

Case Report

A Rare Vestibular Injury from a Trivial Trauma

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Abstract: Urethral injury is a common complication of pelvic trauma; it occurs in as many as 24% of adults with pelvic fractures. Injury of the female urethra is rarer (<6% of female pelvic fractures) than that of the male urethra. Unless urethral injuries are associated with major bladder trauma, they are rarely life-threatening in the acute phase. However, they may lead to significant long-term morbidity. The severity and duration of such complications may be reduced if urethral injury is promptly diagnosed and appropriately treated. This case report suggests how a trivial trauma can cause vestibular injury and proper examination and repair under anaesthesia can prevent long term urinary disabilities. To best of my knowledge there are no published case reports suggestive of such rare vestibular injury. It can be concluded that female urethral injury though rare should be suspected in blunt vulval trauma and proper examination and repair should be done under anaesthesia to prevent long term urinary disabilities.

Keywords: Urethral injury, Pelvic Fractures, Endopelvic Fascia

INTRODUCTION

Urethral injury is a common complication of pelvic trauma; it occurs in as many as 24% of adults with pelvic fractures[1]. Unless urethral injuries are associated with major bladder trauma, they are rarely life-threatening in the acute phase. However, they may lead to significant long-term morbidity [2]. Strictures have been reported in 31%–69% of patients after a complete disruption of the bulbous urethra [3]. Incontinence and impotence are other well-recognized associated problems. The severity and duration of such complications may be reduced if urethral injury is promptly diagnosed and appropriately treated.

Injury of the female urethra is rarer (<6% of female pelvic fractures) than that of the male urethra because of shorter length, internal location, increased elasticity, and less rigid attachment of the urethra to the adjacent pubic bones [4]. The posterior urethra injury is more common due to road traffic accidents and fall from height, whereas anterior urethral injury is due to Straddling injury, which results from compression of the urethra against the pubis[5,6]. This case report presents a rare vestibular injury from a trivial blunt trauma.

CASE REPORT

A 24 yrs old unmarried girl presented with a history of fall on a wooden ladder (slipped her foot on 2nd step while climbing the ladder) two hours ago. She suffered from straddle injury of vulva and had bleeding per

vaginum. Patient passed urine at home after the injury. On examination her vitals were stable with Pulse of 90/min and B.P=120/76 mmHg, Per abdomen examination was normal, on local examination bleeding from the anterior part of vestibule was seen but urethral opening could not be seen. Pelvic fractures were ruled out by X-Ray. Decision for examination under anaesthesia was taken and she was examined under saddle block anaesthesia. Urethral opening was still not located and only laceration and bleeding was seen at upper portion of vestibule, Examination by urologist identified the urethra after the bladder was pushed from above. The urinary stream was visualized just below the injured area. The bladder was catheterized after which the urethral anatomy could be delineated. Hymen was intact and no bleeding through vagina seen. There was a disruption of pubo-urethral ligaments and endopelvic fascia due to which urethra got sheared from the pubic bone and sagged down on anterior vaginal wall. Urine was clear in the catheter suggestive of no urethral injury.

Endopelvic fascia was sutured with pubic bone and fascia with no 1 vicryl in two layers and the anatomy was restored. Catheter was left for 7 days. Her postoperative period was uneventful and she was discharged on POD-8 after she voided the urine successfully.

On follow up, after 6 months of surgery, she is doing well with no urinary complaints.



Fig. 1: vestibule showing the injury in the urethral area but no urethral opening seen (1.Pubic Bone, 2. Endopelvic Fascia, 3. Hymen)



Fig. 2: Showing urethral opening with catheter and delineating the anterior urethral wall (1. Pubic Bone, 2. Anterior urethral wall, 3. Urethral opening with Foleys, 4. Hymen)

DISCUSSION

Injury of the female urethra is rarer (<6% of female pelvic fractures) than that of the male urethra [4]. Female urethral injury is usually seen in cases of severe pelvic trauma and, in female patients, often is associated with vaginal (75%) or rectal trauma (33%) [7]. To the best of our knowledge there are no published case reports suggestive of such rare vestibular injury. Urethral injury if undiagnosed, may lead to significant long-term morbidity. As in our case there was loss of urethral support, if not repaired could lead to stress and urge urinary incontinence. Hence, any case with suspected urethral injury should be examined under anaesthesia as timely intervention is important to reduce long term morbidity.

CONCLUSION

Female urethral injury though rare should be suspected in blunt vulval trauma and proper examination and repair should be done under anaesthesia to prevent long term urinary disabilities.

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