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VESICO – UTERINE FISTULA – A COMPLICATION OF CAESAREAN SECTION

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INTRODUCTION

Caesarean section is the second commonest obstetric procedure after episiotomy [1,2]. Vesico – uterine fistula is one of the rare, but preventable, complications of caesarean section especially repeat surgery [3]. Prevention is possible by pushing the bladder away from the line of incision over the uterus during opening the uterus and then careful closure of uterine incision.

Repeated surgery can lead to fibrotic adhesions between urinary bladder and lower uterine segment leading to difficulty in separating urinary bladder away from uterine wall, hence increased danger of vesico-uterine fistula formation [4]. In the case reported, vesico uterine fistula followed second caesarean section. Vesico-uterine fistula typically presents 7-10 days post caesarean when sloughing of necrosed bladder and uterine walls occur. Urine leaks from cervical os when urinary bladder is full or intra-abdominal pressure rises such as on coughing-hence it is often mistaken as stress incontinence-as happened in this case.

Diagnosis is not difficult if condition is kept in mind and recommended examination is carried out. After ruling out stress incontinence by cough impulse, speculum examination is performed. Absence of urine leak from opening in anterior vaginal wall excludes vesico-vaginal fistula. Observing with patience urine can be seen escaping from cervical os. Methylene blue test confirms the diagnosis.

Careful preoperative evaluation and identification of fistula is very essential not forgetting that there maybe more than one fistula.

Cystoscopy is performed to demonstrate relationship of ureteric orifices to fistula. If fistula is found to be near ureteric orifice, the ureter should be catheterized.

Timing of operation is important. Usually 12 weeks time is given for local inflammation to be eradicated before repair operation. An indwelling catheter is used meanwhile for continuous drainage. Smaller fistulae might close spontaneously during this period.

Successful repair should be the aim on first attempt and surgery should be done by experienced surgeon. Failure rate is high hence repeated surgeries are common but it becomes more and more difficult due to fibrosis of previous operations. Golden principle of successful repair is good surgical technique. Wide separation of bladder wall from uterine wall and then closure of urinary bladder in two layers without tension over suture line. Uterine opening is closed separately Omentum is interposed between the two stitch lines to ensure separate healing of urinary bladder and uterus.

Post operatively continuous bladder drainage is ensured with an indwelling catheter for two to three weeks to enable repair to heal

CASE REPORT

A 36 years old lady, para 2, both delivered by caesarean section, last-born child 12 years old presented with complaints of dribbling of urine on coughing for last 12 years, menorrhagia and pressure perineum for last 02 years.

She had been to various doctors for urinary complaints, diagnosed and treated for stress incontinence but to no relief.

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Patient was a lady of average build with abdominal pfannensteil scar of previous operations. Local examination revealed normal perineum with a slight clear fluid at introitus. Cough impulse did not reveal urine leak from urethra so possibility of stress incontinence was exclude.

Speculum examination revealed intact vaginal walls and clear fluid escaping from cervical os.

Cystogram confirmed vesico – uterine fistula.

Cystoscopy revealed fistula located in centre above ureter oifices. Intravenous urogram revealed normal study.

Ultrasonography revealed 12 weeks size enlarged uterus due to intra – mural fibroid. Abdominal hysterectomy with repair of fistula was planned after couple counselling. During operation urinary bladder was found morbidly adherent to lower uterine segment over scar. Total abdominal hysterectomy was performed after careful dissection of urinary bladder away from lower uterine segment. Urinary bladder was repaired in two layers with vicryl 2/O. Omentum was interposed between urinary bladder and vaginal vault. Post operatively patient was kept catheterized for 02 weeks, Recovery was smooth and she is asymptomatic now.

DISCUSSION

Improved obstetric practice and surgical skills are responsible for reduction in incidence of these fistulae compared with a much more frequent occurrence in 19th century.

Almost all vesico – uterine fistulae are associated with injury to or necrosis of the bladder wall directly over dehiscence of a lower uterine segment caesarean section incision.

The patient may experience some involuntary loss of urine through the vagina or she may remain continent. She may present with 'menouria' or cyclic haematuria [5]. In most cases variable degrees of intermittent urinary incontinence is present as in our case and only microscopic haematuria is present during regular menstrual flow [6,7].

Vaginal examination fails to reveal a fistula although occasionally urine is seen trickling through the cervical os [8].

Cystoscopy, cystogram and hysterogram are useful diagnostic procedures.

Surgery is mostly through trans-abdominal approach [9]. A dissection is carried out to separate the bladder from the cervix and lower uterine segment. After identification of fistula tract, the uterine and bladder defects are closed separately in layers. A layer of vesical peritoneum or omentum could be interposed between the two sides. Bladder drainage should be continued for 7-10 days post operatively [10].

Hysterectomy is not required for fistula repair, unless for some other reason. In this case hysterectomy was performed because of a symptomatic uterine fibroid leading to menorrhagia and pressure perineum.

Caesarean section is many a time essential to reduce morbidity and mortality of both fetus/neonate and mother but it has definite complications, vesico-uterine fistula being one of them. This is preventable in most cases and prevention is better/easier than cure. Prevention is possible by pushing the urinary bladder away from the line of incision over the uterus during opening the uterus and carefully avoiding inclusion of bladder wall while repairing the uterine incision. Diagnosis is based on history and clinical examination.

Repair of vesico - uterine fistula is regarded as a specialised gynaecourological or uro-gynaecological procedure [11]. Successful repair should be the aim on first attempt as repeated surgery becomes more

and more difficult due to fibrosis of previous operations.

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