SOCIAL HISTORY

She was a housewife staying with her husband. There was no history of tuberculous contact in the family.

PHYSICAL EXAMINATION:

She was a young lady. She was not in pain and was comfortabl in sitting position. She was pale. She was not jaundiced no had a significant lymphadenopathy.

Her resting pulse was 90/min regular and good volume. Her blood pressure was 120/70mmHg. Jugularvenous pressure was normal. Breasts were normal. Cardiorespiratory status was unremarkable. She had no oedema of lower limbs. Abdominal

examination revealaed a normal scaphoid abdomen with no palpable masses. The liver, spleen and kidneys were not palpable.

Pelvic examination revealed a normal vulva and vagina. No obvious vaginal dischage was noted.

Speculum examination revealed an ulcerated polypoidal growth 3-4cm in diameter protruding through the cervix. The cervix was healthy looking. The base of the ulcer was covered with a purulent discharge.

Digitally there was no obvious discharge on milking the urethra. The growth seemed to be arising from the uterine cavity with a pedicle and was encircled by the dilated cervix firmly enough so that the upper end of the growth could not be reached. The polyp was soft in consistency. The uterus was in midline normal sized, non tender and freely mobile. There were no palpable adnexal masses. The pouch of Douglas was free of masses. The examining finger was blood stained at the end of the examination.

On rectal examination the parametria were healthy and rectal mucosa was normal. A pus swab was taken and sent for culture and sensitivity. Pap smear could not be taken as the growth was overlying the squamo - columnar junction. Thus it was taken after polypectomy in the theatre.

PROVISIONAL DIAGNOSIS

1. Pedunculated cervical polyp
2. Pedunculated submucous fibroid
3. Pedunculated endometrial polyp

After discussing with the patient the nature of her problem a informed consent was taken for a polypectomy and currettage.

MANAGEMENT PLAN:

Baseline investigations

1. Haemoglobin level 8.5gram/dl

2. Red blood cell morphology showed features of microcytic hypochromic anaemia in consistence with chronic blood loss

3. Mid stream urine for culture and sensitivity showed no bacterial growth.

4. Pus swab taken for culture and sensitivity from the ulcerated lesion revealed a significant growth of Bacteroides fragilis sensitive to Metronidazole.

5. Pap smear which was taken during polypectomy after treatment with metronidazole showed normal morphology.

She was given oral hematinics for a month and oral metronidazole for a week to clear the infection and build her

for surgery. The haemoglobin went up to 10.5 gram/dl just before surgery.

PRE-OPERATIVE PREPARATIONS:

1. Blood grouping and cross matching was done and 500mls of compatible blood was obtained.

2. The perineum was cleaned and shaved in the ward.

3. A signed informed consent was obtained for polypectomy and if necesary a total abdominal hysterectomy in case the pedicle of the growth was thick and inaccesible.

4. A soap enema was given in the evening prior to the operation.

ANAESTHESIA:

She was given atropine 1mg thiopental 250mg and put on a mask with oxygen at 6 litres/min.

OPERATION:

She was put in a lithotomy position. The perineum was cleaned with savlon 1:20 and draped using sterile towels. The bladder was catheterized aseptically obtaining 100mls of clear urine

The vulva, and vagina were normal. Digitally the previous findings were confirmed. After retracting the posterior vaginal wall with a Sims speculum the polyp was well

visualized protruding through the healthy looking cervix. The anterior lip of the cervix was held using a volsellum forceps

Using a sponge holding forceps the polyp was firmly grasped and easily avulsed at its base after rotating the forceps by 180^{o} in the clockwise direction.

A piece of gauze was inserted on the Sims speculum in the posterior fornix. Gradual dilatation of the internal os was performed to Hegars dilator No 8. Curettage was then performed systematically starting at the fundus, anterior, posterior and lateral walls obtaining fluffy endometrial tissue. All the tissues obtained from different sites were sent for histological examination in different containers.

She recovered well from anaesthesia and after a brief observation in the recovery room was transferred to the gynaecological ward.

POST OPERATIVE CARE:

Her blood pressure pulse and respiratory rate were monitored they remained stable. She was discharged home six hours later.

FOLLOW UP

Six weeks later she was seen at the outpatient clinic. She was not pale and in good general condition. The histology of the polyp revealed a benign mucinous adenomatous polyposis with a "Swiss cheese pattern" of endometrial glands. Tissue

taken for other sites were normal with no evidence of malignancy. She had no intermenstrual bleeding and had her normal menstruation a week ago. She was discharged from the clinic.

COMMENTARY:

The incidence of Endometrial polyposis is cited to range between 10-16% in the literature[1-2]. The exact incidence at our centre is unknown.

They usually present between 29-59 years of age group but the greatest incidence is beyond 50 years unlike this case[1]. Not all polypoid intra-uterine structures are ordinary endometria polyps, but could also be submucous myomas, malignant neoplasms and even retained fragments of placental tissue. Polyps may be single or multiple ranging in size from a few millimetres to masses that fill the uterine cavity. Occasionally they extend downwards and project through the external os, as was seen here. In a normal sized uterus with a history of regularly recurring metrorrhagia as was present here, an endometrial polyp is highly suggestive.

The histogenesis of endometrial polyps is not clear[2]. Schroeder speculates as to the occurrence of small endometria adenomas arising from the basalis portion of the endometrium. They tend to protrude into the functional zone of the endometrium, but do not shed at menstruation. In time they press upwards and present as polyps. Malignant changes of these growths is rare and it may be difficult to distinguish

from the benign variety. The differentiation can usually be made by careful study of the polyp base as was done here[1]. A study by Pearson and Novak found a 15.5% malgnancy associatio with benign polyps in the postmenopausal women, thus under scoring the value of careful tissue examination in that age group.

Optimal management is polypectomy. This should be preceded with a Pap smear and endocervical curretage so as to prevant contamination from the uterine cavity after curettage. In addition to scrapping the uterus, the curette is useful in exploring the uterine cavity for irregularty in its contour such as caused by a submucous fibroid. It has also been recommended by some workers to explore the uterine cavity wit a ureteral stone forceps so as not to miss any small endometrial polyps[1]. This manouvre could prevent many unnecessary hysterectomies done due to persistent or recent functional bleeding following a curettage.

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MULTIPLE UTERINE FIBROIDS

MENORRHAGIA

ABDOMINAL HYSTERECTOMY

Registration Number: 632097

Name: Mrs E.M.

Age: 44 years

Parity: P2+0

Residence: Magomeni, Dar es Salaam

Date of admission: 11/4/91

Date of discharge: 17/4/91

SUMMARY

Mrs E.M. was a 44 years old, parous woman referred on account of excessive vaginal bleeding which was accompanied by a slowly growing lower abdominal swelling over a period of the past two years. During the last three months she had also experienced easy fatigability and feeling of faint on assuming an erect position. Examination revealed a pale looking non dyspnoeic middle aged woman. Abdominally she had an obvious midline suprapubic irregular, non tender sixteen weeks firm mass. Digitally she had a fullness in the pouch of Douglas. provisional diagnosis of multiple uterine fibroids was made. Fractional curettage revealed cystic glandular hyperplasia of the endometrium. She underwent a total abdominal hysterectom uneventfully and was discharged home in a good condition. Histology revealed multiple leiomyomas with no evidence of malignancy.

HISTORY OF PRESENT ILLNESS

Mrs E.M. was a fourty four years para two with no living child. She was well till two years ago when she experienced excessive blood loss during her periods which was fluid in consistency initially and later accompanied with clots. She had to change her pads 6-8 times per day instead of the usual 2-3 times in the past. She also noted a slowly growing swelling in the lower abdomen, which gave her some discomfort She also noted a recent onset of painful menstruation more so on the first two days, of her cycle.

During the last three months she experienced easy faligability on executing normal household chores and also had feeling of faint on standing from a sitting position. She attended the local dispensary from where she was referred to the outpatient department of gynaecology at Muhimbili Medical Centre.

PAST OBSTETRIC AND GYNAECOLOGICAL HISTORY

She was a parous woman with no living child. She had normal, term deliveries. The first male infant died at 6 months due to febrile convulsions and the second died in the early neonatal period on account of birth asphyxia.

She attained menarche at the age of thirteen, had regular menstruation lasting 3-4 days in cycles of 26-30 days. She had no vaginal discharge, dysmennorhoea or dysperunia. She had not used any form of contraception in the past.
Past medical history was not contributory

FAMILY AND SOCIAL HISTORY

She was a housewife staying with her husband.

PHYSICAL EXAMINATION

She was a middle aged woman. She was pale but not jaundiced. She was not in pain. She was not dyspnoeic. She had a normal sized thyroid gland. Her jugular venous pressure was normal. Her resting pulse was 90/min regular good volume. Her blood pressure was 120/70mmHg. Her cardiorespiratory status was unremarkable.

The abdomen was soft and there were no surgical scars. There was an obvious suprapubic swelling sixteen weeks in size, non tender, irregular, mobile with a firm consistency. The liver spleen and kidneys were not palpable. There was no free fluic demonstrated.

Pelvic examination revealed a normal vulva and vagina. Speculum examination revealed a healthy looking parous cervix partially hidden behind the pubic symphysis with no obvious discharge. There was no obvious urethral discharge on milkin the urethra. Digitally the cervix was pushed slightly behind the pubic symphysis smooth, firm and closed. The uterus was eighteen weeks in size irregular and in midline. No other masses were felt in the pelvis. Pouch of Douglas had an obvious fullness. Bimanually both parametria were soft and non tender. A Pap smear was taken from the cervix.

PROVISIONAL DIAGNOSIS

1. Multiple uterine fibroids with menorrhagia. She was put on oral haematinics while awaiting investigations and definitive surgery.

MANAGEMENT PLAN:

Baseline investigations

1. Haemoglobin level after six weeks of haematinics was 10.! gm/dl.

2. Full blood picture showed a normochromic normocytic red cell morphology. There was reticulocytosis as evidence of a recent accelerated erythropoeisis in response to oral haematinics.

3. Serum creatine level was 75 umol/litre within normal range.

4. Pap. smear was normal.

5. Mid steam urine for microscopy, culture and sensitivity was normal.

6. Pelvic sonography confirmed multiple uterine fibroids.

7. She underwent a fractional curettage as described in case (2). The histology reports from the endocervix was normal, endometrial tissue revealed cystic glandular

huyperplasia with no evidence of atypical cells. The utero cervical length was 11cm.

The couple was explained the nature of the problem and after deliberating on the option for a myomectomy in view of the secondary infertility a decision for a total abdominal hysterectomy was entertained. In view of the advanced age for conception this decision seemed suitable by both the couple and the author.

PRE-OPERATIVE PREPARATION

1. Blood grouping and cross matching was done and 1000mls of compatible blood was obtained.

2. The abdomen was cleaned with soap and shaved.

3. A signed informed consent was obtained for a total abdominal hysterectomy.

ANAESTHESIA

Induction: She was given 1mg of atropine 375 mg of thiopenta sodium and 100mg of suxamethonium and intubated with a 7.5mm cuffed endotracheal tube.

MAINTENANCE

She was maintained on 1% halothane and 10mg of pavulon, with oxygen at six litres/min.

OPERATION

The abdomen was cleaned with 1:20 savlon, dilute iodine and spirit. A left sided paramedian incision taken and abdomen opened in layers. An eighteen weeks mobile uterus with multiple subserous fibriods with one pedunculated fibroid was found. Both the tubes and ovaries were normal in size and appearance. The pouch of Douglas was filled with a small subserous fibroid. There were no omental adhesions or lesions suggestive of endometriosis.

Using standard Richardson technique a total abdominal hysterectomy was done as follows.

A self retaining retractor was inserted and the bowels were packed away by moist abdominal packs. The left round ligament was divided between two kochers clamps about a centimeter from the uterus thus opening the anterior leaf of the broad ligament. The stumps were transfixed using chromic catgut No 2. The broad ligament was then opened and the ureter was viewed at its base. An avascular area in the posterior leaf well above the ureter was incised open thus enabling to triple clamp the infundibulo-pelvic ligament just below the tube and ovary. The tip of each clamp placed through the open window in the broad ligament. It was then divided between the first (laterally) and the other two clamps and doubly ligated with chromic catgut No 2. The same procedure was repeated on the right side. Next the reflection of the bladder peritoneum onto the uterus was freed by extending the incision in the anterior leaf of the broad ligament to join the two windows.

The bladder was then pushed far down by both careful sharp and blunt dissection from the anterior cervical and vaginal wall. The exposed uterine vessels on both sides were then triply clamped bilaterally with curved Kocher clamps and cut with scalpel and doubly ligated using chromic catgut No 2. The uterus was then retracted forward and upward to demonstrate the stretch of the utero sacral ligaments. A transverse incision was then made through the uterine reflection of the cul-de sac and the cervix and vagina dissected from the anterior wall of the rectum. The utero sacral ligaments were clamped cut and ligated.

Next attention was paid to the pubovesicocervical fascia which contains the venous plexuses. An inverted T incision was made in the fascia just below the level of the internal os and ligated uterine vessels. A pale avascular area of the anterior surface of the cervix and vagina was seen as the edges of the incision was retracted. Using the blunt end of the scalpel and sponge forceps the dissection was carried out until the fascia was reflected far laterally off the anterior surface of the cervix and upper vagina. The remaining portions of the cardinal ligaments was on each side clamped with straight artery forceps, excised and ligated. The anterior vaginal fornix was opened up with a scalpel and the vagina circumscribed by sharp knife dissection thus removing the uterus. An iodinated gauze was inserted in the vagina

The vaginal margins were closed with a series of figure of eight sutures starting at the angles. Haemostasis was

satisfactory and the stumps were extraperitonealized with No 1 chromic catgut. The abdomen was closed as in case 1. Blood loss was 300mls. Vaginal gauze was removed. The uterus was later dissected revealing multiple subserous and intramural fibroids. The myometrium seemed healthy and the serosa was normal. The sample was sent for histology.

She recovered well from anaesthesia and after a brief observation in the observation ward was transferred to the gynaecological ward.

POST OPERATIVE CARE:

1. Her pulse, blood pressure and respiratory rate were observed half hourly till stable then four hourly.

2. Injection Pethidine 100mg intramuscularly six hourly for 24 hours.

3. Injection ampicilin 500mg intravenous six hourly for 48 hours

4. Intravenous fluids 1000mls 5% Dextrose alternating with 1000mls of normal saline 3 litres in 24 hours.

5. A fluid balance chart was kept. She produced 1200ml of clear urine in the first 24 hours.

6. She received 500 mls of compatible blood.

She fared well. The sutures were removed on the sixth post-operative day. Wound had healed well. There was no vaginal bleeding. She was discharged in a good condition to the outpatient department.

FOLLOW UP

She was seen six weeks later. she was not pale. There was n vaginal discharge. Speculum examination revealed a well healed vaginal vault. She was discharged from the gynaecolog outpatient department. The histopathology reported a benign uterine leiyomyoma with no evidence of malignancy.

COMMENTARY

Patients with uterine fibroids are one of the common gynaecological disorders seen at the outpatient department at our Centre. The incidence at our centre is not known but it is estimated that about 20% of all women have this pathology present in the uterus at death[2] (Dewhurst). Nulliparity is strongly associated with fibroids but this by no means is always the case as was seen here[1].

The majority of small fibroids and some large ones are symptomless[1-2]. The nearest the fibroid to the endometrial cavity, the more likely it is to cause symptoms, especially menstrual[1]. This could be a possibility here. A fibroid has usually to attain the size of a 14 weeks pregnancy before a woman is concious of the presence of a tumour, as was the cas here. Pressure symptoms on the bladder commonly causing bladder irritability with diurnal frequency were absent.

Physical signs are usually suggestive of a diagnosis but occasionally with a large pedunculated fibroid it may be clinically difficult to distinguish from an ovarian pathology. Excessive bleeding leading to symptoms of anaemia forced the patient to take medical help, and later surgery.

In view of the advanced age for conception the couple rightly opted for a hysterectomy. This has been documented as a best modality of treatment by most authors at that age. Intra-operative difficulties arise in the presence of omental adhesions, or a broad ligament or cervical fibroid which were luckily not present here. The value of inserting iodinated gauze per vaginum to reduce the risk of infection seems logical. However a case controlled study could be the right answer. Both the ovaries were normal in size and morphology and hence conserved. In a six year retrospective study in Italy on 965 perimenopausal subjects undergoing hysterectomy for benign indications, preservation of ovaries was chosen in 234 (27.8%) while 609 (72.2%) women had their ovaries removed[4-6]. There was a significant increase in the signs and symptoms of menopausal syndrome and loss of bone mass in subjects who had ovarian ablation. In the removed ovaries no undiagnosed malignant ovarian disease was found[4]. However, a longer period of follow up is required to assess whether removal of the normal looking ovaries be performed or not. The critical decision being made at the time of hysterectomy at that age (perimenopausal) with regard to future benign and malignant ovarian disease.

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FULMINANT ECLAMPSIA AT 36 WEEKS GESTATION

FAILED INDUCTION

DELIVERY BY CAESAREAN SECTION

Registration No: 36/91

Name: Miss A.S.

Age: 16 years

Parity: Primigravida

Residence: Kongowe

Date of admission: 30/6/91

Date of discharge: 15/7/91

SUMMARY

Miss A.S. was a sixteen years primigravida at 36 weeks of gestation admitted to the intensive care unit on account of eclamptic fits. She had reportedly convulsed thrice at home. Her blood pressure was elevated to 150/110mmHg from her booking blood pressure of 110/80mmHg at sixteen weeks of gestation. On admission she had generalized oedema and a proteinuria of 3+. She was conscious but drowsy with a fundal height of 36 weeks and positive foetal tones. She was induced with oxytocin after a failed attempt at artificial rupture of membranes, without any response. She had another fit despite of the heavy sedation. She underwent a caesarean section and got a live baby weighing 1950 grams with an APGAR of 7 at 5 minutes. She recovered well and was discharged home with the neonate in good condition.

HISTORY OF PRESENT ILLNESS

Miss A.S. was a sixteen years primigravida at 36 weeks of gestation. She had booked at a gestation of 16 weeks at a peripheral clinic with a blood pressure of 110/80mmHg haemoglobin of 62% and a weight of 51kg. Urine was not examined for proteinuria. She made seven subsequent visits at the peripheral clinic where the fundal height grew satisfactorily but there was oedema and her blood pressure ranged between 120/80mmHg and 110/70mmHg. She had a weight gain of eight kilograms during the last 20 weeks. Her urine was not examined for proteinuria. At 36 weeks of gestation she developed generalized convulsion at her residence and was referred to the Muhimbili Medical Centre. She had developed severe headache a few hours prior to the onset of convulsion. She had a blood pressure of 150/110mmHg and a proteinuria of 3 + on admission to the intensive care unit. There was no history of recent febrile illness or epilepsy elicited from the relatives.

GYNAECOLOGICAL HISTORY

She attained menarche at the age of fourteen had regular menstruation lasting 3-4 days in cycles of 28-30 days. She had no dysmennorhoea, vaginal discharge or dysperunia.

FAMILY AND SOCIAL HISTORY

She was an unmarried school girl. There was no history of hypertension or diabetes mellitus in her family.

PHYSICAL EXAMINATION

She was drowsy and restless. She was well nourished, not pal not jaundiced, nor cyanosed. She had generalized oedema and was dehydrated. Her axillary temperature was 37.4^{o}C. Her pulse rate was 96/minute regular and good volume. The blood pressure was 150/110mmHg in the left lateral position. The jugularvenous pressure was normal. Her cardiovascular and respiratory systems were unremarkable except for a tachypnoea of 24/minute. The pupils were pin-point and reacted briskly bilaterally and equally to light. There was no neck stiffnes and kernigs sign was negative. The patellar and ankle jerks were exaggerated. There was no clonus. Proteinuria was 3+.

Per abdomen she had a fundal height of 36 weeks with a longitudinal lie, cephalic presentation and the level of presenting part was 5/5. The foetal tones were present. There were no area of tenderness on the uterus. The liver spleen and kidneys were not palpable. The baby size was estimated to be about 2300 grams.

Digital examination carried out after sedating her with intravenous diazepam 20mg revealed a soft midposed 2cm long closed cervix. An artificial rupture of membrane was attempted but failed.

DIAGNOSIS

In view of proteinuric hypertension accompanied by convulsion in a primigavida a diagnosis of eclampsia was entertained.

B. Control of convulsions and Hypertension

1. She received intravenous Hydrallazine 20mg intravenous slowly in a single dose followed by 10 mg intravenous four hourly PRN to maintain the diastolic blood pressure below 110/mmHg.

2. She received intravenous Diazepam 20mg on admission followed by 20mg - 4 hourly.

3. Analgesia in the form of Pethidine 100mg intramuscular six hourly for 24 hours.

C. Other Supportive Measures:

1. The airway was sucked and a mouth gag inserted.

2. She had an indwelling Foley's catheter in the urinary bladder and urine output monitored hourly.

3. She received intravenous Ampicilin 500mg six hourly prophylactically for aspiration or hypostatic pneumonia.

4. Her position was changed every two hourly.

D. OBSTETRIC MANAGEMENT

An oxytocin drip was set up with 10IU in 1000mls of 5% Dextrose. The drip was titrated to run at 40, 50, 60 drops/minute increasing the rate every 15 minutes. She continued on the oxytocin drip for six hours but despite the heavy sedation she had another fit. Her blood pressure was

under control in two hours of admission. There were very mil contractions felt with a poor Bishop's score. A decision to deliver her abdominally was made inview of a poor Bishops score and a repeated convulsion.

PRE-OPERATIVE PREPARATIONS

1. In view of clinical signs of dehydration and repeated fits with absence of electrolyte results at that time, she was given 1000mls of Ringer lactate prior to surgery This was given in an attempt to correct her volume and electrolyte imbalance.

2. The anterior abdominal wall and vulva were cleaned with soap and shaved.

OPERATION

Anaesthesia:

Induction: She was given sodium thiopentone 250mg intravenously, 1mg atropine and 100mg of suxamethonium hydrochloride. A cuffed 7.5mm endotracheal tube was passed. The operating table was tilted at an angle of 15^{o} to the left side.

Maintainance:

She was maintained on a mixture of ether 0.5% and oxygen at 6 litres/min.

Procedure:

The abdomen was cleaned with savlon 1:20 and dilute weak iodine. A subumbilical midline incision made and the abdomen opened in layers. A poorly formed lower segment of an intact gravid uterus was found. Two wet packs were inserted on either side of the uterus. The lower end of the abdominal wound was retracted using a Doyen's retractor. The vesicouterine fold of peritoneum was incised and the bladder was pushed away from the lower segment. The lower segment wa then incised by stroking gently with the knife over a length of 2-3 centimetres and the index fingers of each hand were inserted to extend the incision laterally. The Doyens retractor was then removed. The surgeons right hand was inserted below the head and it was delivered gently from the uterine incision. The mouth and nostrils were cleared of mucus, blood and liquor with a sterile gauze, followed by delivery of the shoulder, trunk and lower extremity. The cor was clamped and cut and the baby handed over to the midwife. An injection of 5IU of oxytocin was given immediately after the delivery of the baby. Green Armitage forceps were applie to the upper and lower end of the uterine incision so as to occlude the most significant sites of haemorrhage.

The placenta separated spontaneously and was delivered complete with membranes. The maternal surface showed some whitish calcified areas. There was no retroplacental clot. The uterine cavity was mopped with a sterile abdominal pack. The uterus was well contracted. The uterine wound was repaired in three layers. The first muscular layer with No 1

chromic catgut with a locking stich. As the first layer was repaired the uterus was massaged in between ensuring it to be well contracted. The second layer of Delee's fascia was repaired using No 1 chromic catgut with a continuous running stich, burying the muscular layer under neath. The uterovesical fold of peritoneum was closed using a continuous No 0 chromic catgut and its edges inverted. Both the abdominal packs were removed and the abdominal cavity mopped dry. The abdomen was closed in 3 layers using catgut No. 2/0 for the peritoneum continuous No 1 Nylon for the rectus sheat and interrupted silk No 0 to the skin after ascertaining correct swab and instrument count together with satisfactory haemostasis. Vulval toilet was done and the uterus was well contracted at the end of surgery. There was clear urine in the urine bag measuring 400 mls. The placenta weighed 300 grams. The estimated blood loss was 400mls.

She was briefly observed in the recovery room and then transferred back to the intensive care unit.
The baby boy scored an APGAR of 5 at 1 minute and 7 at 5 minutes, weighing 1950 grams with some vernix caseosa. No congenital malformations were noted. He was sent to the neonatal unit.

POST OPERATIVE CARE

1. The blood pressure, pulse and respiration were monitored half hourly. The blood pressure range between 120/70 to 130/90, pulse ranged between 90 to 100 per minute regula and good volume. The respiratory rate was 33 - 36

/minute in the first four hours than settled down betwee 18 - 20/min later.

2. She received 2000mls of 5% Dextrose and 1000mls of Ringer's lactate in 24 hours.

3. Injection Pethidine 100mg intramuscular six hourly for 4 hours.

4. Injection Diazepam 20mg intravenous 6 hourly for 24 hours.

5. Injection Hydrallzine 10mg intravenous when the diastoli blood pressure rose above 110mmHg.

6. Injection Ampicilin intravenously six hourly till she wa able to take oral feeds. Here she was given for 72 hour followed by oral capsules for the next three days.

7. A fluid balance chart was kept. She produced 1200mls of clear urine in the first 24 hours. She progressed well in the intensive care unit and was transferred to the post natal ward 48 hours later. Her level of conciousness improved remarkably after gradual withdrawa of sedation and she was ambulant on the third post operative day. Her post operative haemoglobin was 8.3 gram/dl. The uterus involuted well and the lochia were not foul smelling. Sutures were removed on the sixth postoperative day with a well healed wound. The baby wa

nursed in the nursery. The baby later received BCG and oral polio vaccines. Both were discharged home in good condition. The mother was prescribed oral haematinics

POST NATAL FOLLOW UP

She was seen six weeks later. Her blood pressure was 120/80 mmHg. Her haemoglobin was 10.2gram/dl. The uterus was well involuted and there was no vaginal discharge. She was discharged to attend the family planning and MCH clinic.

COMMENTARY

Eclampsia is one of the most serious obstetric emergencies because of its various consequences to both the mother and th foetus[1-3]. Although its incidence in Tanzania is unknown it is one of the common cause of maternal death at the Muhimbili Medical centre. Other authors have reported an incidence of pre-eclapsia as 5% among all pregnant women and an incidence of eclampsia as 5% among these patients[3].

Diagnosis is usually not a problem. Presence of a generalize tonic and - clonic convulsions in a pregnant or puerperial patient should raise the suspicion. Findings of proteinuric hypertension with or without oedema in absence of other cause of convulsions as was found here established the diagnosis. The principles of management of eclampsia constitutes of control of convulsions, lowering of blood pressure supportive therapy and planned delivery of the patient[2]. Numerous drugs have been used for controlling convulsions. Diazepam (20 mg) intravenous has been the policy at our Centre. Magnesium

sulphate has been used in other Centres and is advantageous t arrest and prevent convulsions without sedation. Perhaps this regime could be initiated at our Centre after a carefully don prospective case controlled study.

Hydrallazine a powerful vasodilator is used only if the diastolic blood pressure is more than or equal to 110mmHg, as was the case here. The aim is to decrease the the diastolic blood pressure between 90/100mmHg and not much lower lest placental perfusion or of maternal vital organs be compromised.

The Obstetric management of antepartum eclamptic women has been a subject of controversy over the years. It is now well established that adequate control of fits and delivery offers the best prognosis to both the mother and foetus. Even when the foetus is remote from term or nearterm as was here, successful induction is possible in the majority of women. Immediate delivery by Caesarian section in patients with eclampsia has been associated with a high maternal mortality rate[3-7]. This was avoided in this woman. It has been recommended that the patient should be delivered within 24 hours of the first fit and the ideal time is probably within 8-10 hours as was demonstrated here.

Due to the catastrophic implications of eclampsia women so affected and their families often are quite concerned over th prognosis of future pregnancies. Chesley and his coworkers through a meticulous follow up of women with eclampsia have

conclusively proved that the risk of eclampsia in the next pregnancy was less than 2%. He also emphasized that a large number of women who developed hypertension during the subsequent pregnancies will become hypertensive in later life[3]. These women were found to be having a normal blood pressure during the pregnancy free interval.

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CERVICAL INCOMPETENCE

CERVICAL CERCLAGE

NORMAL DELIVERY AT TERM

Registration Number: 7878/90

Name: Mrs F.M.

Age: 29 years

Parity: P1+4

Residence: Manzese, Dar es Salaam

Date of admission: 20/1/91

Date of discharge: 28/1/91

SUMMARY

Mrs F.M. was twenty nine years old, gravida six para one at 1 weeks of gestation. She had had four consecutive abortions between twenty and twenty six weeks of gestation. The sequence of events during the process of abortions was strongly suggestive of an incompetent os. About four years ago she had a cerclage followed by a live normal delivery at term. Digital examination revealed a short patulous cervix. Other relevant investigations were negative. Obstetric pelvi sonography revealed a normal intra-uterine pregnancy with no obvious malformations. She under went cervical cerclage at 1 weeks of gestation. The pregnancy continued to term and the stich was removed at 38 completed weeks. She had a normal delivery of a live baby 3 days later. She was subsequently discharged home in good condition with a healthy neonate.

PAST OBSTETRIC AND GYNAECOLOGIC HISTORY:

During the past ten years she had had four successive abortions. In the year 1981 she had an amenorrhoea of eighteen weeks followed by spontaneous draining of liquor and expulsion of a live foetus at home surviving for a few minutes. She did not experience significant abdominal pains. The placenta and membranes were expelled completely.

She had a similar sequence of events subsequently in the years 1983 and 1985 occuring at a gestation of 20 and 22 weeks. During the last abortion in 1986 she delivered a live foetus at 20 weeks with intact membrances, again surviving a few minutes. In 1987 she sought medical help and had a MacDonalds stich followed by a normal vaginal delivery at term. She had no history of skin rashes with fever in the past.

She attained menarche at the age of twelve years, had regular menstruation lasting 5-7 days in cycles of 28-30 days. She had no dysmenorrhoea vaginal discharge or dyspereunia. She had not undergone any major surgery and denied history of cervical dilatation.

CURRENT PREGNANCY

In the index pregnancy she booked at 13 weeks of gestation with a blood pressure of 120/70 mmHg and haemoglobin of 10.0gm/dl. She had no proteinuria and her weight was 44kg. She had her first dose of tetanus toxoid vaccine and was on oral haematinics and two tablets of chloroquine weekly for malaria prophylaxis. Blood was taken for VDRL, blood group and Rh factor, blood sugar fasting and post prandial, serum

creatinine and urine for protein with culture and sensitivity, these were within normal limits.

FAMILY AND SOCIAL HISTORY

She was the third born in a family of four sisters. The elde: sisters had no such problems.

PHYSICAL EXAMINATION

She was a young healthy looking lady. She was not pale nor jaundiced. She had no oedema of the feet. Her cardio respiratory systems were normal.

Abdominal examination revealed a scaphoid abdomen. No abdominal masses were noted. The uterus was just palpable at the pubic symphysis.

Pelvic examination revealed a normal vulva with no obvious discharge. Speculum examination revealed healthy vaginal walls and a parous healthy looking cervix. There was no tear discharge or obvious membranes noted on the cervix. On digital examination there was no obvious discharge on milking the urethra. The cervix was soft and short of about less tha two centimetres easily admitting the index finger beyond the internal os. There was no obvious draining or discharge note on the examining finger. The uterus was about fourteen weeks size, soft in consistency in the midline with no obvious nodules or a notch felt on the fundus. The pouch of Douglas was normal.

PROVISIONAL DIAGNOSIS

Cervical incompetence. After discussing the nature of her problem an informed consent was taken for a repeat applicatio of a cervical stich at sixteen weeks of gestation.

MANAGEMENT PLAN:

Baseline investigations:

1. Haemoglobin level was 10.6gm/dl

2. Full blood picture was within normal limits

3. Midstream urine for culture and sensitivity showed no significant growth

4. Blood group and rhesus factor: B positive

5. VDRL and TPHA tests were negative

6. Blood sugar profiles were within normal limits. Fasting 3.5 m.mol/litre and Postprandial 5.5 m.mol/litre.

7. Serum creatiinine was 65 umol/litre within normal limits

8. Pelvic ultrasound showed a single intra uterine live foetus of about thirteen weeks gestation with no obvious congenital malformations.

She was put on bed rest at home since she first came to the clinic and was instructed to come for admission at sixteen weeks of gestation for the cervical cerclage.

PRE-OPERATIVE PREPARATIONS:

1. The perineum was shaved and cleaned with soap in the ward

2. A signed informed consent was obtained for anaesthesia and surgery after explaining fully the involved risk.

ANAESTHESIA:

INDUCTION:

She was induced with 375mg of thiopental sodium after being atropinized with 0.5mg atropine.

Maintainance:

She was maintained on 1.5% of halothane with 7 litres/of oxygen and an intravenous line of 5% Dextrose.

Operation:

She was put in a lithotomy position. Perineum was cleaned with savlon 1:20, draped with sterile linen and the bladder catheterized obtaining 100mls of clear urine.

A Sims speculum was inserted in the vagina to retract the posterior vagina enabling visualization of cervix. There was no obvious discharge, scarring or bag of membranes seen. Using two sponge holding forceps the anterior and posterior lips of the cervix were held in preparation for the MacDonald

stich at the level of internal os without reflecting the bladder. Nylon No. 1 stich on a round bodied needle was inserted at 12 O'clock to emerge at 10 o'clock position. Similar bites were taken at 8, 6, 4, 2 and a knot secured care fully at 12'Oclock position just enough to provide a slight resistance to the passage of a No. 6 Hegar dilator. There was some passive oozing of blood but no draining at the end of the surgery.

POST OPERATIVE CARE:

1. Her blood pressure pulse and respiratory rate were monitored half hourly till stable, than 4 hourly. They remained stable.

2. Intramuscular pethidine 100mg was given as a single dose.

3. Perineal pad was given to note any discharge, bleeding or draining

4. She was later put on acetylsalicylic acid 600mg three times daily for a week.

The post operative was uneventfull and she was discharged home after a week with instruction to rest for about two hours in the noon avoiding heavy household chores and sexual intercourse. She was told to come for follow up after two weeks to the antenatal clinic.

She had no significant complains in the antenatal clinic. He fundal height corresponded well to the gestational age. Quickening was experienced at 20 weeks. Speculum examination revealed the suture insitu with no discharge or draining. He blood pressure remained normal she maintained her haemoglobin level at 11.0gm/dl and there was no proteinuria. Her weight gain was within normal limits. She was seen at weekly visits after 32 weeks of gestation.

She was admitted at 38 weeks of gestation for the removal of the stich. The cervix was 2cm long soft and anterior admitting one finger. The presenting part was high. She wen into labor on the third day after removal of the stich and delivered normally after laboring for six hours a live 3000gm with an APGAR score of 10 at 1 and 5 minutes. The placenta and membrane were delivered completely and the perineum was intact. The examination of the new born revealed a healthy neonate with normal reflexes and no obvious congenital malformations. She was discharged on the next day in good condition to attend the post natal clinic after six weeks for child spacing.

COMMENTARY:

Incompetence of the cervix is a term which includes two concepts. The first is a cervix with a demonstrable anatomic defect due to previous laceration through the internal os and the second is a somewhat less concrete concept of a congenital deficiency in the cervix[1].

Normally the cervix remains closed during pregnancy and retains the products of conception within the uterus till term. During the third trimester the cervix softens in preparation for labour when dilatation and effacement occur i response to uterine contractions[2]. When the cervix is incompetent as was in this woman it opens prematurely progressively without uterine activity and finally the pregnancy is expelled usually with minimal uterine contractions as occured repeatedly in this woman. In pregnancy the diagnosis is made from a suggestive history and manual examination when effacement and dilatation of the cervix may be found as was the case in this patient. It is rare to diagnose this disorder in the non pregnant state as the patients frequently present in pregnacy even after a number of fetal wastages as again demonstrated by this patient.

In the rare instance when a non pregnant patient is seen a number of procedures may demonstrate an abnormal cervix. If Hegar dilators are passed starting with the biggest an almost incompetent cervix will be demonstrated if Hegar 6 is found t pass easily[3]. A premenstrual hysterography with a Leech - Willkinson canula will show funelling when the cervix is incompetent and measuring the dilatation of the cervical cana in such cases will show it to be more than 3.5mm.

Cervical incompetence is a fairly common obstetric disorder. As high an incidence as 6.6 per 1000 deliveries has been reported by some authors while MacDonald considers that the

incidence varies between 1-2%[2]. This substantial difference in the incidence indicates the condition is almost certainly overdiagnosed. This could mean some other factors or causes other than the incompetence of the cervix be operating such a endocrinological, metabolic, congenital anamolies of uterine body as the bicornuate uterus or submucous fibroids. Althoug the incidence at Muhimbili Medical Centre is not known this disorder is fairly frequently encountered in our antenatal clinics.

Trauma to the cervix is an important aetiological factor. Gynaecologist are now well aware of the need to avoid unnecessary damage to the cervix[1]. However in this woman there was no history of any trauma. In modern practice the greatest potential surgical cause of cervical incompetence ma be cervical dilatation during termination of pregnancy. Forcible cervical dilatations to No 12 Hegar have been known to cause cervical ruptures of more than 5mm in depth in about 22% of uteri predisposing to cervical incompetence[1].

Thus excessive dilatation during treatment of dysmenorrhoea c suction evacuation, amputation of cervix cone biopsy and operative vaginal deliveries especially forceps delivery are common iatrogenic causes. Intra-uterine exposure of the mother to diethyl - stilboestrol as a foetus has been associated with cervical incompetence. Congenital weakness accounts for 2% of all cases and was most probably the cause in this patient and in these cases normal functioning of muscular fibres around the internal os is impaired.

Many authors recommend that the cerclage be performed between 14-16 weeks gestation as was done in this case. Cervical incompetence has medical and surgical components. The former includes proper diet, bed rest and therapeutic relationship between the patient and the physician. The role of tocolytic agents such as salbutamol has been controversial. Studies done at the Parkland Memorial Hospital Dallas, Texas have indicated no significant difference in the arrest of preterm labour and perinatal mortality. Prostaglandin synthesis inhibitors like acety salicylic acid have been known of value in preventing preterm labour and was used in this case.

Surgical component is the mainstay of the treatment. A number of procedures have been recommended such as Shirodhkars suture in which a strip of fascia lata was tied submucosally around the isthmus of the cervix often reflecting the bladder off the cervix. The disadvantage of Shirodhkars suture was that it could not be readily removed and is technically a more difficult procedure. In this patient a purse string suture was tied around the cervix using non absorbadle material called the McDonalds suture. This was done as it is technically simpler procedure as equally effective as Shirodhkars stich and can be easily removed when required. Cervical cerclage stich works by providing mechanical support to the weakend cervix.

Complications of the operation include induction of premature contractions, rupture of membranes and maternal sepsis. The

stich is usually removed at 38 weeks as in this case or early in labour to avoid ruptured uterus or avulsion of the cervix. The success rate of cervical cerclage varies betwen 50-80% when considering those pregnancies who reach term. The procedure has to be repeated during the next pregnancy as was demonstrated were.

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PELVIC ABCESS IN AN HIV SEROPOSITIVE WOMAN

COLPOTOMY DONE - STEADY RECOVERY

Registration No: 150209/91

Name: Mrs M.M.

Age: 21 years

Parity: P 1+ 0

Residence: Mabibo, Dar es Salaam

Date of admission: 21/5/91

Date of discharge: 10/6/91

SUMMARY

Mrs M.M. was a 21 years old woman who had delivered a full term baby at Muhimbili Medical Centre. She was re-admitted a week later with foul smelling yellowish vaginal discharge, fever and considerable lower abdominal discomfort. Initial evaluation revealed signs of acute pelvic peritonitis with no evidence of pus in the pouch of Douglas. She was put on antimicrobials but without much relief. Fever persisted and she developed a mucoid diarrhoea. A second pelvic evaluation five days later revealed a tense bulging pouch of Douglas. Colpotomy was done draining 500mls of pus. She made a rapid recovery and was discharged home in good condition. Blood taken for HIV screening was subsequently found to be positive

HISTORY OF PRESENT ILLNESS:

Mrs M.M. was a 21 years puerperial woman who had delievered a normal healthy baby at term a week earlier. She had no history of any illness during the pregnancy, nor was a histor

of prolonged rupture of membranes or of prolonged labour. Five days after delivery she started experiencing foul smelling vaginal discharge accompanied by fever with chills. This was followed by a constant dull lower abdominal pain which was not relieved by paracetamol. She went to a local dispensary from where she was referred to the Muhimbili Medical centre in a rather poor state.

GYNAECOLOGICAL HISTORY

She attained menarche at the age of fourteen years and had regular menstruation lasting 3-4 days in cycles of 28-30 day She has had more than four sexual partners. She had been treated for genital ulcer disease in the past. She had no dysmenorrhoea. She had not used any form of contraception.

FAMILY AND SOCIAL HISTORY

She was a housewife staying with her husband who was a long distance lorry driver. She had no history of tuberculosis i the past.

PHYSICAL EXAMINATION

She was ill looking but not wasted. She was febrile and concious. She was pale but not jaundiced. Her neck was not stiff. She had no lymphadenopathy or oral thrush. The thyroid gland was of normal size. Her resting pulse was 110/min regular and high volume. Her blood pressure was 100/60mmHg. The cardiovascular and respiratory systems were unremarkable.

There was marked tenderness elicited in the lower abdomen. There was no evidence of free fluid in the abdominal cavity and the bowel sounds were sluggish. The uterus was in midlin of twelve weeks size and tender. The liver, spleen and kidneys were not palpable.

Pelvic examination revealed a normal looking vulva with an infected episiotomy wound. Gentle speculum examination revealed normal vaginal walls covered with yellowish exudate. An endocervical swab was taken for Microscopy, culture and sensitivity. The cervix was then cleaned with clean gauze. It was healthy looking save for the physiological ectropion. There were no deep lacerations noted on it. On gentle digita examination the cervix was firm and closed with a marked tenderness in the right adnexa. The uterus was 12 weeks in size in midline and quite tender bimanually. The pouch of Douglas was empty. The examining finger had yellowish discharge.

PROVISIONAL DIANOSIS

Puerperial sepsis with severe pelvic peritonitis:

MANAGMENT PLAN

Baseline investigations:

1. Haemoglobin level 9.5 grams/dl

2. Full blood picture showed evidence of severe neutrophilia. The total count was 25,000/mm^3 with a

neutrophil count of 20,000/mm, which was above normal f a normal puerperium.

3. Mid stream urine for culture and sensitivity was negative.

4. Serology for salmonella typhi was within normal limits "O" titre <1/20, H titres <1/20.

5. Blood culture was negative.

6. Blood slides for malarial parasites taken 8 hourly for hours were negative.

7. Serum electrolytes were as follows. Sodium was 142 m.eq/litre, Potassium was 4.2 m.eq/litre.

8. Endocervical swab for culture revealed a positive growth of E.coli and Bacteroides fragilis sensitive to Gentamycin and metronidazole respectively.

9. HIV screening by ELISA and later by Western blot was positive. The initial treatment for acute pelvic peritonitis was as follows.

1. Intravenous crystalline penicillin 2.5 mega units 6 hourly for 48 hours than intramuscular procaine penicillin 1.2 mega units daily for a period of seven

days. Penicillin was stopped on 4th day after the cultu
report.

2. Intravenous metronidazole 500 mg eight hourly for 48 hours than orally for five days.

3. Intramuscular Gentamycin 80mg, 12 hourly for 7 days.

4. Intravenous fluids 5% Dextrose 1000mls alternating by normal saline 3 litres in 24 hours.

Inspite of the above antibiotics her condition deteriorated and fever fluctuated between 38 - 40^{o}C. She developed mucoic diarrhoea later. A repeat pelvic examination done five days later revealed a tense and bulging pouch of Douglas; warranting a colpotomy. After discussing with the patient th nature of her problem she was prepared for a colpotomy and i necessary a laparotomy.

PRE-OPERATIVE PREPARATION

1. Grouping and cross matching was done and 500mls of compatible blood was obtained.

2. The abdomen and perineum were cleaned with soap and shaved.

3. A signed informed consent was obtained for colpotomy and if necessary a laparotomy.

SEDATION

She was given 100mg of intravenous Pethidine and 10mg of Diazepam. She was given 1mg of atropine and put in a lithotomy position.

OPERATION

The perineum was cleaned with 1:20 savlon and draped with sterile towels. She was catheterized and 200mls of concentrated urine was obtained. Vulva and the vaginal walls were normal. Episiotomy wound was infected. Foul smelling vaginal discharge was noted. No obvious discharge was noted on milking the urethra.

The cervix was healthy looking save for the physiological ectropion and partially visible as it was pushed behind the pubic symphysis. After retracting the posterior vaginal wall a tense bulge in the posterior forrix was noted. The posterior lip of the cervix was held with a sponge holding forceps and about 5cc of pus was aspirated from the tense swelling confirming the diagnosis. A transverse incision was made just below the cervix and about 500mls of foul smelling pus was obtained under pressure. The loculi in the pelvic cavity and pouch of Douglas were released digitally.

A corrugated rubber drain was kept in the pouch of Douglas by a stay suture with catgut to the posterior lip of the cervix

POST OPERATIVE CARE:

1. Her vital signs remained stable

2. Temperature chart was kept four hourly. She was normothermic in 24 hours

3. Oral paracetamol 1000mg eight hourly was administered.

4. Antibiotics were discontinued and the drain was removed on the third post-operative day.

She had a remarkable improvement. Her temperature was norma in 18-20 hours, diarrhoea decreased over the next two days a she was ambulant and breast feeding her baby. she was discharged home on the fourth day after counselling her on t HIV status, protected sex and consequences of future childbirth. She was put on oral contraceptive pills in the family planning clinic. The HIV status of the neonate was negative. The baby was given BCG and oral polio vaccines. The mother was instructed to breast feed her on demand. She was discharged from the postnatal clinic to the nearest MCH clinic, and was made to understand the importance of regular follow up for the first year of the infant.

COMMENTARY:

Seroprevalence of HIV cases have been escalating and by 1990 about 11% of pregnant women attending antenatal clinic at th Muhimbili Medical Centre were seropositive (Urassa et Mhalu)

One major change which occurs during pregnancy involves the cell mediated immune function and is characterized by an apparent depression of helper inducer T cell (T4) while the production of (T8) killer cells continues unchanged[2-5]. The T4/T8 ratio which normally ranges from 1.7 to 2.3 is depresse approximately to 0.9 - 1.92 in pregnancy. In HIV infected gravidas it drops below 1 which could be the case here. The fact that she was well antenatally, delievered a full term healthy infant with no apparent precipitating factors for sepsis like prolonged rupture of membranes warranted investigation to rule out an immunocompromised state. The persistence of fever, lower abdominal distension, pain and development of mucoid diarrhoea all pointed to pelvic infection. Surgery becomes necessary when there is evidence of development of an abcess, but the timing of the operation can be a difficult decision in clinical practice. Most authorities working in Africa recommend surgical intervention in 24 - 48 hours if there is no obvious response to conservative managment[4]. In this case there was some respons during the first 48 hours but the development of mucoid diarrhoea and subsquent detection of pus in the pouch of Douglas justified a posterior colpotomy.

Prospective studies are currently underway at several centres to clarify various issues concerning the effects of pregnancy on HIV infection. There have been reports of an increase of human papilloma viral infection and subsequent cervical dysplasis in patients who are HIV seropositive, indicating a possible need for Papanicolaou smears and evaluation of cervi

at intervals more often than annually. It has been heavily stressed by Centres for Disease control guidelines that any HIV sero positive pregnant woman with a positive serology for syphilis be preferably treated with penicillin, since there are failures in treatment with other agents[9]. There have bee case reports of poor response to penicillin in seropositive gravida, followed by delivery of a congenitally malformed child.

The perinatal transmission rate varies in different studies from 30-60%[5-7]. It is not clear whether infection occurs during pregnancy, delievery or shortly after birth. HIV has been isolated from fetal tissues as early as 14 weeks of gestation, also there has been a report of twins born to HIV positive mother who were discordant for HIV infection. Thus it seems clear that the rate of transmission is not 100% and that other unknown mechanisms must be operating. Until these factors are known, prediction of fetal infection and counselling of HIV positive women will remain difficult. Two factors are most predictive of vertical transmission, the birth of a previously infected child and a severely depressed maternal immune function. In a study done in Zaire Kinshasa, T4 cell counts were performed in 37 seropositive pregnant women and cord blood from their infants cultured for HIV. Th cultures were positive in the infants of 6 of the 18 women with antepartum T4 counts of 400 or fewer cells/mm^3 as compared to none of the infants of 19 women with more than 40 T4 cells/mm^3 (P=0.02). One year later 21% of the infants of the seropositive mothers had died as compared to 3.8% of

control infants. (P,0.001)[5]. This indicates that perinatal transmission of HIV-1 has a major adverse effect on infant survival. It has also been reported that many infected infants fail to produce detectable antibodies as was the case here, and more sophisticated and sensitive methods for viral detection such as the polymerase chain reaction be employed i future.

Little is known regarding HIV transmission in the postnatal period by breastfeeding. A prospective study in Rwanda has found that when a mother is newly infected while breastfeedin there could be a high risk of transmission to her infant[7]. I is the higher viraemia at the time of seroconversion that possibly increases the risk[7]. However these findings should not discourage breast feeding in Developing Countries. Similarly a seropositive infant should receive full dose of vaccinations as has been recommended by EPI, WHO guidelines. The only contraindication is of BCG vaccine to a HIV seropositive infant with clinical symptoms of the disease. This was done here and mother was instructed about attending the MCH clinic regularly.

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SEVERE INTRA AND POST PARTUM ANAEMIA

INVESTIGATIONS AND MANAGEMENT

Reg. No. 233/90

Name: Mrs R.A.

Age: 29 years

Parity: $P_4 + 0$

Residence: Mtoni, Dar es Salaam

Date of admission: 9/10/90

Date of discharge: 24/10/90

Delivery Number: 11,686/90

NB: The author was responsible for the management of this case at re-admission during the puerperium.

SUMMARY:

Mrs R.A. was a 29 years old para four who had delivered normally a month ago. She was brought to the postnatal ward in a poor condition with severe palor, dyspnoea and altered sensorium. She was resuscitated with diuretics oxygen and blood transfusion. She underwent a bone marrow examination which revealed features of megaloblastic anaemia with adequat iron stores. She was managed with Cyanocobalamine and folic acid with good haematological and clinical response. She was discharged home in good condition.

HISTORY OF PRESENT ILLNESS

Mrs R.A. was brought to the maternity block at the Muhimbili Medical Centre by relatives in a poor condition. She had

delivered normally 30 days ago, in our labour ward, a 2400gra female baby with an APGAR score of 8-9 at end 1 and 5 minutes On admission to the labour suite she was found to have a haemoglobin of 3.0gm/dl and was in impending cardiac failure. She labored for another four hours and had an assisted vacuum delivery after receiving injection frusemide 120mg intravenously and blood transfusion in a propped up position. She received oxytocin5IU intravenously after the second stage and the blood loss was about 100mls. The placenta and membranes were delievered complete and the the perineum was intact. She had one unit blood in 12 hours uneventfully and was later transferred to the post natal ward for further management. In the ward she received 3 more units of blood over a week with 40mls of total dose imferon, folic acid 5mg daily and a full course of chloroquine. Her haemoglobin rose to 7.8mg/dl and she was subsequently discharged without a ful haemotological work up. She was not in cardiac failure on discharge.

A few days later she noted unusual fatigability and breathlessness on attempting to carry out normal house hold chores. She also developed fever, headache and jointpains fo which she was given oral tablets of choloroquine. However he general condition deteriorated rapidly over the next few days She was even breathless at rest and was rushed to the hospita in a rather poor state.

INDEX ANTENATAL HISTORY"

She had booked at a peripheral antenatal clinic with a haemoglobin of 65% and blood pressure of 120/70mmHg, at twent eight weeks of gestation. She denied history of any dyspnoea or cough at that time. There was no history of vaginal bleeding or bleeding from any other site. There was no history of vomiting in early pregnancy . Her appetite had been good. Her daily meals was composed of two cups of tea and four buns for breakfast and a maize meal with boiled spinach or beans for lunch and dinner. The family could not afford regular supply of meat, fruits and fresh vegetables. She had to sell buns to supplement the income of her husband.

She made three antenatal visits the last one being two weeks before delivery. She neither received iron or folic acid supplements. Haemoglobin was not checked during subsequent visits.

PAST OBSTETRIC HISTORY

She had four normal term deliveries, the last one being 30 days ago. She had received blood transfusion antenatally during her second and third pregnancy. She was not investigated on both occassions and she had no supplementary medication provided during those pregnancies. She used to attend the peripheral MCH clinics and than go to the hospital for confinement. She denied past history of post partum haemorrhage and the puerperium was uneventful.

All her children were alive and well and their ages were 5, 3 and 1 1/2 years respectively. The last born being 30 days.

GYNAECOLOGICAL HISTORY

She attained menarche at the age of thirteen years had regula menstruation lasting 6-7 days in cycles of 28-30 days. She had no dysmenorrhoea, vaginal discharge or dysperunia. She had never used any form of contraceptives.

PAST MEDICAL HISTORY

There was no history of significant illness except during confinements. She had no history of fevers jointpains or jaundice in the past.

FAMILY AND SOCIAL HISTORY

She was the third born in a family of four children. All of them were alive and well. There was no family history of diabetes mellites or hypertension. Both herself and her partner did not smoke nor consume alcohol.

PHYSICAL EXAMINATION

She was a very sick looking young lady. She had severe pall and was markedly orthopneic. She was drowsy and was not jaundiced. Her jugularvenous pressure was markedly elevated her pulse was 140/min regular but of low volume, blood pressure was 120/70mmHg. There were marked oral ulcers. There were basal crepitations in both the lung fields. The heart sounds were normal with a haemic murmur at the mitral area.

Abdominal examination revealed a normal liver, spleen and kidneys. There was no ascites, the uterus was not palpable. There were no other masses felt. Since there was no history of vaginal bleeding or discharge per vaginum, in view of her poor state, pelvic examination was deferred

Pelvic examinaion done after stabilizing her haemodynamic status on the second day revealed a healthy vulva with no obvious discharge from the vagina. Speculum examination revealed normal vaginal walls with a healthy parous cervix with mild ectropion. No obvious urethral discharge was noted on milking the urethra. Digital examination revealed a firm closed cervix with a normal sized uterus in the midline mobile with normal adnexae. The pouch of Douglas was empty.

PROVISIONAL DIAGNOSIS

Severe puerperial anaemia with congestive cardiac failure probably due to.

1. Haemolysis secondary to chronic malaria or a sickling crisis.

2. Iron deficiency anaemia.

3. Folic acid deficiency

4. B_{12} deficiency as a rare possibility.

5. Urinary tract infection leading to a refractory anaemia

6. Haematological malignancies such as the leukaemias

MANAGEMENT PLAN

Immediate resuscitative measures

1. She was put on a cardiac bed.
2. Intravenous injections of Frusemide 120mg were given immediately and repeated four hourly PRN - she received such doses.

3. Packed red cells were instituted as soon as they were available in an hour of admission and run over 12 hours She received 3 units, (1500) over a period of 72 hours

4. Oxygen therapy given at 6 litre/min by intranasal tube. (Physiologically of very little significance).

She was catheterised to monitor the urinary output. She produced 6.0 litres of clear urine in twenty four hours, following the diuretic therapy.

Baseline investigations

1. Full blood picture was taken before starting on blood transfusion showed features of anisocytosis polychromasia. No blast forms were noted. Reticulocyt count could not be done due to logistic problems.

2. Blood slide for malarial parasites was negative on 3 occassions.

3. Portable haemoglobin done on admission was 2.0grams/dl

4. Catheter specimen of urine for microscopy, culture and sensitity was negative

5. Sickling test was negative.

6. Stool examination for ova load was twice negative.

7. Bone marrow "aspiration biopsy" revealed packed bone marrow fragments with hypercellular trail smears characteristic of any erythroid hyperplasia. There was also moderate dyserythropoeitic features pointing to megaloblastosis. Giant metamyelocytes with normal megakaryopoesis were noted.

Iron stain was strongly postive. Myelogram revealed 16% segmented neutrophils, 5% metamyelocytes 7% myelocytes, 2% eosinophils and 70% erythroid forms.

The above findings were diagnostic of megaloblastic anaemia with an abundance of bone marrow iron deposits.

8. Red cell folate levels and Schillings test could not be done Tests for achlorhydria were not done due to logistic problems

FINAL DIAGNOSIS

1. Megaloblastic anaemia with poor response to folic acid therapy which was instituted on discharge immediate postpartum.

TREATMENT PLAN:

1. Blood transfusion of 2000mls in the initial 4-5 days to stabilize the patient from the congestive cardiac failure.

2. Folic acid tab 5mg thrice daily for two weeks followed b 5 mg daily for a month.

3. Injection of Cyanocobalamine 1000mg stat following bone marrow reports and a haematological consultation. This was followed by another 1000mg 2 weeks later.

The haemoglobin rose steadily and in two weeks it was 5.5gm/dl. She continued on the above therapy in addition to the high protein diet from the hospital kitchen in the form o 2 eggs day, half a litre of milk and occassional meat. Her general condition improved remarkably and she was discharged five weeks later with a haemoglobin of 8.5gram/dl to attend the postnatal clinic 2 weeks later.

FOLLOW UP:

At the post natal clinic she was quite cheerful, not pale nor dyspnoeic. Her haemoglobin was found to be 10.0gm/dl. There

were no oral ulcers. She was counselled and agreed to underg bilateral tubal ligation under local anaesthesia. She underwent the surgery a month later uneventfully and was subsequently discharged to the MCH clinic.

COMMENTARY

Anaemia in pregnancy remains an important problem of the Developing World[1-3]. It is a leading cause of Maternal death at our Centre[10-11].

The most common cauase in the tropics being iron deficency which is commonly aggravated by parastic infestations like malaria and hookworm. Sickle cell anaemia and malnutrition also play a role. It has been reported in many studies that about 90% of our women attend antenatal clinics. Despite this heavy attendance the problem of anaemia is encountered intrapartum or even postpartum. One may easily find 1 to 2 patients on blood transfusion in our labor ward due to anaemia. Does this mean adequate screening at the peripheral clinics is neglected? perhaps due to lack of morale and motivation of MCH aids or poor superivision by qualified midwives. It is not uncommon to see blank spaces in the column for haemoglobin on the antenatal card and even lack of adequate supplementary haematinics at the periphery. It seem the primary levels of health care needs a thorough review. Seminars or workshops, targeted at the primary health level b conducted at regular intervals for continuing education of th low cadre health worker.

This woman had her last antenatal visit about two weeks prior to the onset of labour. Had an effort been made during that time on proper clinical evaluation perhaps she could have had an earlier intervention. The decision to discharge her postpartum after instituting blood, imferon and folic acid without investigations should be condemned. Perhaps it was due to the pressures of an over crowded ward which led to her being prematurely discharged. Routine administration of bloc without proper investigations is fallacious. Blood is only tc be administered to resuscitate and not to treat patients. Th National Aids control programme has the same recommendations in limiting blood trasfusions to a minimum.

The cause of megaloblastic anaemia in pregnancy is nearly always folate deficiency[2-3]. Vitamin B12 is only rarely implicated[3]. A considerable number of women may have megaloblastic changes in their marrow which may not be suspected on examination of the peripheral blood film. This matter is currently being looked into by some workers at our Centre. The rich source of folates in our populaion is spinach but upto 90% of its folate content is lost within a few minutes on boiling or steaming as was the case here[1]. Normal dietary folate intake is inadequate to prevent megaloblastic changes in the bone marrow of approximately 25% of pregnancy women[1]. There is much controversy about the requirement of folate particularly in pregnancy. WHO recommedations of folate intake are as high as 800ug during pregnancy and 600ug during lactation[7]. Antepartum folate or B12 deficiency can unmask for the first time in the

puerperium. It has also been speculated recently whether the apparent folate deficiency of pregnancy can predispose the mother to a wide variety of obstetric complications like abortions, fetal neural tube defects, prematurity and antepartum haemorrhage. The extensive literature seems to be almost equally divided in its opinion on the value of folic acid supplementation to prevent the above mentioned obstetric catastrophies. A recent report on a controlled trial of pre-conceptional folic acid supplement in preventing neural tube defects seems exciting. However such a simple solution to a devastating congenital problem obviously deserves further studies in a wider population.

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OBSTRUCTED LABOR

LSCS WITH IATROGENIC BLADDER INJURY

NORMAL RECOVERY

Registration No: 1096/90

Name: Mrs R.O

Age: 29 years

Parity: P7+0

Residence: Mbagala, Dar es Salaam

Date of admission: 9/1/91

Date of discharge: 23/191

SUMMARY:

Mrs R.O. was a 29 years old, para 7 woman at term in labour since the previous twenty six hours. She was referred from a peripheral hospital in the early hours of the morning to the Muhimbili Medical Centre. Examination revealed an exhausted febrile mother in pain with a Bandl's ring and good foetal heart tones. Digital examination revealed moulding of grade two with a caput at the level of the ischial spines. An emergency lower segment caesarian section was done and in the process a bladder tear occured. The rent was repaired and sh had an uneventful postpartum recovery.

HISTORY OF PRESENT ILLNESS:

Mrs R.O. was a parous woman at term. She experienced labour pains and reported to the local hospital where she was examined and found to be in established labour. Initial evaluation had revealed a cervical dilatation of 4cm and an

artificial rupture of membrances was done. The presenting part being a vertex about four-fifths above the pelvic brim with no evidence of caput or moulding. The liquor was clear with vernix caseosa and no cord was palpated. The position was right occipito-posterior. She had six subsequent vaginal examinations in the following 18 - 20 hours !!! at the peripheral hospital. A diagnosis of obstructed labour was then made and she was finally referred to the Muhimbili Medical Centre.

INDEX ANTENATAL HISTORY:

She booked late at a gestational age of 30 weeks at a peripheral MCH clinic with a blood pressure of 110/70mmHg haemoglobin of 8.9 grams/dl and a weight of 58.0kg. Protein was not checked in her urine. She made two subsequent visits and had a weight gain of 3.5kg in the next 10 weeks. Her blood pressure remained in the range of 120/70 - 110/60 mmHg. She received two doses of tetanus toxoid four weeks apart. She had not received oral haematinics nor malarial prophylaxis. She had no complaints during the first two trimesters. She never attended the high risk clinic.

PAST OBSTETRIC AND GYNAECOLOGICAL HISTORY:

She had seven previous normal delieveries with an uneventful puerperium. Her babies weighed between 3000 to 3500 grams a birth. The average duration of labour was 12-14 hours.

She attained menarche at the age of twelve, had regular menstruation lasting 4-6days in cycles of 26-28 days. She ha no dysmenorrhoea, vaginal discharge or dysperunia. She had not used any contraceptive methods.

FAMILY AND SOCIAL HISTORY:

She was a housewife staying with her husband. There was no history of diabetes mellitus in her family.

PHYSICAL EXAMINATION:

She was a healthy looking lady in good nutritional status. She was not pale but markedly dehydrated and exhausted. Ther was no acetone smell in her breath.

Her resting pulse was 106/min regular and good volume. Her blood pressure was 120/70mmHg. The cardio - respiratory status was unremarkable.

Abdominal examination revealed an obvious Bandl's ring with a full bladder. The foetal tones were well heard. No free fluid was demonstrated and the flanks were not bulging. The liver spleen and kidneys were not palpable. Marked tenderne was demonstrated over the lower abdomen. Pelvic examination revealed a normal vulva with some foul smell. There was no bleeding noted. Digitally the cervix was 8 cm dilated with moulding of grade 2 and a caput at the level of the ischial spines. The presenting part was about three fifths above the pelvic brim. Marked tenderness was noted while evaluating th pelvic findings. The bladder was catheterized with some

difficulty after digitally pushing the presenting part up obtaining 50 mls of clear urine. Urine was positive for ketone bodies and a trace of proteinuria.

PROVISIONAL DIAGNOSIS:

Obstructed labour in a multipara.

MANAGEMENT PLAN:

Baseline investigations

1. Blood was taken for grouping and cross matching and 1000mls of compatible blood was obtained.

2. Urine was positive for ketone bodies.

3. Blood sugar done on the second day post operative was 45mmol/l within normal range.

PRE-OPERATIVE PREPARATIONS:

1. The abdomen was cleaned with soap and shaved in the labour ward.

2. A signed informed consent was obtained for a caesarean section and bilateral tubal ligation.

3. Pre-operative 1.0gram of injection Ampicillin was given intravenously.

4. 2000mls of fluids in the form of Ringerslactate 1000mls alternating with Dextrose saline was given with a No. 18

canula so as to rehydrate and attempt to correct the electrolyte imbalance.

5. Serum electrolytes and blood sugar could not be done urgently in the labour ward.

ANAESTHESIA:

INDUCTION:

She was given atropine 1mg thiopental 375mg, suxamethonium 100mg intravenous and then intubated using a 7.5 mm cuffed endotracheal tube.

MAINTAINANCE:

She was maintained on ether and 6 litres of oxygen/minute.

OPERATION:

The abdomen was cleaned with savlon 1:20 and a weak iodine (10%) solution.

The abdomen was opened as described in case(1). An obvious retraction ring with a stretched out and thin lower segment was found. The bladder was markedly oedematous.

After opening the lower segment as described in case(1), the foetal head was delivered with some difficulty. After delivery of the placenta as the lower segment was being repaired, the Foley's catheter was seen in the operative fiel confirming a bladder tear. The edges of the bladder fistula were then gently held with Allis tissue holding forceps. The

trigone and the ureteric openings were not injured. The bladder wall was then repaired in two layers. The muscularis with continuous no 1/0 chromic catgut on an atraumatic needle. The serosa was repaired with an interrupted 1/0 chromic catgut. Bilateral tubal ligation was done as described in case(8). Estimated blood loss being 800mls. she recovered well from anaesthesia and after a brief observation in the recovery room was transferred to the postnatal ward.

POST OPERATIVE CARE:

1. Her blood pressure, pulse and respiratory rate were monitored half hourly till they were stable, than four hourly. They remained stable.

2. She received 500mls of compatible blood in the first twelve hours.

3. Intravenous fluids 1000mls of normalsaline alternating with 5% dextrose 1000mls 3 litres in 24 hours.

4. (a) Injection Ampicillin 500mg intravenous six hourly fo: 24 hours followed by oral capsules for five days.

(b) Injection Gentamycin 80mg intramuscular twelve hourly fo: five days.

(c) Oral Metronidazole 400mg eight hourly from the second post-operative day for five days.

5. Injection Pethidine 100mg intramuscular six hourly for 24 hours.

6. A fluid balance chart was kept. She produced 1200mls of urine in the first 24 hours. It was slightly haemorrhagic. The urine output was noted 3 hourly and a deliberate efforts made to avoid blockage in the flow by kinking of the catheter or a blood clot. A continous drainage of the catheter was maintained.

On the third post operative day the urine was clear and draining well. Catheter specimen of urine was taken on alternate days for culture and sensitivity. The fourth specimen was colonized at day 10 with a significant growth of E, coli, sensitive to Nitrofurantoin. She was put on Nitrofurantoin (100mg) 12 hourly for a period of two weeks. No leakage of urine was noted vaginally.

Abdominal sutures were removed on the seventh day and had healed well. The catheter was removed on the fourteenth day post operative. She was fully continent with urine control. There was no leakage of urine on walking or coughing. Gentle speculum examination did not reveal any areas of leakage of urine. She was discharged home on Nitrofurantoin and oral haematinics and instructed to come back four weeks later. Her haemoglobin on discharge being 9.5grams/dl.

FOLLOW UP:

She was seen four weeks later at the postnatal clinic in good general condition. She was not pale and fully continent of urine. There were no symptoms of stress incontinence or of increased frequency of urine. Midstream urine was sent for culture which was found negative for bacterial growth. She was subsequently discharged from the clinic.

COMMENTARY:

Obstructed labour remains the commonest cause of maternal morbidity and mortality in tropical Africa. It can almost totally be prevented by the provision of comprehensive maternity services. Even where this cannot be afforded much can be done to reduce the frequency of the condition by interventions at the Community and primary health level. In the management of the established condition each level of the service has its own distinct role and prompt referral is vital.

Despite interventional policies and introduction of partographs, it is common to see referrals coming to the tertiary level of care after a prolonged delay or with a ruptured uterus. Multiple factors could be operating, like literacy and cultural values resulting in women not accepting clinic delivery, risk factors not being picked at antenatal clinic or to some extent communication problems delaying referrals. This woman was monitored at the peripheral clinic labour ward for 18-20 hours, despite being highly parous. The partograph was not properly made use of perhaps due to

poor training of health workers at the primary level. The Safe Motherhood Initiative funded by the WHO to reduce the Maternal morbidity is a positive sign of Donor Countries towards maternal wellbeing.

In rural Africa most deliveries occur at home thus many Countries like Nigeria and Zimbabwe have started training the TBA^{S} to work hand in hand with the midwives. This could detect "high risk" mothers and refer them on time. The trained midwife is the key to early diagnosis of obstruction. She can identify the "high risk" group both by history and examination. Cases of advanced obstructed labour should be reviewed in the same way as cases of maternal and perinatal deaths. Ideally the Community Midwife should sympathetically interview either the mother or her relatives to uncover the critical determinants. Members of staff with resposibility for the development of the Community and peripheral maternity services should also participate. Such an analysis of cases would readily reveal the geographical and social strata from which cases of obstructed labour arise. It may also reveal factors which may be overcome by one intervention or another.

The bladder is relatively resistant to injury when collapsed, so the first line of defense is drainage by Foley's catheter as was done here. However due to oedema it was perhaps not fully pushed away. Bladder tear is easily confirmed by the sight of the Foley's catheter. Once an injury is noted the ureters and trigone should be carefully evaluated as was done in this woman. Catheterization for a period of 10-14 days

permits continous bladder drainage allowing healing of damaged tissues as well as of some silent undetected fistulas. Infection is a common cause of break down of the repair, hence justifying the antibiotic regime, in this case. The prognosis of intra-operative bladder tear if detected and repaired adequately is quite good as was proved here.

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ADVANCED INTRALIGAMENTOUS PREGNANCY

(A REMINDER TO THE CONTEMPORARY PELVIC SURGEON)

LAPAROTOMY SUCCESSFUL RECOVERY

Registration No: 17114/91

Name: Mrs Z.I

Age: 34 years

Parity: P3 +1

Residence: Mbagala, Dar es Salaam

Date of admission: 13/7/91

Date of discharge: 30/7/91

NB: The author was only responsible from the operative management onwards, for this particular case.

SUMMARY:

Mrs Z.I. was a 34 years old woman at 36 weeks of gestation with three living children. She was referred from a peripheral MCH Clinic to the Muhimbili Medical Centre on account of persistent abdominal pain. Examination revealed a tense tender uterus with absent foetal tones. She had a long un-effaced and closed cervix. She was thus managed as a case of concealed abruptio placenta. She was on an oxytocin drip for "FORTY TWO" hours!!! without any uterine contractions and had a persistently long, uneffaced and closed cervix. Ultrasound revealed what appeared like an "intra uterine" foetal death with a long cervix but with no evidence of retroplacental bleeding. In view of failure of oxytocin to initiate uterine contractions, with a persistent abdominal

pain and a long uneffaced closed cervix a clinical suspicion of an advanced abdominal cyesis was made. Laparotomy reveal an advanced right sided macerated intraligamentous pregnanc with a foetus weighing 2500grams encapsulated in a pseudocapsule. The uterus was fourteen weeks of size and wa pushed away on the left side. On removal of the foetus it w difficult to achieve haemostasis so a pack was left in situ the placental site. Abdomen was re-opened forty eight hours later the pack removed and she was discharged home in good condition on the ninth postoperative day.

HISTORY OF PRESENT ILLNESS:

Mrs Z.I. was a 34 years gravid woman at 36 weeks of gestatic She had booked at a peripheral MCH Clinic at a gestation of weeks with a blood pressure of 100/60mmHg, haemoglobin of 7C and a weight of 60kg. Proteinuria was not checked. She had no illness during the first trimester. She made 4 subsequer visits and her blood pressure ranged between 130/70 to 120/80mmHg, had a weight gain of 7.0kg and a haemoglobin of 75%. However there was no increase in the fundal growth during the last 3 weeks. She had also noted a cessation of foetal movements a week earlier followed by galactorrhoea, f which she did not seek any medical help. She had no history of recent febrile illness.

She was well till 2 days earlier when she started noting continuous dull abdominal pain. The pain was localized to t right lower abdomen. It was not associated with vaginal

bleeding or feeling of faint. She had no dysuria or constipation.

PAST OBSTETRIC AND GYNAECOLOGICAL HISTORY:

She had three normal term delieveries with an uneventful puerperium. All her children were alive. The last delivery was six years ago.

She attained menarche at the age of fifteen, had regular menstruaction lasting 4-5 days in cycles of 28-30 days. She had no dysmenorrhoea, vaginal discharge or dysperunia. She denied any use of contraception.

FAMILY AND SOCIAL HISTORY:

She was a housewife staying with her husband. No other relevant history, was available.

PHYSICAL EXAMINATION:

She was healthy looking and not pale nor jaundiced, but was i obvious pain. She was markedly dehydrated but had no ketone smell in her breath. Her resting pulse was 94/min regular with good volume and her blood pressure was 130/80mmHg. Ther was an obvious galactorrhea. The cardiovascular and respiratory systems were normal.

Abdominal examination revealed a tense tender uterus with a fundal height of 32 weeks and absent foetal tones. Foetal parts were not felt easily. No further increase in the funda height was noted over the time she was on oxytocin No free

fluid was noted. The liver spleen and the kidneys were not palpable.

Pelvic examination revealed a healthy looking vulva with no obvious vaginal discharge, draining liquor or bleeding. Speculum examination revealed normal looking vaginal walls ar a closed healthy cervix with no evidence of bleeding or draining. Initial digital examination revealed a closed and uneffaced long cervix. These findings persisted over the tim she was on oxytocin.

PROVISONAL DIAGNOSIS:

Concealed abruptio placenta

MANAGEMENT PLAN:

With above diagnosis she was managed as a case of concealed abruptio placenta aiming at vaginal delivery. She was induce with an oxytocic drip.

Baseline investigations:

1. Blood grouping and cross matching was done and 1500mls c compatible blood obtained.

2. Bed side clotting time was monitored 4 hourly. It range between 5-6 minutes.

3. Urgent haemoglobin estimation was 9.5gram/dl. She received the following treatment.

1. Intravenous line with a canula No.16 for correcting dehydration in the form of 1000mls of normal saline. Sh received 3000mls in 24 hours.

2. Another intravenous line for induction of labor in the form of 500mls of 5% Dextrose with 1.25IU of oxytocin titrated at a rate of 10,20,30,40 drops/min every 30 minutes. This was stepped up to 2.5, 5, 7.5 and 10IU without any effect on the uterus.

3. An indwelling Foley's catheter to monitor urinary output was kept. She produced 1500mls of clear urine in 24 hours which was more than 60mls/hour indicating a good renal perfusion.

The pain and tenderness persisted. The vital signs remained stable and there was no pallor. There was no increase in the fundal height and there were no palpable uterine contractions despite the escalating, though not well titrated doses of oxytocin, the cervix remained persistently long closed and un effaced. On re-evaluation no free fluid nor a palpable mass separate from the "uterus" was detected. Although an ultrasound did not prove useful except for detecting a dead foetus a clinical suspicion of an advanced abdominal pregnanc was made. Relevant radiological investigations like the erec lateral and anteroposterior abdominal Xray were not done due to logistic problems. An informed consent was taken for a laparotomy.

ANAESTHESIA:

Induction: She was given atropine 1mg thiopentone sodium 375 suxamethonium 100mg intravenous and then intubated with a 7.5mm cuffed endotracheal tube.

Maintanance: She was maintained on ether and ketamine hydrochloride drip.

Operation:

The abdomen was cleaned with savlon 1:20, 10% Iodine solution and spirit. A midline subumbilical incision was made and the abdomen opened in layers. An advanced right sided intraligamentous (between the folds of the broad ligament) pregnancy of about 34 weeks size with a false capsule was noted. The empty uterus was of 14 weeks size and pushed away to the left side.

The pseudocapsule was incised vertically in midline and 2.5kg macerated female foetus with no obvious congenital malformations was carefully delievered from the pseudo capsule. As much of the pseudocapsule as possible was excised. There was a partial seperation of the placenta resulting in a considerable amount of active oozing. The placental bed was situated over the common iliac vessels and also extended over the ascending and transverse colon. Efforts to pack and compress the partially seperated placenta bed with warm saline packs proved futile, as on removal of th pack significant oozing persisted. This prompted the author to utilize the orthodox method of leaving the pack in situ an

close the abdomen with an aim of removing the pack forty eigh hours later. The rectus sheath was closed using continuous Nylon No. 1 and skin with interrupted silk No. 0, Estimated blood loss being 2000 mls.

She recovered well from anaesthesia and after a brief observation was transferred to the post natal maternity ward.

POST OPERATIVE CARE:

The post operative period was stormy as is expected in such cases.

1. Her blood pressure was between 50/20 to 90/70mmHg during the first six hours. Her pulse ranged between 110/min t 140/minute of low volume for the first six hours. In th next 18 hours the vital signs had stabilized blood pressure ranging between 90/60 mmHg to 110/70 mmHg while her pulse ranged between 90-110/min of good volume.

2. She developed fever after about 12 hours measuring $38^{5o}C$ The temperature ranged between 37-39^{o}C in the first 48 hours. She received tepid sponging regularly. Blood slide taken for malaria was negative.

3. She received 1000mls of blood in the first 12 hours of surgery and another 1000mls on the second day post operative.

4. Intravenous normal saline 1000mls alternating with 5% Dextrose 1000mls, 3 litres in 24 hours.

5. Intramuscular injections of 50 mg Pethidine in the first 12 hours due to the hypotension followed by 100mg in the next 12 hours at six hourly intervals.

6. In view of the anticipated infection, she received the following antibiotics.

   (a) Injection Crystalline Penicillin 2.5 mega units intravenously six hourly for fourty eight hours.

   This was followed by Cephalosporin preparation on availability following the relaparotomy, in the form of cefuroxine sodium, (ZINACEF) 750mg intravenous eight hourly for five days.

   (b) Injection Gentamycin 80mg intramuscular 12 hourly for seven days

   (c) Injection Metronidazole 500mg intravenous eight hourl for 72 hours followed by oral dose for 4 days.

7. Abdominal girth measured - 2 hourly showed no increase over the next 24 hours. There was no evidence of continued intra abdominal bleeding.

Forty eight hours later following laparotomy she was rescheduled for a re-laparotomy under sedation and local

anaesthesia. Her general condition was poor. She had stable vital signs but the temperature fluctuated between 37-39^{o}C.

OPERATION:

She received 50mg Pethidine, and 10mg diazepam intravenous. She received 1mg atropine.

The skin sutures were removed. Local anaesthesia in the form of 1% lignocaine infiltrated along the wound edges on both sides. The Nylon suture holding the rectus sheath was cut. The abdomen gave way and the pack was carefully brought out after pushing away the omentum. The rectus sheath, peritoneu and skin were closed in one layer using Nylon No. 2 interrupted. thus making the tension suture. Plastic tubing were inserted in the suture to prevent cutting through of the skin. Skin was closed with interrupted silk No.0.

She recovered well from the sedation and was transferred back to the ward. Her vital signs were stable. She was on intravenous fluids for a day and received antibiotics as stated above. The fever subsided in the next 48-60 hours. She started ambulating on the third day and was on oral feeds Her haemoglobin was 6.7 grams/dl. She was put on oral haematinics. Skin sutures were removed on the sixth day post operative followed by removal of tension sutures on the tenth day post operative. The wound had healed well. She was discharged home two days later.

FOLLOW UP:

She was seen six weeks later at the postnatal clinic. Her general condition was good with a haemoglobin of 9.8 gram/dl No. obvious mass was felt per abdomen. Pelvic examination revealed a normal looking vulva and vaginal walls. Speculum examination revealed a normal healthy closed cervix with no obvious discharge. Digitally there was a firm non tender immobile mass felt on the right adnexa, measuring 5 x 4cm. The uterus was midline normal sized and rather fixed. The left adnexa was not palpable. There was no obvious mass felt in the pouch of Douglas. She was counselled for family planning methods and she opted for an intra uterine contraceptive device. She was instructed to come back 12 weeks later. This was to evaluate the placental autolysis or any other complication.

Twelve weeks later (ie. 18 weeks post laparotomy). She was seen at the clinic. She had not yet resumed mensus. She was not pale. Pelvic and speculum examination were normal. Digitally the mass in the right adnexa had shrunk to about 2 2 cm was non tender and immobile. This showed placental autolysis of the remaining placental tissue. She was seen si months later, had resumed mensus and no evidence of adnexal mass noted. She was discharge to the family planning clinic subsequently.

COMMENTARY:

Advanced abdominal pregnancy is a rare event in literature. Its exact incidence in Tanzania is unknown.

Mbura JSI and Mgaya. H.N. in a two year prospective study at the Muhimbili Medical Centre in 16 patients found the incidence at the Centre of 1:3259 normal deliveries[1]. Prolonged involuntary infertility being a significant antecedent factor (P,0.001), as was seen in this case.

Primary abdominal pregnancy with the first and only nidation onto a peritoneal surface is difficult to prove and rarely reported. Studdiform published his three criteria for the above diagnosis, a) the tubes appearing normal with no evidence of previous nidation b) there is no uteroplacental fistula or evidence of uterine rupture and C) the conceptus being exclusively attached to the peritoneal surfaces and the pregnancy early enough to say so[4]. In this case the above criteria were not satisfied.

This condition may result from tubal abortion or occassionally the trophoblast penetrates the tubal wall at the mesosalphinx resulting in secondary implantation of the conceptus between the leaves of the broad ligament. This is called an intraligamentous pregnacy as was present in this case. The resultant haemorrhage due to the trophoblastic invasion may be controlled by the compressive forces of the peritonum and the pregnancy may survive. An early abdominal pregnancy is less than 24 weeks gestation, whereas late or advanced is 24 or more weeks as was present in this case. From 50-90% of abdominal pregnances are advanced when the diagnosis is first made. Almost every patient with an abdominal pregnancy

complains of abdominal pain in late pregnancy as was seen here. In about 40% the diagnosis was not considered until attempted induction failed as was demonstrated here. The suspicion should have been made quite early and the inductio with oxytocin over such a prolonged time of fourty two hours by the previous colleagues in the ward be strongly condemned

The correct diagnosis of abdominal pregnancy is made pre-operatively in about a third of cases. Successful diagnosis depends on a high index of suspicion, elaborate history taki careful physical examination and meticultous intrepretation sonographic and radiological signs. Ultrasonic diagnostic features of abdominal pregnancy have been reviewed, its sensitivity was 83.3% and specificity 85.7% Inadequate demonstration of pelvic anatomy probably an effect of overlying bowel gas may lead to misdiagnosis. Also the "pseudo capsule" could have mimicked as an uterine wall for the mis diagnosis of an intrauterine foetal content as was found here.

Sepsis is a common and formidable complication associated wi an uremoved placenta. The rapid recovery here with a partially present placenta was very unusual as compared to previous studies[1]. Aseptic techniques and antibiotics shoul be used liberally as was done here. Failure to achieve haemostasis by conventional methods in such a situation coul prove disastrous to the patient. Some authors have occasionally resorted to keep a warm saline pack in situ to control haemorrhage as was done here[4-5]. The pack can be

removed 48 hours later as was done here. Some authors have reported placental retention for many months awaiting autolysis[3]. If after six to nine months there are no signs o regression and symptoms of internal obstruction or adhesions occur than a relaparotomy can be considered to enucleate the placental tissue. The role of methotrexrate to devascularize the placental bed and speed up its reabsorbtion is controversial[4].

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EXSANGUINATING SECONDARY PPH

RESUSCITATION FOLLOWED BY EVACUATION

SUCCESFUL RECOVERY

Registration No. 1156/91

Name: Mrs E.M.

Age: 26 years

Parity: Para two

Residence: Magomeni, Dar es Salaam

Date of admission: 30/4/91

Date of discharge: 6/5/91

SUMMARY

Mrs E.M. was a 26 years old puerperial woman who had been referred from a peripheral hospital on account of severe bout of genital bleeding on her tenth day postpartum. She had delivered a normal baby weighing 3000 grams after laboring fo about 8-10 hours. Examination revealed a pale woman in shoc with a 16 weeks tender uterus with extensive clots in the distended vagina and on open internal os. A diagnosis of a secondary postpartum haemorrhage with haemorrhagic shock was made. She was resuscitated and evacuated obtaining infected placental tissue which were sent for histology. She recovere well and was discharged home in good condition. The histolog reports revealed normal infected placental tissue.

HISTORY OF PRESENT ILLNESS

Mrs E.M. was a puerperial woman who had delivered normally at a peripheral clinic a healthy live baby weighing 3000grams after laboring for about 8-10 hours uneventfully. She had experienced vaginal bleeding 10 hours prior to admission at her residence. She reports to have changed 3 pairs of "khanga" which were filled with huge clots. She experienced a feeling of faint and diziness and reported to the dispensary six hours later. She had been having fever with chills since the last four days. She denied any foul smelling vaginal discharge or dysuria. She had been treated at a local dispensary with injections for the fever.

INDEX ANTENATAL AND INTRA NATAL HISTORY:

She had booked at a gestational age of 26 weeks at a peripheral MCH clinic with a blood pressure of 110/60 mmHg haemoglobin of 9.0gram/dl and a weight of 56.0kg Proteinuria was not checked in the urine. She made four more subsequent visits and had a weight gain of 6.5kg in the last 14 weeks. Her blood pressure remained in the range of 120/60 - 110/70 mmHg. She received two doses of tetanus toxoid at four weeks interval. She had not received oral haematinics nor malarial proplylaxis. She had no complaints during the first two trimesters.

She went into labor and reported to the labor ward two hours later. Membranes were ruptured spontaneously in the labour suite and she delivered about 8 hours later. The placenta was reported to have been delivered complete by the attending MCH

Aid. She had an uneventful thirdstage of labour. She was discharged eight hours later in a good condition.

PAST OBSTETRIC AND GYNAECOLOGICAL HISTORY

She had one previous normal delivery with an uneventful puerperium.

She attained menarche at the age of twelve, had regular menstruation lasting 3-4 days in cycles of 30-32 days. She had no dysmenorrhoea, vaginal discharge or dysperunia. She had not used any contraceptive methods.

FAMILY AND SOCIAL HISTORY

She was a housewife staying with her husband. There was no history of any chronic illness in her family.

PHYSICAL EXAMINATION

She was a young woman with severe pallor. She was not in pain nor jaundiced. Her pulse was 120/min of low volume and regular. Her blood pressure was 70/50mmHg in the sleeping position. She had cold clammy extremities with sweat on the forehead. The jugular venous presure was not visible. Thyroid gland was normal sized.

Her breasts were functional. There were no basal crepitations. The heart sound were normal with a tachycardia.

Albdominal examination revealed a scaphoid abdomen. No free fluid was noted. The uterus was of sixteen weeks size and tender.

The liver spleen and kidneys were not palpable No other masse were noted.

Pelvic examination revealed foul smelling lochia with blood clots in the distended vagina. The vulva was normal. There was no episiotomy wound or perineal tears. Digital evacuatio of clots was done which was estimated to about 1 litre. The cervical os was open, easily admitting two fingers. The uterus was in midline and of sixteen weeks size and tender. Digital evacuation of the uterus was not done since there was no active bleeding and she was in a state of shock. There wa tenderness in both fornices. The pouch of Douglas was empty

Speculum examination revealed normal vaginal walls with no laceration. The cervical os was open and no lacerations were noted on the cervix or fornices.

PROVISIONAL DIAGNOSIS:

Massive secondary PPH due to retained infected products of conception leading to haemorrhagic shock.

MANAGEMENT PLAN

Baseline investigations:

1. Blood was taken for grouping and crossmatching and 1000ml of compatible blood was obtained

2. Urgent haemoglobin level was found to be 7.0gams/dl.

3. Endocervical swab for culture and sensitivity revealed significant growth of E coli and streptococcal agalactiae sensitive to gentamycin and penicillin respetively.

4. Catheter specimen of the urine sent for culture and sensitivity showed no growth.

5. Red cell film done two days later revealed features of normochromic normocytic anaemia in consistence with an acute blood loss.

6. Serum creatinine was found as 90umol/litre within normal limits.

7. Blood taken for culture and sensitivity was negative for bacterial growth

8. Tissue histology of the retained products revealed normal decidua with infected chorionic villi. There was no evidence of malignancy noted.

PRE OPERATIVE PREPARATIONS:

1. She received 1000mls of Normal saline in half an hour with No 16 canula followed by 1 unit of blood. On the other arm 1000mls of normal saline with 40 IU oxytocin was set up.

2. She was catheterized and about 20 mls of concentrated urine obtained.

3. She was given 1.0 gram of Inj. Ampiclin intravenous pre-operatively.

4. Perineum was cleaned with soap and shaved.

5. Informed consent was taken for on evacuation or a laparotomy if need be.

She was sent to the theatre after finishing the first unit of blood. Her blood pressure was now 90/60mmHg with a pulse of 100/min good volume. She had produced 100mls of urine by then. She was not bleeding during the time of resuscitation.

ANAESTHESIA:

She received 1mg atropine 100gm Pethidine and 10mg of Diazepa intravenously. She was on a drip of normal saline with 40 IU of oxytocin and with second unit of blood on the other arm.

OPERATION:

She was put in a lithotomy postion. Perineum was cleaned with savlon 1:20 and draped using sterile towels.

The posterior vaginal wall was retracted using a Sims speculum. The cervix was visualized and the anterior lip was held with a sponge forceps. Using ovum forceps many products of conception along with a placental lobe, were evacuated to completion. Using a sharp curette gentle curettage was done to completion. A brisk haemorrhage ensued on removal of placental tissue. Injection ergometrine 0.5mg intravenous was instituted. No cervical or vaginal lacerations were noted. The uterus was fourteen weeks sized and well contracted at the end of the evacuation. She was observed briefly in the observation room and later transferred to the postnatal ward.

POST OPERATIVE CARE:

1. Her blood pressure pulse and respiratory rate were monitored half hourly till stable than four hourly. Her blood presure was 90/60 - 80/60 in the first six hours than stabilized to 100/60 - 90/60 during the next twenty four hours. Temperature was normal after 72 hours. It fluctuated between 37- 38^{o}C.

2. Injections Ampicilin 500mg intravenous eight hourly for 48 hours followed later by Crystalline penicillin 2.5 mega units six hourly for 24 hours, than by Procaine penicillin 1.2 mega units daily for 3 days, after obtaining culture reports.

3. Injection Getamycin 80mg intramuscular after culture report for five days.

4. Intravenous fluids 1000mls. Dextrose saline alternating with Ringers lactate 1000mls 3 litres in twenty four hours.

5. She was on a full diet

6. A perineal pad was kept to observe for vaginal bleeding. Very minimal bleeing was noted.

7. A fluid balance chart was kept. She produced 1000mls of urine in the next twenty fours hours which was more than 40 mls/hour and acceptable for such a patient with haemorrhagic shock.

Her urine output improved over the next day to 1200mls and the catheter was removed. She began to breast feed again on the third day and was discharged to the post natal clinic later on haematinics. Haemoglobin on discharge was 8.0gm/dl.

FOLLOW UP

She was seen six weeks later at the postnatal clinic. She was not pale and in good nutritional status. The uterus was well involuted and normal sized. The adnexae were normal. Haemoglobin was 10gm/dl. She was discharged to the family planning clinic for child spacing.

COMMENTARY:

The incidence of secondary postpartum haemorrhage varies between 0.7 to 1% in the literature. The incidence at our Centre is unknown but one encounters about 2-3 referrals a month with such a problem.

Haemorrhage most often is the result of abnormal involution o the placental site or due to retention of a portion of placenta as was seen here[1-3]. Usually, the retained piece of placenta undergoes necrosis with deposition of fibrin and eventually forms a so called placental polyp. As the eschar of the polyp detaches from the myometrium brisk haemorrhage ensues as was seen here. One of the most common abnormalitie of placental configuration is its division into one or more lobes[2]. The lobes are connected by vessels and membrances from the main placenta. These are known as accessary or succenturiate lobes as could be present here. The vessels connecting the accessary lobe with the main portion of placenta may traverse the region of the internal os giving rise to a condition called as vasapraevia. Such vessels frequently rupture ante or intrapartum leading to severe haemorrhage detrimental to the foetus. This was probably absent here. The succenturiate lobe may be retained in utero after delivery of the main placenta with consequent likehood of haemorrhage and infection, as was seen here. The attendin midwife might have possibly overlooked the routine of inspecting the placenta and membranes. Thus it should be stressed to the midwives to examine every placenta for

evidence of a retained succenturiate lobe " "fenestration in the membranes with vessels running into it".

Retrospective studies done elsewhere have shown that bleedin frequently occurred between the 8-14th day of the puerperium About 73% of patients were already discharged at the time of bleeding requiring re-admission. This seams to be the trend in our setting. It has been generally accepted that with secondary postpartum haemorrhage from the uterus, prompt curettage is necessary, this is also the policy of our department. The histological confirmation of retained gestational products is usually not seen in some cases while in some cases following a caesarean section one may not find any placental tissues. In some cases if evacuation fails to arrest haemorrhage than the obstetrician may be forced to do hysterectomy.

In Centres were sonographic facilities are readily available at any time to each patient, a pelvic scan is performed to identify products of conception[1]. If no products are demonstrated than a more conservative approach in the form o oxytocics or ergometrine is used. It has been argued by som authors that currettage in the absence of products of conception is likely to traumatize the former placental implantation site and incite more bleeding[1]. However in the authors opinion in our setting an exploration of the uterus with currettage is the best option.

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CORD PROLAPSE AT 37 WEEKS OF THE FIRST TWIN

EMERGENCY ABDOMINAL DELIVERY LIVE BABIES

Registration No: 880/90

Name: Mrs J.M.

Age: 36 years

Parity: P5+0

Residence: Buguruni, Dar es Salaam

Date of admission: 14/4/91

Date of discharge: 20/4/91

SUMMARY

Mrs J.M. was a 36 years old gravida six at 37 weeks of gestation with diagnosed twins. She was admitted to the labour ward on account of draining for the past one hour. Examination revealed a healthy woman with a fundus of 36 weeks and with good foetal tones. Digital examination revealed obvious draining of clear liquor with a pulsating cord at the partially dilated cervix. She underwent an emergency Caesarean section delivering live twins weighing 2800gm and 2600gm with a good APGAR score. She was discharged home with both her babies in good condition on the sixth post operative day.

HISTORY OF PRESENT ILLNESS:

She was a gravida six at 37 weeks gestation with a twin pregnancy. She noted spontaneous vaginal leakage of liquor while resting. She had no labour pains. She reported to the labour ward an hour later and examination revealed an abvious

draining of liquor with cord prolapse. The presenting part was cephalic and about four fifths above the pelvic brin and the second twin being also a cephalic presentation. The cervix was four centimetres dilated. A diagnosis of cord prolapse was made and she was prepared for an emergency abdominal delivery.

INDEX OBSTETRIC HISTORY:

She was a 36 years gravid woman at 37 weeks of gestation, She had booked at a gestation of 10 weeks with a blood pressure c 110/70mmHg, haemoglobin of 10 grams and a weight of 45kg. Th fundal height was of 16 weeks. Foetal movements were not felt. Proteinuria was not checked. She made eight subsequer visits and her blood pressure ranged between 110/70 - 110/80mmHg, the haemoglobin was raised to 11.0grams/dl and sh had a weight gain of sixteen kilograms. Proteinuria checked on subsequent visits was trace in amount, she had no other complaints. The disparity of fundal growth with gestational age prompted for an obstetric sonography which revealed viabl twin pregnancy with no obvious congenital malformations. She received 2 doses of tetanus toxoid at 4 weeks interval and oral chloroquine for malarial prophylaxis. She also receive oral haematinics in the form of ferrous sulphate 200mg daily in the second trimester and stepped up to 200mg twice daily i the last trimester along with folic acid 5mg daily.

PAST OBSTETRIC AND GYNAECOLOGIC HISTORY>

She had five normal delieveries at term, the puerperium was uneventful. She had not used any form of contraception. She

attained menarche at the age of thirteen had regular menstruation lasting 3-4 days in cycles of 28-30 days. She had no dysmenorrhoea vaginal discharge or dysperunia.

FAMILY AND SOCIAL HISTORY:

She was a married housewife staying with her husband. She hac no history of diabetes mellitus or hypertension in self or her near relatives. Her elder sister had delivered twins.

PHYSICAL EXAMINATION:

She was healthy looking was not pale nor jaundiced. She was not in pain, her axillary tempreture was 37^{o}C. She had a pulse of 82/min regular and good volume, her blood pressure was 110/70mmHg, the cardiorespiratory status was normal.

Abdominal examination revealed a fundus of 36 weeks with positive foetal tones. There were no contractions felt, the lie was longitudinal and the presenting part was cephalic followed by a breech. The liver, spleen and kidneys were not palpable. The liquor seemed normal for twin pregnancy.

Pelvic examination revealed an obvious draining of clear liquor at the vulva. Digitally a pulsalting cord was palpabl along side the high presenting part. The cervix was 4cm dilated . She was immediately put in the knee chest position after confirming foetal viability and prepared for an emergency caesarean section. No effort was made to auscultat for2 foetal heart tones at different sites. Since the cord

was pulsating and a foetal heart was heard well, indicating foetal viability probably of both twins.

DIAGNOSIS:

A diagnosis of cord prolapse in twin pregnancy following spontaneous rupture of membranes at 37 weeks of gestation.

PRE OPERATIVE PREPARATIONS:

1. An informed consent was taken for a Caesarean section and bilateral tubal ligation.

2. The couple had already decided for a tubal ligation antenatally. Blood was taken for grouping and crossmatching.

3. Injection Ampicilin 1.0gram was administered intravenous prophylactically.

4. The abdomen was quickly cleaned with soap and water and shaved.

ANAESTHESIA

INDUCTION: She was given atropine 1mg, thiopentone 375mg, suxamethonium 100mg IV and than intubated with a 7.5mm cuffed endotracheal tube.

MAINTAINACE: She was maintained on Ether and 10mg of pavulon.

OPERATION: She was kept on a 15^{o} tilt in the supine poistion. The abdomen was cleaned with savlon 1:20, a weak iodine (10%) solution and spirit. A subumbilical midline incision was made and the abdomen opened in layers. A poorly formed lower segment of an intact gravid uterus was found. Two wet packs were inserted on either side of the uterus the lower end of the abdominal wound was retracted using a Doyens retractor. The vesicouterine fold of peritoneum was incised and the bladder was pushed away from the lower segment. The lower segment was then incised by stroking gently with the knife over a length of 2-3 cm and the index fingers of each hand were inserted to extend the incision laterally. The Doyens retractor was then removed.

The Surgeons right hand was inserted below the head of the first twin and it was delivered gently from the uterine incision. The mouth and nostrils were cleared of mucous blood and liquor with a sterile gauze, followed by delivery of the shoulder, trunk and lower extremity and was immediately clamped and cut and the baby handed over to the midwife. Similary the second twin which was also vertex presentation was delivered. An injection of 0.5mg of ergometrine was given immediately after the delivery of both the babies. Green - Armitage forceps were then applied to the upper and lower end of the uterine incision so as to occlude the most significant sites of haemorrhage, the placenta seperated spontaneously and was delivered complete with the membranes. The uterine cavity

was mopped with a sterile abdominal pack. The uterus was wel contracted. The uterine wound was repaired in three layers. The first muscular layer with No 1 chromic catgut with a locking stich. As the first layer was being repaired the uterus was massaged in between ensuring it to be well contracted. The second layer of DeLee's fascia was repaired using No 1 chromic catugut with a continuous running stich burying the muscular layer underneath. The uterovesical fold of peritoneum was closed using a continuous No 0 chromic catgut and its edges were inverted. Both the tubes and ovaries were identified and were normal looking. The fimbria end of both tubes were identified. The left tube was held with tissue holding forceps at the mesenteric border in the least avascular areas and stretched a bit. A small artery forceps was applied horizontally including a loop of about 3 cm of the fallopian tube. Using No. 1 chromic catgut a stich ligature was applied after releasing the artery forceps, gently to have a firm knot. The artery forceps was reapplied again. Using a scalpel knife the loop of the tube was severed, the artery forceps was released and the stump mopped to look for any active bleeding areas. The haemostasis was good. The right tube was similarly ligated. Both the packs were removed and the abdomen was mopped dry. The abdomen was closed in 3 layers using catgut No 2/0 for the peritoneum, No 1 nylon for the rectus sheath and interrupted silk No 0 to th skin, after ascertaining correct swab and instrument count together with satisfactory haemostasis. Vulval toilet was done and the uterus was well contracted at the end of surgery

There was clear urine in the urine bag, measuring 300mls. Th estimated blood loss was 600mls.

She was briefly observed in the recovery room and then transferred to the postnatal ward. Both the twins were femal weighing 2.8kg and 2.6kg with APGAR scores of 9-10 each No obvious external congenital malformations were detected. The placenta weighed 750grams.

POST OPERATIVE CARE:

1. Her blood pressure was between 110/70 - 120/80mmHg
   The blood pressure pulse and respiration were monitored half hourly till stable then four hourly. They were stable .

2. She received 2000mls of normal saline and 1000mls of 5% Dextrose in 24 hours.

3. Injection Ergometrine 0.5mg was repeated after 6 hours o: surgery in view of the anticipated postpartum haemmorhag due to an overdistended uterus in multiple pregnancy. The uterus remained well contracted.

4. Injection Pethidine 100mg intramuscular six hourly for 2 hours.

5. Injection Ampicillin 500mg interavenous six hourly for 4 hours as prophylaxis. A fluid balance chart was kept. She produced 1400mls of clear urine in the first 24

hours. She progressed well in the postoperative period. She was ambulant the next day and was breast feeding her babies. They were given BCG and oral polio vaccines. The sutures were removed on the sixth postoperative day and the wound had healed well. There was no foul lochia and the uterus was involuting well. She was discharged home in good condition with her babies.

POST NATAL FOLLOW UP

She was seen six weeks later at the postnatal clinic. She was not pale and the abdominal scar was healthy and the uterus had involuted well. She was discharged from the postnatal to the underfives clinic.

COMMENTARY

Twins tend to run in families and heredity plays an important part, paternal as well as maternal[1]. The incidence of twinning varies with race age and fertility[1]. The exact incidence of twinning in Tanzanian population is unkown, but one encounters almost a daily admission of twin in labor, at the Muhimbili Medical Centre. A prospective study done from October 88 - March 89 at the Muhimbili Medical Centre showed an incidence of 38.4/1000 deliveries[2].

Early detection of the disparity between the gestational age and accelerated fundal growth led to the clinical suspicion and later was supported by sonographic evidence of a twin pregnancy. Common antenatal problems such as anaemia, eclampsia and premature labor were perhaps prevented by

regular intake of oral haematinics and adequate bed rest. Th commonly cited association of hydramnios with twin pregnancy was not present here.

Cord prolapse should always be suspected when there is a spontaneous rupture of membranes as was demonstrated here. The decision to carry out an expeditious abdominal delivery was well justified here by getting live babies without much anoxic damage. The traditional value of knee chest position versus the manual elevation of the presenting part is controversial. There being no controlled studies in evaluating their respective values. The knee chest position was used with good fetal outcome as was adequately demonstrated here. Women with an overdistended uterus as was present here with plural pregnancy have a risk of an atonic post partum haemorrhage. This was anticipated and adequately prevented by judicious use of ergometrione intra and postoperative .

The incidence of preterm deliveries is significantly high[3-4]. This is usually the scenario in the Developing Countries wher the woman is the major work force at home and in the field depriving her of adequate bed rest. Also in many instances due perhaps to low morale of MCH staff or poor training even the suspicion of plural pregnancy is absent. This leads to delivery of undiagnosed preterm neonates leading to an increased perinatal morbidity and mortaility . In Nigeria where the incidence of twinning is highest in the Yorubas tribe special maternity villages or maternal waiting,

shelters are constructed for women at risk to deliver prematurely thus achieving better perinatal outcome[4].

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EXTENSIVE CERVICAL AND PARAURETHRAL TEARS FOLLOWING PRECIPITATE LABOR OF A PREMATURE BABY REPAIR DONE- SUCCESFUL RECOVERY:

Registration Number: 3796/91

Name: Mrs. Y.K.

Age: 26 years

Parity: P1 + 0

Residence: Mabibo, Dar-es-Salaam

Date of admission: 19/7/91

Dateof discharge: 4/8/91

SUMMARY:

Mrs. Y.K. was a 26 years old gravid woman at 34 weeks gestation admitted on account of premature labor pains and foul smelling yellowish vaginal discharge. She had a precipitate delievery of a 1500gm live baby with an APGAR of 8-10 with no obvious congenital malformations. She developed a primary post partum haemorrhage and on evaluation under anaesthesia a deep left sided cervical tear extending to the left fornix with a para-urethral tear were noted and repaired The patient recovered successfully and was discharged home with her baby in good conditon.

CURRENT OBSTETRIC HISTORY

Mrs. Y.K. had not attended antenatal clinic in the index pregnancy. There was no illness in the index pregnancy Mrs. Y.K. was well about a week ago when she noted foul smelling yellowish vaginal discharge accompanied by lower abdominal

discomfort. She had not experienced any draining nor vaginal discharge. There was no dysuria or fever. Five days later she noted labor like pains which persisted for a few hours, and she was referred from a peripheral clinic to the labor ward at the Muhimbili Medical Centre. On admission she was noted as having a yellowish vaginal discharge but was not in active labor. An endocervical swab was taken for culture and sensitivity together with a midstream urine for microscopy and culture and she was given tocolytic agents in the form of salbutamol and aspirin. She was empirically put on oral Ampicillin and metronidazole. She was sent to the antenatal ward for observation. She developed strong labor pains on the next day and had a precipitous delievery on arrival to the labor ward. Subsequently she developed a primary postpartum haemorrhage with a well contracted uterus. She was taken to the theatre for evaluation under anaesthesia.

PAST OBSTETRIC AND GYNAECOLOGICAL HISTORY:

She had a normal term delievery two years ago of 2800gm after laboring for 16 hours. The puerperium was uneventful. She had not used any form of contraception. There was no history of premature delievery in the family.

She attained menarche at the age of fourteen had regular menstruation lasting 3-4 days in cycles of 26-28 days. She had no dysmenorrhoea or dysperunia. She had been admitted fo an attack of acute pelvic inflammatory disease to a local hapital an year ago.

FAMILY AND SOCIAL HISTORY:

She was a housewife staying with her husband.

PHYSICAL EXAMINATION:

She was a young healthy lady not pale, nor jaundiced. She w not in pain. She was afebrile. The thyroid gland was norm sized. Her resting pulse was 88/min regular. Her blood pressure was 120/70mmHg. The cardiovascular and respiratory systems were unremarkable. Breasts were normal.

Abdominal examination revealed a fundus of 32 weeks gestatio non tender with no palpable contractions. There was no suprapubic tenderness. The lie was longitudinal and head wa floating, with a normal foetal heart rate. The liver, splee and kidneys were not palpable.

Pelvic examination revealed a healthy vulva with an obvious vaginal discharge. Speculum examination revealed "strawberr cervix" with a yellowish vaginal discharge. No draining was noted. An endocervical swab was taken for microscopy, culture and sensitivity.

Provisional diagnosis:

Cervicitis with false labor pains

Managment Plan:

Baseline investigations.

1. Haemoglobin level: 11.8gm/dl.

2. Endocervical swab for culture and sensitivily: revealed no evidence of Neisseria gonorrhoea.
3. Midstream urine for culture and sensitivity was negative
4. Blood for grouping: ORh positive.
5. Blood slide for malarial parasites was negative.

In the postnatal ward she was put on `

(a) oral Ampicilin 500mg 8 hourly for 5 days
(b) oral Metronidazole 400mg - 8 hourly x for 5 days
(c) oral Salbutamol 4mg 8 hourly for 2 weeks
(d) oral acetyl salicyclic acid 600mg - 8 hourly for 7 days.

However she continued feeling lower abdominal discomfort and developed strong labor like pains and was sent back to the labor ward. She delievered within a few minutes a vertex delievery of a live female 1500gm without an episiotomy. She developed profuse vaginal bleeding despite a well contracted uterus and was taken to the theatre for an evaluation under anaesthesia.

PRE-OPERATIVE PREPARATIONS:

1. Grouping and crossmatching was done and 1000mls of compatible blood obtained.
2. The perineum was cleaned with soap and shaved.
3. A signed informed consent was obtained for an evaluation under anaesthesia and a possible laparotomy.
4. Injection Ampicilin 1.0gm intravenously in a stat dose.

5. An intravenous No. 18 canula was inserted and 1000mls of normal saline instituted very fast in half an hour, whil on her way to the obstetric theatre.

ANAESTHESIA:

INDUCTION:

She received 1mg of atropine 100mg of ketamine hydrochloride and 10mg of diazepam intravenously.

Maintainance: She was maintained on ether and 6 litres of oxygen/min.

OPERATION:

Patient was put in a lithotomy position perineum was cleaned with savlon 1:20 and a weak iodine solution. The bladder was catheterised using a Foleys catheter obtaining 50mls of concentrated urine. A right sided paraurethral tear running transversely upto the right labia minora was oozing profusely

A deep cervical tear at three o'clock position involving the left fornix and bleeding profusely was detected after applyin 3 sponge holding forceps.

The angles of cervical tear were held with a sponge holder achieving significant haemostasis.

The urethral mucosa was not involved para-urethral tear was repaired using No. 20 chromic catgut on an atraumatic needle, applying figure of eight stiches and achieving satisfactory haemostasis.

Stay sutures were taken on the cervix at the distal end of tear after exposing the lateral vaginal wall with a Sims speculum, this enabled the author to have a good exposure of the left lateral fornix. The cervix was finally repaired using a series of `figure of eight' haemostatic sutures with No.1 chromic catgut achieving satisfactory haemostasis. Estimated blood loss was about 2000mls. - She received 1000ml of blood intraoperatively.

POST OPERATIVE CARE:

1. Her blood pressure fluctuated between 60/40 - to 90/60mmHg during the first six hours . It was stabilized to 100/70mmHg later.

2. Intravenous normal saline 1000ml alternating with. Dextrose saline 1000mls 4 litres were administered in 24 hours.

3. She received 1500ml of blood transfusion.

4. Injection ampicillin 500mg intravenously six hourly for 24 hours than oral for five days.(tablets) Metronidazole 400mg eight hourly for five days from the second postoperative day.

5. A fluid balance chart was kept she produced 1000mls in 2 hours.

6. Indwelling Foleys catheter was kept for five days, in view of the proximity of the para urethral tear to avoid contamination of the wound and retention of urine due to pain.

7. Oral haematinics in the form of ferrous sulphate 200mg twice daily and 5mg of folic acid for a month.

She recovered well. The catheter was removed on the third day and she was nursing the neonate in the nursery. Both were discharged in good conditon 15 days later. The neonate weighed 1600gms on discharge and had received BCG and polio vaccination. Her haemoglobin on discharge was 9.0grams/dl.

FOLLOW UP:

She was seen six weeks later at the postnatal clinic. She was not pale and fully continent. She was breast feeding well. The infant was healthy and weighed 2000grams. She was counselled for family planning methods and settled with oral contraception. She was discharged to the MCH Clinic.

COMMENTARY:

The incidence of precipitate labor in the literature is cited to be 1-2%[1] and the incidence in our population is unknown. Maternal injuries particularly their avoidance, recognition and managment comprise a fascinating series of acute obstetric events[1]. In the third stage of labor there lurks more unheralded treachery than in both the other stages combined[1]. The normal case can, within a minute, become abnormal and a

successful delievery can turn swiftly to a disaster as was seen here. The obstetricians judgement must be sure and swif Increasing experience serves to sharpen ones alertness during this stage.

The onset of premature labour could be triggered here by the extensive endocervicitis. It has been postulated by parturition research studies that this could be as a result o realease of interleukines (1L-II) released by the lymphocytes as a result of the reaction to infection[2]. Interleukins set into action the synthesis of arachidonic acid the precursor o prostaglandins by activating phospholipase A2 in the cell wall[2]. In some Centres it has been possible to predict the onset of premature labour in the presence of infection by the estimation of elevated levels of C reactive protein in the plasma. It is said that once the trigger for the onset of premature labor is set than all efforts to prevent it from progression are unfruitful as was proved here[1-3].

The role of tocolytic agents like salbutamol and prostaglandi synthesis inhibitors like acetyl salicyclic acid is controversial[2]. Precipitate delivery as evidenced in literature causes extensive damage to the unyielding genital tract as was seen here[1]. The value of evaluation under anaesthesia during post partum haemorrhage with a well contracted uterus was well proved here. Deep cervical tears extending to the fornices can test the obstetricians endurance and technique. Suturing in that area can be tricky as the ureter just lies in the near vicinity. The para-urethral

tears can prove to be notorious as there is an extensive vascularity and there may be an continuous venous oozing as was seen here. Value of an episiotomy in preventoring an injury to the fetal head during delivery is well appreciated. Also a timely episiotomy during the violent expulsion of a tiny foetus during a precipitate delivery could have prevented these extensively potentially fatal tears.

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POST DATISM WITH SIGNIFICANT REDUCTION IN FOETAL KICK COUNT

POOR BISHOP SCORE

EMERGENCY ABDOMINAL DELIVERY - LIVE BABY

Registration No:918/90

Name: Mrs. V.M.

Age: 27 years

Parity: P 1 + 0

Residence: TEMEKE

Date of admission: 30/3/91

Date of discharge: 5/4/91

SUMMARY:

Mrs V.M. was a 27 years old gravid woman about fourty two weeks and two days of gestation. She had delivered normally four years ago but the infant had succumbed to measles at the age of eight months. She was referred to the highrisk clinic from a peripheral hospital on account of postdatism, reduction in foetal movements for the last 24 hours and static weight gain since last 3 weeks. She had a good fetal heart with no beat to beat variability and the liquor seemed clinically in adequate with easily palpable foetal parts. Her Bishop score was poor. Foetal kick count chart on admission showed a drastic reduction over the next 24 hours of less than ten kicks. In view of a poor Bishop score the foetus was delievered abdominally with an APGAR score of 9 at the end of 5 minutes, with signs of postmaturity with a meconium stained liquor. The mother and her baby were discharged home in good condition.

HISTORY OF PRESENT ILLNESS;

Mrs V,M. was a young parous married housewife with no living child. A day before admission she noted a reduction in fetal movements. There was no associated fever, vaginal bleeding or draining. She was quite sure of dates and they agreed by extrapolation of the fundal height. She had not used oral contraception.

PAST OBSTETRIC AND GYNAECOLOGIC HISTORY;

She had one normal delievery at term four years ago. The puerperium was uneventful. The infant contacted measles at eight months and succumbed to the same.

She attained menarche at the age of fourteen had regular menstruation lasting for 3 -4 days in cycles of 28-30 days. She had no dysmenorrhoea, vaginal discharge or dysperunia.

FAMILY AND SOCIAL HISTORY;

She was a house wife staying with her husband. There was no history of postdatism or congenital malformations in the near relatives, or her sisters.

PHYSICAL EXAMINATION;

She was a young healthy lady. She was not pale nor jaundiced. Her resting pulse was 80/min regular. The cardiovascular and respiratory systems were unremarkable. Her blood pressure was 110/70mmHg and she had no proteinuria in the urine. She had no oedema of lower extremities.

Abdominal examination revealed a fundus of 36 weeks gestation and the foetal parts were easily palpable. The foetal cardiac activity was well heard but no beat to beat variability noted on auscultating for over 5 minutes. The liver, spleen and kidneys were not palpale.

Pelvic examination revealed a normal vulva and vagina. Digitally she had a long posterior and closed firm cervix.

PROVISIONAL DIAGNOSIS;

1. POSTDATISM WITH. REDUCED FOETAL MOVEMENTS.

MANAGMENT PLAN;

Baseline investigations

1. Haemoglobin: 9.7 gm/dl

2. Obstetric ultrasound revealed a reduced amount of liquor with no obvious congenital malformations, with a normal foetal cardiac activity. The foetal breathing movements and limb movements were not noted over a period of 15 minutes (ideally done for 45 minutes).

3. Urine for albumin was negative. Midstream urine for microscopy and culture was negative.

4. Blood slide was negative for malarial parasites.
5. Blood sugar fasting was 4.0m.mol/litre.

She was admitted to the antenatal ward and was explained the use of the foetal movement count chart. The fetal kick count recorded were less than 10 fetal kicks in 12 hours and bearing in mind the poor Bishop score and poor biophysical profile a decision for abdominal delivery was made. An informed consent was obtained after explaining to her the nature of her problem and she was prepared for surgery.

PRE-OPERATIVE PREPARATIONS;

1. Grouping and cross matching was done and 1000mls of compatible blood obtained.

2. The abdomen was cleaned with soap and shaved in the ward.

3. A signed informed consent was obtained for an emergency Caesarean section.

ANAESTHESIA:

INDUCTION:

She was given atropine 1mg, thiopental 250mg, suxamethonium 100mg and intubated with 7.5mm cuffed endo-tracheal tube.

MAINTAINANCE:

She was maintained on ether and oxygen at 6 litres/min.

OPERATION:

The abdomen was cleaned with savlon 1:20, a weak iodine 10% solution and spirit.

A midline subumbilical incision was made and the abdomen opened in layers. A poorly formed lower segment was found. The bladder was reflected down after incising the uterovesical fold of peritoneum. A transverse incision was made in the lower segment delivering a live female baby weighing 3000gm with an APGAR score of 7-9. There was an old meconium stain in the liquor with abundance of vernix caseosa.

- Uterus was repaired in 2 layers with chronic No.1 catgut as described in case (1)
- Abdomen closed after asertaining correct swab count and satisfactory haemostasis as in case (1).
- The uterus was well contracted at the end of surgery and vulval toilet was done.
- Blood loss was about 400mls.

The placenta weighed 350grams and it was filled with whitish areas hard in consistency suggestive of calcified infarcts. The neonate had a length of 50cm. She recovered well from anaesthesia and after a brief observation in the recovery roo was transfered to the postnatal ward.

POST OPERATIVE CARE:

1. Her blood pressure, pulse and respiratory rate were monitored half hourly till they were stable than four hourly. They remained stable.

2. Intravenous 5% Dextrose 1000mls alternating with normal saline 1000mls 3 litres were given in 24 hours after which oral fluids were started.

3. Intramuscular Pethidine 100mg six hourly for 24 hours.

4. A fluid balance chart was kept. She produced 1200ml of clear urine in 24 hours, on the first post operative day She recovered uneventfully. The stiches removed on the sixth postoperative day and she was discharged home with her neonate in good condition.

FOLLOW UP:

She was seen six weeks later in the postnatal clinic. The uterus was well involuted with normal pelvic findings. She was not pale. She was later referred to the family planning clinic.

COMMENTARY:

To the practicing Obstetrician the problem of postmaturity constantly recurs. The difficulties arise from the absence o any fixed criteria. Finn Boe used the following criteria (i Pregnancy more than 290 days, (ii) Fetal length exceeding 54c (iii) Fetal weight exceeding 4000grams[1]. In only 2 percent c cases were all the above criteria satisfied. However in this case only the first criteria was satisfied.

Not yet much is known about the causes of postmaturity. Hereditary factors are probably of most importance.

Postmaturity tends to recurr in succesive pregnancies in the same woman which was unlikely here. It is strongly associated with neural tube defects such as anencephaly. The role of oestrogen in large amounts during parturition is less clear. However it is known that pregnant women with a fetus having an arylsulphatase deficiency (a sex linked enzyme deficiency which prevents desulphation of steroid conjugates) results in subnormal oestrogen production and excretion. These women will have a poor Bishop score as was here and these women usually require a Caesarean section[2].

Mistaken dates accounts for more errors in diagnosing postmaturity than any other factor and should be very carefully scrutinized as was done here. Normally the maternal weight stops increasing at about term and then begins to fall or remains static as was seen here. This is a useful sign and Browne (1962) attached even greater importance to this sign and regarded it as evidence of placental insufficiency so commonly associated with this conditon. On examining the abdomen of a postmature case, the relative quantity of liquor to the size of the baby may appear palpably reduced as was seen here. The child has increased muscle tone, giving an impression of ram-rod rigidity[1]. The value of this sign is increased if examined by the same pair of hands at each visit which was not the case here.

The normal foetus usually moves more than ten times per 12 hours and even more so in the evening, so much that such an inexpensive test as the foetal kick count has proved useful in

some hands as a screening procedure[3]. If there is a reduction by 20% in the fetal kick count from the tally of the preceding day or ten movements are not felt in twelve hours than it is a sinister sign of fetal anoxia. The rationale for counting fetal movements is well founded in that the fetus normally passes through rest-activity cycles lasting approximally 40 minutes. From animal studies it could seen that one of the response to chronic hypoxia is a decrease in fetal activity which is presumably a mechanism to conserve oxygen consumption. The time course of these events and the seriousness of the insult necessary to cause a decrease in fetal activity is not certain but it is likely that a cessation of movement is a fairly late event, perhaps occuring 24-48 hours before fetal demise.

In the genuine case the risks are very real, already short of oxygen the baby will not tolerate further hypoxia in labor and may succumb to the intrapartum stress of labor. Documented risks of still birth in post maturily is 5-6% . It is not surprising therefore that the operative delievery rate is enormously increased. The fetus that is suffering from hypoxia in labor is therefore distressed, not only passes meconium because of sphincter relaxation but is likely to inhale it in the course of hypoxic gasps, giving rise to the meconium aspiration syndrome. This is not uncommon in the postmature and because of the great respiratory efforts which may be made pulmonary alveoli may rupture giving rise to pneumothorax. In enumerating the formidable complications of postmaturity, it may seen the dangers have been over played,

since the majority of cases deliver themselves satisfactorily. But a majority of results are not good enough, and to for see a risk is to go half way towards circumventing it.

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LOW DOSAGE OF ASPIRIN IN PREVENTION OF PREGNANCY INDUCED HYPERTENSION (PIH) IN PRIMIGRAVIDAE AT MUHIMBILI MEDICAL CENTRE, DAR ES SALAAM

ABSTRACT

There is evidence that aspirin in low doses favourably influences the course and outcome of pregnancy in women at risk of developing pregnancy induced hypertension[1]. The author carried out a prospective randomized, double blind study to investigate the effect of low dosage of aspirin in preventing pregnancy induced hypertension. A total of two hundred and one primigravidae from twenty weeks of pregnancy and above were screened with the roll-over test. Of the 127 women with an increase in blood pressure during the roll over test 126 women entered the study and were treated with a daily dose of either aspirin (80mg) or placebo upto 10 days before the expected date of delivery. Samples of urine were collected for detection of aspirin.

The incidence of pregnancy induced hypertension in the aspirin treated group was significantly lower than the placebo treated group (3.17%) percent V/S 15.8 percent) with a P value of 0.02. the author concludes that low daily doses of aspirin taken from twenty weeks of pregnancy and above significantly reduce the incidence of pregnancy induced hypertension, possibly through the correction of an imbalance between levels of thromboxane and prostacyclin[2].

STUDY OBJECTIVES:

A. Broad objectives

(i) To investigate whether a low daily dose of aspirin significantly reduce the incidence of pregnancy induced hypertension in the high risk primigravidae attending antenatal clinic at the Muhimbili Medical Centre.

(ii) To determine the usefulness of the roll over test in identifying women at risk of developing pregnancy induced hypertension.

B. Specific objectives:

(i) To determine whether a low daily dose (80mg) of aspirin administered to primigravidae from twenty weeks of gestation and above, selected by a positive roll-over test, significantly reduce the incidence of pregnancy induced hypertension.

(ii) To determine the sensitivity, specificity, positive predictive and the negative predictive value of the roll - over test in our local population.

MATERIALS AND METHODS:

Two hundred and one primigravidae women at twenty weeks of pregnancy and above were screened with the roll - over test. This was done with the comparison of blood pressure in the left lateral position and the supine position. The women were positioned on the left side for at least 15 minutes and the right branchial artery pressure was measured successively until a difference between recurrent measurements of no more

than 2mmHg of diastolic pressure was obtained of the Korotkoff IV sound. With the blood pressure cuff still strapped to the arm the women where then instructed to roll to the supine position and the blood pressure measured at 5 and 5 1/2 minutes. The test was considered positive if the diastolic blood pressure values at 5 and 5 1/2 minutes were more than 15mmHg higher than those obtained before she rolled over.

Those which tested positive were divided into two groups. One group received aspirin (80mg) daily up to 10 days before the expected time of delievery while the control group received a placebo consisting of 50mg starch and 30mg lactose. The placebo drug was identical with the junior aspirin (80mg) tablet marketed by Mac's pharmaceuticals in Nairobi, Kenya.

The blood pressure profile was monitored together with protein excretion in urine nitrites, sugar and leucocytes on every antenatal visit. Samples of urine were analysed for aspirin at every visit to confirm that it was being consumed. Those women with a negative roll over test were followed by measuring their blood pressures and urine for protein, nitrites, sugar and leucocytes till term. This enabled the investigator to test the sensitivity of the roll over test.

Screening:

Between June 1991 and December 1991 two hundred and one primigravidae were screened by the roll over test. This was done by two well trained qualified midwives under the authors supervision at the antenatal clinic of Muhimbili Medical

Centre. The test was done between 7.00 a.m. - 9.00 a.m. It was done as described above. The criteria for exclusion from this study were:

(i) History of hypertension from any cause

(ii) Long term treatment with nonsteroidal anti-inflammatory drugs or the use of such drugs during the previous six weeks.

(iii) Elevated blood pressure detected before screening.

(iv) Proteinuria of more than 300mg/litre without significant bacteruria, detected before screening

(iv) Medical contrandications to aspirin such as:

(a) Peptic ulcer disease

(b) Thrombocytopaenia

(c) Bleeding disorders and

(d) Bronchial asthma

Gestational age was determined from the date of the last menstrual period if the woman had regular 26-31 day cycles or from ultrasonographic examination if the cycles were irregular. Of the 201 eligible women 127 entered the study having obtained the positive roll over test. 1 dropped out i between due to severe gastritis.

Methodology:

The women who entered the study were randomly divided into t groups. The study groups received aspirin tablets of 80mg

acetyl salicylic acid, 30mg starch and 0.09mg of silicondioxide. The control group received 50mg starch and 30mg lactose. Neither the subject nor the physician knew which tablet was being taken by the particular woman. The medication were supplied in coded packages and the women were instructed to take one tablet at the same time everyday up to 10 days before the estimated date of delivery.

They were also instructed not to take any nonsteroidal anti-inflammatory drugs and to inform the physician of any change in drug intake or suspected side effects. If the subject developed pregnancy induced hypertension the drug was discontinued and she was treated accordingly. At the end of the study the drugs were decoded by the pharmacist who had coded them, for the investigator. Blood pressure was measure using the mercury sphygmomanometer. It was measured monthly at the antenatal clinic upto 28 weeks and thereafter bimonthl to term. On each visit urine samples were obtained for protein, leucocytes, nitrites, sugar and aspirin.

Laboratory tests:

The procedure for determining protein, nitrites, sugar and leucocytes was carried out by using the AMES MULTIPLE REAGEN' STRIPS Marketed by Miles Limited, Ames Division. The procedure for determining salicylates in urine or any other biological fluid is based on the formation of a violet coloured complex between ferric ion and phenols.

Violet coloured

complex

This is read by using a spectrophotometer. This test is not specefic for salicylates but false negative results do not occur. The colour developing solution contains acid and mercuric ions to precipitate protein.

DATA ANALYSIS:

(i) Pregnancy induced hypertension rate using drug A = $\frac{2}{63} \times 100 = 3.17\%$

(ii) Pregnancy induced hypertension rate using drug B = $\frac{10}{63} \times 100 -= 15.8\%$

The two hundred primigravidae 126 had a positive roll over test and hence entered the study.

(a) Sixty three received Drug A One of these

(b) Sixty three received Drug B was aspirin and one was a placebo

(c) Twelve women developed pregnancy induced hypertension

(i) 10 from Drug B

(ii) 2 from Drug A

and 114 did not develop Pregnancy induced hypertension.

TABLE 1:

DRUG	PIH +	PIH -	TOTAL
A	2	61	63
B	10	53	63
TOTAL	12	114	126

Statistical analysis:

Tests of significance for obtaining the P value was done by using the chi square test. Chi square was 5.907, and the degree of freedom was 1. P value was obtained by using standard charts. It was 0.02: This value was less than 0.05 and hence the drug was found statistically significant in reducing the incidence of pregnancy induced hypertension.

Using the Mantel-Haenszel method the estimated Odds ratio was 0.17, confidence interval of 0.04 and limit of 0.83. The relative risk was 0.2. Similarly tests of significance, done for the roll over test by using the Mantel Haenszel method revealed an Odds ratio of 13.77, confidence interval of 1.71 and limits of 110.9.

DIASTOLIC BLOOD PRESSURES IN PATIENTS WITH POSITIVE ROLL OVER TEST TABLE2.

A) DRUG A. GROUP:

DRUG A	DBP in left lateral Position (mmHg)		DBP in supine position (mmHg)		Mean Difference
A	Range	Mean	Range	Mean	
(i) BEFORE DRUG A, i.e AT BOOKING	50-90	64.4	70-110	85.2	20.8
(ii) FINAL EVALUATION AFTER DRUG A AT TERM	60-90	73.2	70-100	82.4	9.2

B. DRUG B. GROUP

DRUG	DBP in left lateral Position (mmHg)		DBP in supine position (mmHg)		Mean Difference
B	Range	Mean	Range	Mean	
(i) Before Drug B i.e. at Booking	50-90	63.1	70-110	82	18.9
(ii) Final Evaluation After Drug B at Term	50-100	76.6	60.110	89.6	13.2

TABLE 3: COMPARISON OF SENSITIVITY SPECIFICTY POSTIVE AND NEGATIVE PREDICTIVE OF ROT IN DIFFERENT STUDIES.

Reference	N	PIH incidence	ROT	P I H +	P I H -	Odds ratio	Sensitivity %	Specificity %	PPV %	NPV %
Gant (1974) Texas. USA	38	44.7	+	15	1	150.0	88.2	95. 2	93.8	90.9
			-	2	20					
Kassar 1980 USA	74	27.0	+	12	35	0.8	60.0	35. 2	25.5	70.4
			-	8	19					
Onuonga/ Rogo (Kenya) (1988)	63	25.3	+	13	33	2.2	84.6	75. 8	57.9	85
			-	3	17					
Okonofua (Nigeria) (1987)	56	3.6	+	2	0		10	100	100	66.6
			-	18	36					
Index Study (Tanzania) (1991)	137	8	+	10	53	13.7	90.9	57.9	158	98.6
			-	1	73					

ROT = roll over Test

PPV = Positive Predictive value

NPV = Negative Predictive value

TABLE 4: ANALYSIS OF THE SENSITIVITY, SPECIFICITY, POSSITIVE AND NEGATIVE PREDICTIVE VALUES OF THE ROLL - OVER TEST IN PRIMIGRAVIDAE

SAMPLE SIZE (N = 137) as, drug group not included for analysis

N	P I H incidence %	R O T	P I H (+)	P I H (-)	Odds ratio	Sensitivity	Specificity %	PPV %	NPV %
137	A + C / N	+	A 10	(B) 53	AD / BC	A / A+C	D / B+D	A / A+B	D / C+D
	8.0%	-	(C) 1	(D) 73	13.7%	90.9%	57.9%	15.8	98.6

RESULTS:

Analysis of data at the end of the study revealed that 64 women had been given aspirin and 137 did not receive aspirin. Out of the 137 women, 63 of them received the placebo, 1 woman from the aspirin group discontinued the drug due to gastritis.

TABLE 5: OBSTETRIC CHARACTERISTICS OF WOMEN TESTING POSITIVE FOR ROLL OVER TEST

CHARACTERISTIC	DRUG	PLACEBO	TOTAL
A AGE			
14-19	17	19	36
20-24	30	26	56
25-29	15	16	31
30-34	2	2	4
TOTAL	64	63	127
B) BOOKING BP DIASTOLIC			
50-60	3	5	8
60-70	32	37	69
70-80	19	12	31
80-90	10	9	19
TOTAL	64	63	127
C. BOOKING GESTATIONAL AGE			
12-14	1	0	1
14-16	0	0	0
16-18	1	1	2
18-20	2	4	6
20-22	29	26	55
22-24	23	26	49
24-26	8	6	14
TOTAL	64	63	127

D. PROTEIN IN URINE AT BOOKING			
NIL	23	29	52
<300mg/dl	41	34	75
TOTAL	64	63	127
E. NITRITES POSTIVE IN URINE	10	8	18
NEGATIVE	54	55	109
TOTAL	64	63	127

CHARACTERISTIC	DRUG	PLACEBO	TOTAL
F. HAEMOGLOBIN LEVEL GRAMS/DL			
5-7	1	3	4
7.1-9	9	7	16
9.1-11	34	36	70
11.1-13	20	17	37
TOTAL	64	63	127

The overall incidence of pregnancy induced hypertension excluding the aspirin group was eight percent. The incidence of pregnancy induced hypertension in the aspirin group was significantly lower than the placebo groups (3.17 percent V/s 15.8 per cent) P = 0.02. The protection level of the drug for the high risk group not developing PIH was 80% (Relative risk 0.2). The incidence of pregnancy induced hypertension in the group which tested positive for roll over test and was on placebo was higher than the control group which tested

negative for the roll over test (9.5 percent V/S 1.36 percent).

Proteinuric pregnancy induced hypertension was significantly higher in the placebo group. Two women in the aspirin groups developed hypertension but had trace (< 300mg/litre) proteinuria.

Ten women in the placebo group with (ROT +Ve) developed hypertension, six of those had proteinuria of more than 300mg/dl litre. Two women (out of the ten from placebo) developed hypertension at 34 and 36 weeks respectively. One woman from the control group (roll over test negative) developed non proteinuric hypertension.

The incidence of positive roll over test from the sample was 63.1 percent. The sensitivity (90.9 percent) and the negativ predictive value (98.6 percent) were significantly high for the roll over test.

DISCUSSION:

The finding in this study was a significantly low incidence c pregnancy induced hypertension in the high risk primigravidae who tested postive for the roll over test, receiving low dosage of aspirin. (P= 0.02). Workers from Western countries have reported similar results in the Caucasians[1]. So far there are no known studies done in the African population.

Wallenburg et al have used the intravenous angiotensin - infusion tests to identify women at high risk for pregnancy induced hypertension[9]. This test is considered too invasive and perhaps dangerous by some workers, hence the use of the

roll over test. Gant et al (1973) showed that primigravidae who required less than eight ng/kg/min of angiotensin II to elicit a pressure response, developed pregnancy induced hypertension if the pressure response was twenty mmHg diastolic or more[10]. Another study by Gant et al (1974) gave a correlation between positive supine response (positive ROT) and increased sensitivity of intravenous infused angiotensin II[8]. Studies on ROT done by Onuonga and Rogo in Kenya showed a sensitivity of 84.6 per cent, specificity of 75.8 percent and a positive predictive value of 57.9 percent, this is almost similar to the findings in this study". However Okonofua E.F et al from Nigeria have reported a very low incidence of roll over test positivity and a poor correlation of the test as a predictor for pregnancy induced hypertension[12]. The same disagreement exists in the Caucasians[13-14]. The variability of the reports could be due to different definitions of gestational hypertension, methodology or to difference in the cardiovascular responses by various racial groups. Although the ROT has its limitations most authors feel that it is a harmless test to narrow the target population". The high negative predictive value (98.6 percent) in this study supports the above fact.

The concern for maternal complications like postpartum haemorrhage or excessive intra-operative bleeding during a Caesarean section in the aspirin group has been dealt with in previous studies in the Western World[15]. No clinical manifestation of haemostatic disturbances were reported in either the mother or neonate[2]. Also the possible effect on

the foetal ductal flow was not found in the newborn, possibly due to the low dosage of aspirin used[16].

The possible drawbacks in the methodology could be the inter and intra observational errors in measuring blood pressure, leading to erroneous intrepretation of the ROT.

In conclusion the authors findings support the contention that low dosage of aspirin significantly lowers the risk of pregnancy induced hypertension in the high risk primigravidae of our population. In the authors opinion the accumulated data from this study as well as other studies justify the prophylactic administration of low dosage of aspirin to appropriately selected groups from twenty weeks of gestation and above. This is because it has been observed that pregnancy induced hypertension in the African population appears rather suddenly after this gestational age[17]. Pre-eclampsia occurs more commonly in primigravidae who account for 65 percent of the cases[18]. At the Muhimbili Medical Centre, hypertensive admissions account for 15.9 percent of the antenatal disorders of whom primigravidae take the majority[18]. Most of the deaths occuring in eclamptic women are said to occur in primigravidae[20-22]. The author recommends that the ROT be included in the curriculum while training the MCH health workers so as to identify high risk primigravidae at an early stage.

However because of a relatively smaller sample size these findings be regarded as a preliminary. Large scale clinical

trials as are ongoing in the Developed countries are needed to confirm the efficacy, safety and scope of this intervention in the wider population.

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