

ACCIDENTAL RUPTURE OF THE FEMALE URETHRA

by

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Injuries to the vagina and vulva as a result of accidental injury or falling on a hard object are quite frequent. They may be associated with bleeding per vaginam or might develop concealed bleeding in the form of a haematoma, but it is unusual to result in visceral tears.

The case reported is of special interest, following a fall on a sharp stone while walking on a road, which resulted in complete division of urethra, one inch from the external urethral meatus.

Surgical and gynaecological textbooks make hardly any reference to this condition, though surgeons may come across accidental rupture of urethra in the male quite frequently. Winsbury-White (1948), in the text book of genito-urinary surgery, just makes a passing reference. Gynaecological Urology by Everett (1947) does not make any mention about this accidental injury. There are three cases reported in literature, one by

Gourlay (1960), a case which followed a fall astride on sharp edge of a stool resulting in complete division of urethra and another by Cooke & Smith (1942) in which there was partial avulsion of urethra as a result of a straddle accident. Herman (1938) reported a similar case which followed a traffic accident. Because of its rarity, we decided to publish this case.

Case Report

A patient, 4th para, aged 35 years, was admitted to the hospital 3 hours after a fall. She was walking on the road which was being repaired, and had a fall on a sharp stone. Very slight bleeding was present on admission. On examination, she was in good condition, her pulse rate was 90/minute and blood pressure 100/70 mm. of Hg. Respiratory rate was normal. Examination of heart and lungs revealed no abnormality. There was no evidence of any other injury. On speculum examination without anaesthesia, there was complete division of urethra, 1 inch from the external meatus. There was also a laceration lateral to clitoris in the 11 O'clock position, mucous membrane deep, about 2 inches long from where oozing was present.

A glucose drip was started and under anaesthesia both the proximal and distal ends were identified. Two sutures were inserted into the posterior wall to appose the cut ends by No. 00 catgut on atraumatic needle and then an ordinary catheter was threaded via the external meatus first

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through distal urethra and then into the bladder. A few interrupted sutures were put on the lateral and anterior surfaces. Paraurethral tissue and pubo-vesical fascia were brought together in the midline by interrupted sutures and lastly the anterior vaginal wall was repaired. Her general condition was normal all throughout the operative procedure. Patient was very unco-operative postoperatively.

She pulled out the catheter twice. After 48 hours, in spite of repeated explanations, she preferred to pass urine on her own. She was put on alkaline mixture and chemotherapeutic cover for 7 days and was discharged after 8 days in a healthy condition. Patient was seen one month after the injury when she had no difficulty in micturition with completely normal urinary control.

Discussion

Following obstructed labour, damage to the bladder or rarely to the urethra is seen commonly in India because of home deliveries. Surgical trauma and irradiation are other causes which can injure the urethra. But accidental rupture of the female urethra is rare because of its anatomical situation, unless there is direct trauma by a sharp or blunt object. Secondly, post-operative stricture being rare, it receives less attention in literature. The cases reported in literature have probably a different mechanism of injury than the present case. The injury in the two reported cases was by falling astride on the edge of a stool or a chair. In Herman's (1938) case it followed a traffic accident. It is likely that a blow from behind and below might nip the urethra against

the posterior surface, rather than inferior margin of symphysis. In the present case, it was due to sharp cut by a pointed stone.

Drainage via an indwelling catheter is sufficient as is done in repair operations of urethra. This is described by Grey Ward (1934) and late advocated by Shaw (1949). Suprapubic drainage is unnecessary. Strictures of female urethra are not common. The reported three cases and the present case had no stricture urethra. It is, however, too early to speculate on our case.

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