



PROSTATIC URETHRAL POLYP

Urology

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ABSTRACT

Acute urinary retention in a young male due to a prostatic polyp is a rare presentation. We present a case of a 29-year-old male, who had a 6-month history of urinary frequency and poor stream and presented with lower abdominal pain and inability to pass urine for 6 hours in the Emergency. He was treated by catheterization initially, followed by endoscopy. Endoscopic examination of the urethra revealed a prostatic urethral polyp, which was excised in total, after which the symptoms did not recur until last follow-up. A prostatic urethral polyp is a rare entity and may be considered in a young male patient with atypical urinary symptoms not explained by any obstructive pathology. The management of this condition is complete endoscopic excision, after which the symptoms usually do not recur.

KEYWORDS

INTRODUCTION

Acute urinary retention (AUR) is a common urological emergency characterized by an inability to pass urine, and not invariably, lower abdominal pain (1). There are varied causes, which include trauma, neurological, infectious, and calculous diseases. A polyp of prostatic tissue is a rare cause of acute urinary retention (2). Oftentimes, the patient has lower urinary tract symptoms (LUTS) for a few months to years before presenting with acute urinary retention (3). Prostatic polyps may be congenital, or idiopathic, arising in a background of smooth muscle hypertrophy with prostatic epithelial changes (4). Routine blood tests are often normal, and radiological investigations are non-contributory. The diagnosis is usually made with cystoscopy, which reveals a pedunculated polyp arising from the prostate, exerting a 'ball-valve' effect on the bladder. Excision and biopsy are the treatment of choice. Recovery is usually complete, and recurrences are rarely reported (5).

In this paper, we present a case of a young male who presented to the Emergency room of our hospital and review the literature of management of this rare condition.

MATERIALS AND METHODS

A 29-year-old male patient presented with complaints of lower abdominal pain and urinary retention since the night before. He had a history of urinary frequency and poor stream over the preceding six months. There was no history of urinary tract infection, instrumentation, or any previous genito-urinary malignancy, or tuberculosis. On examination he was found to be in pain, afebrile, and the bladder was palpable around 5 cms above the pubic symphysis. A catheter was placed immediately, and 600 ml clear urine was drained. Routine investigations of complete blood count, renal function tests, and serology, returned normal values. Urine culture showed no growth and urinalysis was normal. An ultrasound (USG) was performed which revealed normal kidneys and ureters, with the catheter bulb present in the bladder. Prostate was found to be of normal size on USG. The patient was taken up for cystoscopy which revealed a mass in the posterior urethra arising from the bladder neck. The mass was around 1.5 cms x 1.5 cms, pedunculated on a stalk of around 1 cm, and arising from the 2-o'clock position of the prostate. It was mobile, and with saline irrigation for cystoscopy, it was being pushed back in to the bladder. The bladder was trabeculated. An on-table decision was taken to perform an excision of the mass using a transurethral resectoscope and the mass was excised in total. A catheter was kept for 2 days post-operatively. After the catheter was removed the patient voided well. A histopathology of the specimen revealed prostate polypoid urethritis over a background of a benign leiomyoma. There was no evidence of any malignancy. At last follow-up, the patient was doing well, and his symptoms had not recurred.

DISCUSSION

Prostatic polyps are a rare entity which have a wide age of presentation from 10s to 80s (6). Some may be congenital in origin (7). They tend to

present with haematuria, haemospermia, and urinary frequency, only rarely with retention of urine. A prostatic urethral polyp has been described as a benign small, papillary or polypoid structure that protrudes into the lumen of the urethra. Histologically they reveal a polyp lined by urothelial or columnar cells with stroma containing benign prostatic glands (6). In our case, there was the presence of prostatic stroma in the polyp with evidence of polypoid urethritis over changes in smooth muscle suggestive of leiomyoma. The patient did not report having any UTI. Polypoid urethritis has been known to occur in the setting of a foreign body, such as an indwelling catheter or with urinary fistulas, such was not the case in our patient.

The patient was treated with complete endoscopic resection which resulted in resolution of symptoms. There was no recurrence of symptoms on follow-up around 6 months later, and routine investigations, an ultrasound, and uroflowmetry revealed no abnormalities.

CONCLUSION

A prostatic urethral polyp is a rare cause of AUR in young adult males, but should be suspected in cases where there is no evidence of any UTI, TB, trauma or calculous disease. Treatment is by transurethral excision using electrocautery and symptoms usually do not recur.



Image 1: Cystoscopic image of prostate polyp



Image 2: Cystoscopic image of post resection area, showing clear bladder neck outflow

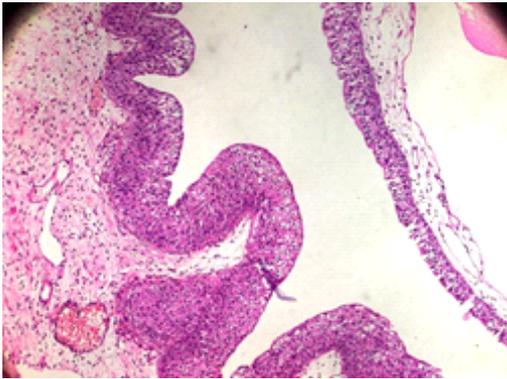


Image 3: Pathologic examination of specimen (H&E staining) showing transitional epithelium

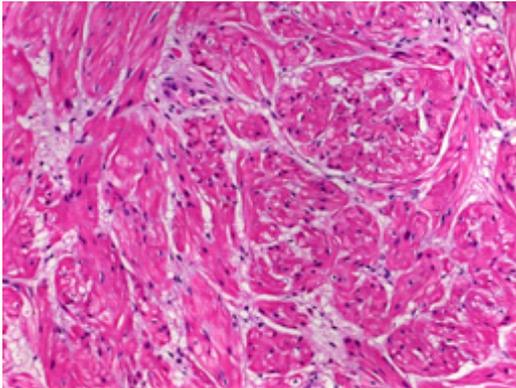


Image 4: Pathologic examination of specimen showing features suggestive of leiomyoma

Table 1: Features suggestive of prostatic polyp in this case.

| | Feature | This case |
|---|---|---|
| 1 | Benign, polypoid structure that protrudes into the lumen of the prostatic urethra | Yes |
| 2 | Haematuria, frequency, haemospermia | Frequency, Yes |
| 3 | Pathology: polyp lined with epithelium with stroma | Yes |
| 4 | Usually seen at verumontanum | Seen at bladder neck, at 2-o-clock position |

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