

Haematocolpos as a Cause of Urinary Retention in the Young Female

M. Mahmood, S. Ahsan, Z. Zaidi (Department of Urology, The Kidney Centre Karachi and Gynaecology, Liaquat National Hospital, Karachi.)

Introduction

Urinary retention in females is rare. In young adolescent female the cause could be severe urinary tract infection (UTI). Tumours of the ovary, vagina or uterus are rare cause of urinary retention. Pelvic abscess, severe constipation and bladder stone should also be considered. We present 2 cases with imperforate hymen and haematocolpos presenting with lower abdominal pain and urinary retention.

Case I

A 13 year old girl presented with one month history of bilateral flank pain and gradual distension of lower abdomen with difficulty in passing urine. For the last 8 hours she was only dribbling urine and was in agony. One month ago, she had a similar episode and needed catheterization. Menarche had not occurred.

Abdominal examination revealed a palpable bladder. Genital examination revealed a swelling in the vulvar ultrasound scan showed a large bulky uterus with fluid filled structure behind the bladder. There was bilateral fullness of kidneys the bladder had normal walls and contained 370 ml of urine.

This girl was diagnosed as having imperforate Hymen with Haematocolpos. She was catheterized and referred for gynaecological evaluation and subsequently underwent incision of the hymen and drainage haematocolpos under general anaesthesia. In follow up she did not have further episode of urinary retention.

Case 2

An 11 year old girl presented to the Urology outpatient department with one year history of right lumbar pain and difficulty in passing urine. There were no symptoms suggestive of UTI. Physical examination was non contributory. Unfortunately perineal examination was not performed.

On investigation, IVU (intravenous Urogram) revealed a non-functioning right kidney. Ultrasound showed a cystic structure in the pelvis suggestive of a pelvic kidney. Tc99 DMSA renogramme was done and it confirmed non function of right kidney. The left kidney was normal.

She underwent cystoscopy and laparotomy for non-functioning right pelvic kidney supposedly the cause of her pain. Cystoscopy revealed an absent right ureteric orifice and subsequent laparotomy also showed absent right kidney. However there was altered blood in the culde sac with adherent omentum and blood in the uterus and vagina. This was checked by needle aspiration the abdomen was closed and gynaecological help was sought. Under anaesthesia hymen appeared perforate and there was complete vaginal septum with 2 cervixes communicating with 2 separate uterine horns. The vaginal septum was incised and altered blood drained from the right cervical os. Post operative recovery was uneventful and she was asymptomatic on two subsequent follow up visits.

Discussion

Haematocolpos is a rare gynaecological abnormality. It usually results due to an imperforate hymen. However vaginal atresia or iatrogenic injury² can also result in collection of blood in vagina. Retained blood in the vagina can cause compression of the urethra and urinary retention³⁻⁵. It can also present as low back pain⁶ or constipation⁷.

The incidence of urinary retention associated with haematocolpos has been reported as rare⁸ to as high

as 30%^{9,10}. Trans rectal ultrasound (TRUS) is a good imaging modality to confirm the diagnosis^{11,12}. However there is no substitute for a proper vaginal examination which shows a bulging, bluish hymen when it is imperforate.

Other extrinsic causes of urinary retention in young females include tumours of ovary, vagina, uterus and ischiorectal abscess, retrovesical hydatid cyst, rectal tumours and constipation leading to impacted faeces. These two cases highlight the need to consider rare causes of urinary retention specially in the young female and importance of detailed physical examination.

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