

Penetrating Injury of the Bladder (A Unique Etiology)

Asal Y Izzidien Al-Samarrai, FRCS(Ed), FACS; Salah Rashid El-Faqih, FRCS(Glas), FRCS(Eng);
Ramiz Atassi Atassi, MD; Khalid Ali Fouda Neel, FRCSI

A four-year-old male was admitted with a history of sitting on a pencil, which was removed by the mother. Two hours later she noticed drops of urine coming from the perineum. A description of the injury together with the management of this unique trauma is given in this paper.

Case Report

This four-year-old male was admitted with a history of a penetrating injury to his perineum which he had sustained after sitting on a pencil which had fallen in an upright position between two cushions. The child was reported to have screamed after sitting down. The mother noticed the pencil pushed in a few centimeters from the anal opening so she removed it and the child settled down. However, on looking at the child's perineum she noticed a drop or two of urine coming out and thus brought the child to KKUH.

On examination the child looked very well. He had mild suprapubic tenderness and examination of the perineum revealed a small laceration, round in shape, 2 to 3 cm medial to the anal opening. No urine was seen coming from that opening. Urine examination, however, showed RBCs of 1440/mm³ and his WBC was 16,600.

An emergency cystogram was done through a urethral catheter under screening and this clearly showed a tract from the base of the bladder (Figure 1), while later pictures showed a clear extravasation of urine (Figure 2). The urinary catheter was left in place for seven days and the patient was put on oral antibiotics.

Micturating cystourethrogram was done 14 days later and showed no further evidence of extravasation.

Discussion

Penetrating urinary bladder injuries in childhood are very rare. We came across one similar case in the English literature that described a nine-year-old male who sustained

a penetrating injury to the perineum and on presenting with a urinary tract infection was found to have a splinter of wood in the bladder.¹

Iatrogenic puncture of the bladder by peritoneal dialysis catheter has been reported² as has urachal laceration leading to extravasation of urine during umbilical catheterization in a newborn.³

Both parents were interviewed during the initial management and later on in the outpatient clinic and there

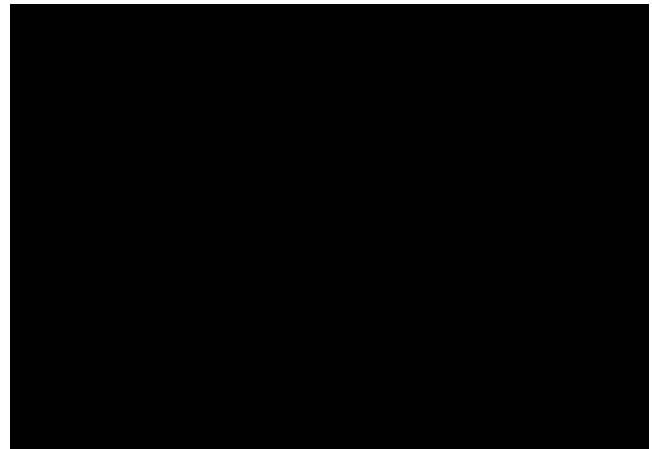


FIGURE 1. Cystourethrogram showing the site of bladder penetration (see arrow).

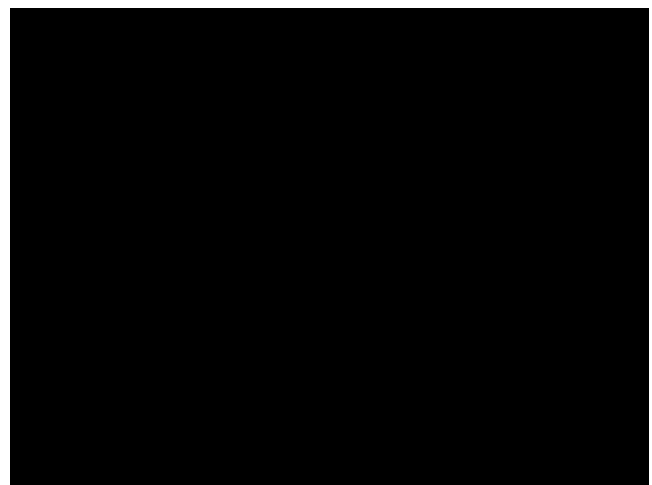


FIGURE 2. Extravasation of dye seen in later films.

From the Departments of Pediatric Surgery (Dr. AlSamarrai), and Urology (Drs. El-Faqih, Atassi, Neel), King Khalid University Hospital, Riyadh.

Address reprint requests and correspondence to Dr. AlSamarrai: Professor of Pediatric Surgery, King Khalid University Hospital, P.O. Box 2925, Riyadh, Saudi Arabia.

Accepted for publication 20 November 1994.

was nothing to suggest child abuse. This was a genuine though unfortunate accident.

References

1. Buchanan DD. Splinter in the urine. W IndiaMed J 1991;40:142-3.
2. Rall KL, Beagle GL. Inadvertent puncture of the urinary bladder by peritoneal dialysis catheter. SMed J 1993;86:1398-9.
3. Mata JA, Livne PM, Gibbons MD. Urinary ascites: complication of umbilical artery catheterization. Urol 1987;30:375-7.