Pelvic Trauma and Urogenital Injury

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Purpose: Urogenital injury is reported in children in association with pelvic fracture. The co-incidence is reported with wide variability from 2-30%.

Patterns of trauma also vary with regards to the local environment. We aimed to investigate local, anecdotal experience that urogenital injury with pelvic fracture is rare in our high volume trauma centre in a high income, urban environment.

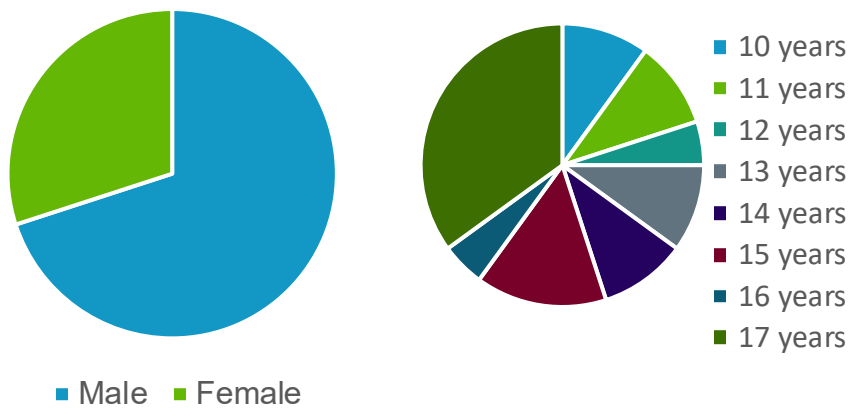
Fig 1. Fracture of left superior and inferior greater trochanter with significant diastasis of the pubic symphasis. Fracture of the left sacral ala.

Methods: A prospective trauma database was interrogated at a single, tertiary major trauma unit over 2.5 years. Case notes were reviewed for all patients with a recorded pelvic fracture.

Results: There were 20 patients with traumatic pelvic fractures over the 2.5 year period.

Demographics:

The mean age at injury was 14 years (range 10 to 17). Six patients (30%) were female.



The most common mechanism was road traffic accident (60%). Nine (45%) had their pelvic fracture managed operatively. One patient (5%) passed away prior to detailed assessment.

One patient (5%), aged 16, had a urogenital injury (bulbar urethral disruption). A urethral catheter was inserted and a cystogram D16 post injury showed contrast leak at the bulbar urethra. This was treated conservatively. A further urethrogram on D51 post injury showed no structure or leak of contrast and the catheter was removed.

No delayed urogenital injuries were noted in any other patients.

Conclusion: Both pelvic fracture and concomitant urogenital injury in children are rare in an urban, high income setting. Our findings are concordant with the literature in showing a low rate of urogenital fractures in paediatric pelvic fractures. In the absence of other urogenital symptoms and signs, clinicians can adopt a conservative approach following confirmed pelvic fracture.

References:
Hasan et al. Pelvic Fractures and Associated Urogenital Injuries in Children: A Systematic Review