TRAUMATIC AVULSION OF THE FEMALE URETHRA

by

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The female urethra is short and being protected by its normal anatomical situation under the symphysis is less vulnarable to trauma and injury as compared to the male urethra. Only isolated case reports are on record stressing on its rarity (Vyas *et al*, 1968). Injuries of the female genital tract involving vulva and vagina have been variously reported, but since the site of trauma is either the lateral or posterior wall as in cases of coital injuries the urethra escapes unhurt in majority of them. Walmiki (1967) reported a collected series of 24 cases of genital tract injuries of which in only two cases the urethra was involved being subject to direct impact.

Two cases are being reported, where as a result of trauma the urethra was severed completely and got displaced from its normal site.

Case 1

Sm. C. D., aged 12 yrs. was admitted to Nil Ratan Sarkar Medical College & Hospitals, Calcutta, with history of a fall from a running Suburban (Electric) train. She was brought to the hospital six hours after the accident.

On Admission. General condition moderate the patient was conscious but confused, pulse 120 per minute, respirations 28 per minute, B.P. 90/60 mm of Hg.

Systematic Examination—There was no evidence of any bony or viceral injury. There were multiple scalds and superficial cuts all over the body. She had frank bleeding from the vulval area.

Examination Under General Anaesthesia: On parting the thighs there was an incised looking triangular wound. One arm of the triangle was parallel to the right groin and the other extending over suprapubic region. On lifting and turning the skin flap it was observed that the whole labium majus with its fat on the right side had been undercut and sliced off. The wound had extended under the left labium majus. The urethral opening could not be located being avulsed completely. The vaginal mucous membrane did show ragged tear all around the introitus.

The vagina was full of blood clots. A repeated attempt to locate the receded urethral opening failed. Since the urinary bladder was distended almost upto the umbilicus, a suprapubic cystostomy was done and a retrograde catheterisation located the cut urethral margin. The vulval wound was repaired by interrupted catgut stitches and the external urethral meatus was fixed at its normal site.

The postoperative recovery was smooth and the indwelling catheter was removed after six days. Patient regained normal sphincteric control and was discharged on the 15th postoperative day.

Follow up after six weeks—The local wound had healed completely. The scar was healthy. Patient did not have any urinary symptoms.

Case 2

Sm. S. R., aged 7 yrs, was admitted to M. R. Bangur Hospital wtih a history of fall from the third floor roof one hour back.

On Admission. General condition, poor. Patient was conscious but shocked. Pulse feeble, B.P. low. Immediate resuscitation was

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started and blood sent for cross matching.

Systemic Examination. There was no evident bony or visceral injury.

Local Examination Under General Anaesthesia. There was a ragged lacerated injury around the vulva. The upper limit of the wound was along the right inguinal canal. The wound was undermined cutting through the labia majora of both sides, extending to the fourchette and perineum on the left side. The external urethral opening had receded 1" away from the normal site. A fine catheter was passed and the urethra was stitched back at the normal site and the vulval wound was repaired by fine interupted catgut stitches. Patient pulled out the catheter in 24 hours and was taken home against medical advice on the 4th postoperative day.

The girl was readmitted on 6th April 74, six weeks postoperative with a history of complete occlusion of the vaginal opening and urinary incontinence.

Examination Under General Anaesthesia. There was secondary gynatraesia due to adhesion of the two labial folds which a pinhole opening at the fourchette through which there was dribbling of urine. The fine adhesions were disected and this opened up the introitus showing the external urethral meatus. There was no urinary fistula. The raw margins were sutured with very fine catgut stitches and vaseline gauze pad was maintained in the vagina. The patient was confined to bed for 3 weeks with both legs abducted. The vaginal gauze pack was changed frequently and there was complete healing. Patient regained complete urinary control.

Discussions

Urethral injuries per sé in the female is a rarity. The urethra is sometimes incorporated at the junction of the bladder neck in cases of necrotic fistula following obstructed labour. Direct injury of the urethra during destructive operation leading to traumatic fistulae are on record. In both the cases reported, the blow was from behind, since both the patients did fall in a sitting posture. The urethra got nipped off behind the symphysis or at the inferior margin. The indwelling catheter alone could have been adequate for healing. The first case demanded a suprapublic cystostomy with a retrograde catheterisation which is not the usual procedure. It was interesting that both the cases regained sphicteric continence. though in both the cases the cut margins of the external urethral opening receded away. Probably the continance regain was at the level of the bladder neck, since the reconstructed urethra got shortened.

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