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IMAGES IN PAEDIATRICS

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To pee or not to pee.....

A 14-year-old girl was referred urgently to the paediatric outpatient clinic from A&E following a recent episode of acute urinary retention, requiring drainage (1.2 litres) by catheterisation. She had intermittent hesitancy with lower abdominal pain for the past 6 months and although her secondary sexual characters were developed, had not attained menarche. A detailed neurological examination including spine was normal and an urgent KUB (kidney, ureters and bladder) ultrasound was also reported as normal. MRI showed a normal spine and a large “fluid” filled mass in the pelvis (fig 1). Examination of her external genitalia revealed an imperforate hymen that caused haematocolpos on menstruating and intermittent urinary retention secondary to pressure on the bladder outlet.

Urinary retention is uncommon in children. Aetiologies include neurological causes such as Guillain-Barre syndrome, acute transverse myelitis, spinal neoplasms and unrecognised spinal trauma, voiding dysfunction, and reflex retention secondary to painful causes such as urinary tract and local infections and obstructive causes such as urethral valves and stones. Haematocolpos is a rare cause. Imperforate hymen is reported to occur in 1:2000 girls.¹ If undetected until puberty, children can present with intermittent lower abdominal pain and acute urinary retention.² The diagnosis is easy, but can be missed if genital examination is not performed. This may be difficult in the A&E or outpatient clinic and may be overlooked, leading to unnecessary investigations.³ Hence genital examination should be performed, with a chaperone if needed, in teenage girls presenting with obscure urinary symptoms.

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Figure 1 T2 weighted MRI image of pelvis showing haematocolpos.

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