HORSE SHOE KIDNEY WITH AN ECTOPIC-URETER

(A Case Report)

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A case of congenital uretero-vaginal fistula with horse-shoe kidney in a girl of 18 is reported. In the female, an ectopic ureter opens either into the urethra below the sphincter urethrae or into the vagina, which causes an intractable incontenence of urine (Bailey and Love, 1968). The approximate incidence of horse-shoe kidney is 1 in 200 to 400 persons (Gray Hack 1969).

CASE REPORT

K.S., 18 years old girl was admitted on 5.2.1974 with the complaint of continuous dribbling of urine since birth. Past and present histories were not significant.

Family History: She had 3 brothers and 2 sisters, all were healthy.

Menstrual History: She had normal and regular cycles with moderate flow and age of catamania was 14 years.

General Examination: She was a healthy female of average build, afebrile, with pulse rate of 80/mt and blood pressure 110/80 mm of Hg. Cardiovascular and respiratory systems were normal.

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Local Examination: There was dribbling of clear urine from the vagina. Just below the urethral opening on the anterior vaginal wall. Methylene blue was injected in the bladder through urethra and three-swab-test was done. There was no staining of any of the swabs, excluding vesico-vaginal and urethro-vaginal fistula. A provisional diagnosis of ectopic ureter with its opening into the vagina was made

Investigations: Haemoglobin was 11.4 gms% E.S.R. 33 mm. for first hour, T.L.C. 5400 cells p. cm., D.L.C.—p 64%, l—22%. Urine report, nil abnormal. Urine culture was sterile 24 hours after incubation.

Intravenous Pyelography: Lower poles of the kidneys were converging with normal calyces and pelves. A horse-shoe kidney was diagnosed. Both the kidneys were excreting the dye normally (Figs. I & II).

Cystoscopy: Left ureteric-opening was seen. The urine was coming out normally. Right ureteric opening was not visualized. Rest of the bladder was normal.

A final diagnosis of uretero-vaginal fistula was made.

Management: She was operated upon on 16.3.1974. Right paramedian incision was made and abdomen opened. There was a horse-shoe kidney. The left ureter was normal. The right ureter was not opening in the bladder. The right ureter was approached extraperitoneally. It was incised at the level where uterine artery was crossing it. A ureteric catheter was passed through the lower cut end which emerged through the abnormal ureteric opening on the posterior aspect of urethral opening. The distal

stump was clamped and ligated and proximal part was implanted into the bladder. After implantation of ureter, bladder was closed and abdomen closed in layers. She was kept on antibiotics postoperatively and self retaining catheter was put. She remained well during postoperative period except for some temperature which was controlled. She was discharged in satisfactory condition. When she again attended the out patient department she was absolutely relieved from the incontinence. On clinical examination urine was not dribbling from the vagina.

Discussion

Sometimes the ureter, but more often an accessary ureter, opens into the anterolateral wall of the uterus, the vagina, the vestibule or the urethra, the commonest site is the vestibule. It then causes incontinence of urine, which is frequently mistaken for enuresis in childhood (Jeffcoate, 1967). The mullerian and wolffian ducts are so closely linked embryologically that gross malformation of the uterus are commonly associated with congenital anomalies of the kidney and ureter (Jeffcoate, 1967).

The present case had an anomaly of one ureter which was opening into the anterior wall of vagina forming congenital uretero-vaginal fistula. This anomaly was further associated with horse-shoe kidney. Horse-shoe kidney is notoriously prone to become diseased due to urinary stasis and consequently pyogenic infection; tuberculosis or calculus are common complications (Bailey & Love 1968). But in this case, patient was free from such complications. Therefore, on laparotomy only ureteric resection and reimplantation into the bladder sufficed. Her incontinence was relieved completely.

The diagnosis of the case did not present any difficulty as is usual in these fistulae. Dribbling was from the vagina from a point behind the urethra on anterior vaginal wall was seen. Intravenous pyelography and cystoscopy were helpful in reaching the final diagnosis.

Summary

A case of congenital uterovaginal fistula is present because of clinical interest and rarity of the condition. Investigations and management of the case have been discussed.

References

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See Figs. on Art Paper IX