URETERO CERVICAL FISTULA IN OBSTETRIC PRACTICE

by

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Genito-urinary fistulae are the most embarassing and distressing gynaecological complaints met with. In our country the origin is still mostly from obstetrical trauma, 97% Rao (1974), as compared to 8-20% in the western countries Moir (1973). Among the different varieties of genito urinary fistulae the uretero cervical fistulae are comparatively rarer more so of obstetric origin. Moir (1960) mentioned "this rare form of fistula in sometimes encountered as a complication of lower segment caesarean section." Rao (1974) in his reported series of 302 urinary fistulae found only 5 cases where the ureters were involved.

Two cases of uretero cervical fistulae of obstetric origin are being reported with the outcome of repair.

Case 1

Mrs. T.M., 25 yrs., Hindu housewife, was admitted with the history of intermittent wetting since last childbirh 2 years by lower segment caesarean section in a rural hospital. Patient could hold urine and void normally on desire and the leaking was first experienced on the seventeenth day postoperative.

Past History of Illness—Nothing suggestive.

Menstrual History—Menarche 14 years. Cycles —28-30 days/3-5 days, flow average. Patient resumed her normal period from the 4th month after the last childbirth by caesarean section.

Obstetric History—Para 2 + 0 Living Issue—Nil. 1st Term Normal delivery after prolonged labour—died 72 hours neonatal.

2nd Term Delivered by caesarean section for arrest of labour—died neonatal due to stress?

Examination on Admission

General condition—Moderate, short statured, pulse—80/minute respirations 18/m. B.P. 110/70 mm of Hg.

Systemic Examination—Abdominal scar healthy. No other abnormality detected.

Vaginal Examination—Uterus—normal in size. A.V. mobile. There was gross adhesion and thickening in the left parametrium. Right fornix clear.

Speculum Examination—Cervix healthy, urine could be seen flowing through the cervix. The fluid sample was collected and urine confirmed. No other fistulous opening could be demonstrated.

Laboratory Investigation

Blood—Hb%, T.C., D.C., blood sugar, blood urea, N.P.N., Creatinine were found within normal limits.

Urine on Examination—Nothing abnormal detected—Culture sterile.

Special Investigation

Examination under Anaesthesia—The previous vaginal examination findings were corroborated with no demonstrable fistulous opening in the vagina.

Cystoscopic Examination—The bladder trigone was found congested showing evidence of chronic infection. The right ureteric opening was found normal with normal influx of urine. The left ureteric opening showed no influx.

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Dye Test—was negative—showing no dye leaking in the vagina.

I.V.P.—Both the kidneys were functioning normally. Right ureter was normal and could be traced upto the bladder. The left ureter was slightly dilated and could not be traced beyond the pelvic brim.

Indigo Carmine Test—Positive. The cervix did show bluish discolouration.

Laparotomy was done under Gas and Oxygen anaesthesia—The left ureter was identified and the distal portion was dissected free with its capsule between the leaves of the left broad ligament upto the site of the dense adhesion along the cervix. The ureter was cut and mobilised. A site was selected on the posterosuperior surface of the bladder which was freely accessable. A transverse slit was made and the ureter was implanted tangentially within the tunnel. It was secured by two layers of fine catgut sutures, the second continuous layer superimposing the first layer of interupted anchoring stitches. A complete haemostasis was secured and the abdomen was closed in layers.

Postoperative Care

A continuous indewelling catheter was maintained for two weeks followed by intermittent release every two hours for another two weeks followed by intermitten release every two hours for another week. Broad spectrum antibiotic coverage was given.

Patient was discharged after 4 weeks. She had total continuous of urine and was advised to empty the bladder every 1 to 2 hours.

I.V.P. after 8 weeks—showed both kidneys functioning normally. Both ureters seen.

Case 2

Mrs. S.B.H.—27 years, para 1 + 0, Bengali, housewife was admitted with the history of (i) continuous dribbling of urines for 5 years commenced from the 3rd day of puerperium following a destructive operation for obstructed labour. (ii) Secondary amenorrhoea—same duration.

Past history of illness—Nothing suggestive.

Menstrual History—Menarche 13 yrs. cycles 28-30 days, 4 to 5 days, flow moderate, L.M.P.—No period seen since last childbirth 5 years, previously.

Obstetric History: Para 1 + 0, no living issue.

General condition—Moderate build, pulse 80/m, respirations 18/m. B.P. 120/80 mm of Hg.

Systemic Examination—Nothing abnormal detected.

Vaginal Examination—Uterus normal in size. A.V. mobile. Right sided parametrium thickened, Left clear. Active dribbling of urine demonstrated.

Speculum Examination—No fistulous opening could be located, sudden spurts of clear liquid of urinary smell was seen jetting out of the cervix.

Dye Test—Negative—Showing no fistulous opening in the vagina.

Laboratory Investigation

Blood—Hb%, T.C., D.C., blood sugar, blood urea, N.P.N., Creatinin within normal limits.

Urine—on examination nothing abnormal detected. Culture sterile.

Special Investigation

Examination Under G.A.—Previous examination finding was corroborated, no fistulous opening demonstrated.

Cystoscopy—The bladder mucous membrane was normal. The left ureteric opening was normal with normal influx. The right ureteric opening could not be properly visualised—no urinary influx on the right side.

Indigo carmine Test—Positive. The dye could be seen coming through the left ureteric opening through cystoscope. No flow through right side. Cervix showed bluish discolouration.

I.V.P.—Both the kidneys were functioning normally. The right ureter was dilated and the pelvic part was obscure. The left ureter was normal.

Hysterosalpingography—The dye filling the uterine cavity went into the right ureter as shown in Figure—1 defining the site of the communication of the right ureter to the supravaginal cervix.

Laparotomy under gas and oxygen anaesthesia. The right ureter was identified and traced down from the pelvic brim. There was extensive fibrosis and adhesions in the right parametrium and mobilisation of the ureter was found extremely difficult.

Boary's flap operation was done and the right ureter was reconstituted over an ureteric catheter. One end of the catheter was taken out through the abdominal wound and was removed after 7 days. The continuous drainage catheter was removed after 14 days.

The postoperative recovery was uneventful

and the patient was discharged well free of complaints.

Follow up—The patient started her normal periods from the second postoperative month. She had no urinary complaints. I.V.P. showed normally functioning kidneys with dilated right ureter. Patient has not conceived during 3 years of follow up.

Discussion

With the improved antenatal care and increased facilities for hospital confinements the incidence of urinary fistulae for obstetrical causes have been remarkably lowered in recent years. The fistulae occurring in spite of all care are usually vesicovaginal or vesicocervical. Uretrocervical fistulae in obstetric practice is still a rarity. The etiology is probably the direct compression by the presenting head against the bony pelvis and a subsequent avascular necrosis. The etiology in the first case was either inclusion of the ureter in the suture while repairing the lower segment rent with possibly an extension of the uterine incision or during attempts to check an haematoma in the left broad ligament. In the second case the trauma was likely during destructive operation since she started dribbling from the 3rd day.

The diagnosis staged a problem since in both the cases the fistulous opening was not demonstrable. The usual dye test was negative in both the cases. Cystoscopic examination was of immense help and the diagnosis by the Indigo carmine test was conclusive. The ascending dye in the right ureter to outline the fistulous communication was an accidental and rare consequence but of much clinical interest. The surgical treatment varies according to the mibility of the distal part of the ureter and its accessibility to the bladder without tension.

Summary and Conclusion

Two interesting cases of ureterocervical fistulae from obstetrical trauma were presented. The radiological investigation and other diagnostic aids at hand are discussed. The treatment varied individually and was planned at laparotomy depending upon the successful mobilisation of the pelvic part of the ureter from the dense parametrial adhesions and its approachability to the bladder fundus.

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See Figs. on Art Paper VIII