URETERO-CERVICAL FISTULA OF TUBERCULOUS ORIGIN

(A Case Report)

by

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Even though tuberculosis is very common in our country, the occurrence of urinary fistulae due to tuberculosis is very rare. Counseller and Welch (1960), have mentioned that earlier in the 20th century syphillis and tuberculosis played a larger role in the aetiology of genito-urinary fistulae than they do in the present era of chemotherapy.

Vesico-vaginal fistulae are very common in our country, mostly as a result of lack of proper obstetrical services especially in villages. Uretero-cervical fistulae are comparatively rare.

Chassar Moir (1960) has mentioned that "this rare form of fistula is sometimes encountered as a complication of lower segment caesarean section". Ureteric fistulae are commonly the result of operative injury, as in hysterectomy, especially in Wertheim's operation.

Case Report

Mrs. K., aged 30 years, 4th para, was admitted on 31st October 1966 for the complaint of continuous dribbling of urine per vaginam and low fever since 6 months. She had developed dribbling of urine suddenly. She had four full-term normal vaginal deliveries. There was no history of prolonged labour nor of any operative interference at any time. Her last delivery was 7 years ago. All her children are living and well. There was no past history of fever, cough or haemoptysis. There was no history of any major disease or any operation done in the past.

On examination, the patient was found to be fairly built but poorly nourished. Her conjunctivae and nails were pale. Lymph glands were not palpable. Blood pressure was 110/80 mm. of Hg. Pulse 72 per minute, volume good. Spine was normal. Gait was normal. On systemic examination, the cardio-vascular system was normal. Abdomen — soft and supple. Tenderness in the suprapubic region and right hypochondrium.

Per speculum examination — on putting the speculum, the whole vagina was found to be full with urine. Vagina was normal; no fistula was seen. Urine was seen to be dribbling through the external os. Cervix was normal.

Per vaginam examination — cervix was downwards and backwards, smooth and firm; uterus was anteverted, anteflexed, normal in size, mobility was restricted. Fornices were clear. Per rectal examination—nothing abnormal was detected.

Investigations done were — Haemoglobin 9 gms%. W.B.C. — Total 8488 cmm. and differential count — poly, 68%, lympho, 30%, eosino, 2%. E.S.R. — 23 mms. at the

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end of one hour. Blood N.P.N. — 29 mgm%. Urine — albumin +, sugar nil; microscopic-leucocytes present in large numbers, R.B.C.'s occasional. Casts and crystals absent. Urine culture for T.B. bacilli was negative. Stool examination — normal. X-ray chest — old calcified spots were seen in right lower zone. Intravenous pyelography revealed non-functioning left kidney and hydronephrotic right kidney. Ureters were not visualised in any of the plates. In the 15 minutes' plate a few cc of the dye were seen in the bladder. Opinion given was a shrunken, calcified, non-functioning left kidney and hydronephrotic right kidney due to tuberculosis of the urinary tract. Methylene blue test was negative. A uretero-cervical fistula was suspected.

Cystoscopy and Exploratory Laparotomy

The cystoscope was passed without any difficulty. Only a few c.c.s of water could be introduced and as nothing could be seen the pressure was raised and more water was introduced, which suddenly went in very easily. As the patient started complaining of shoulder pain, she was taken up immediately for exploratory laparotomy. On opening the abdomen, fluid was found in the peritoneal cavity and the superior surface of the bladder was torn. The fluid was sucked out. There was no fistulous opening in the bladder. Attempts to pass ureteric catheters on both sides failed due to stricture formation. The bladder was extremely small in size, thick and fibrous and its capacity was hardly 16-20 c.c.s. There were small multiple tubercles all over the peritoneum, ileum and bladder. The patient's condition did not permit, further exploration to locate the site of the fistula. Biopsy of the peritoneum was taken. Malecot's self-retaining catheter was kept in the bladder. Suprapubic cystostomy was done. The abdomen was closed in layers.

Histopathological report of the biopsy taken showed typical characteristics of a tubercle (See Fig).

Patient was kept on antituberculous line of treatment for 3 weeks. During this period, she continued to dribble urine from the vagina. Suprapubic catheter could only drain 200-400 ccs per day.

On 23rd December 1966, the patient was again taken up for operation. Abdomen was opened in layers. Multiple tubercules were seen on the peritoneum as well as the ileum. The left ureter was dissected out and sectioned but no lumen could be found even on repeated sections and no catheter or needle could be passed into its lumen, so it was left alone and ligated. The right ureter was very much dilated. It was sectioned a little below the pelvic brim. There were many adhesions and it was difficult to dissect the ureter in its distal part. After sectioning, the distal ureteric segment was ligated — the proximal part was patent and was implanted into the colon. Abdomen was closed in layers.

The patient had a burst abdomen on the 13th post-operative day. Secondary suturing was done. The wound healed well.

She is passing urine per rectum with good control and has stopped leaking per vaginam.

Discussion

The diagnosis of the uretero-cervical fistula of tuberculous origin was made by the following points:

(a) On per speculum examination urine was seen dribbling through the external os.

(b) Vagina was normal and no fistulous opening was seen.

(c) Methylene blue test was negative.

(d) On exploration after cystoscopy—no fistulous opening was found in the bladder.

(e) After suprapubic cystostomy, the patient continued to dribble through the vagina, while suprapubic drainage was only 200-400 ccs. per day.

(f) There was no history of any operation in the past to which the ureteric fistula could be attributed. The shrunken and fibrosed appearance of the bladder with a capacity

of 15-20 ccs, strictures of ureters and finding of tubercules all over the peritoneum, ileum and bladder were suggestive of tuberculosis of the urinary tract.

(g) Histopathology of the biopsy taken of the peritoneum showed a typical picture of a tubercle.

As left kidney was not functioning, and there was hydronephrosis of the right kidney, and as the bladder was very small and fibrosed, a uretero-colic anastomosis was done on the right side. The patient is now passing urine per rectum with good control. The antitubercular line of treatment is continued.

Prognosis of the patient is not favourable as she has only one functioning kidney, tuberculous infection and more chances of urinary infection with a uretero-colic anastomosis.

Summary

Due to its rarity a case of ureterocervical fistula of tuberculous origin has been reported.

The diagnosis and treatment have been discussed.

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See Fig. on Art Paper V