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Pelvic lipomatosis presenting with chronic vasitis: a case report

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Abstract

Background: Vasitis is a rare condition and has not been reported in the literature in association with pelvic lipomatosis.

Case presentation: 25-year-old young male presented with bilateral scrotal pain. He was found to have bilateral thickened and tender vas. On further evaluation, he was diagnosed with pelvic lipomatosis and dilated vas up to ejaculatory duct. He was treated with anti-inflammatory medication and is on close follow-up to look for further symptoms related to other luminal compressive pathologies that are known to occur with pelvic lipomatosis.

Conclusion: In patients with pelvic lipomatosis, careful examination of genitalia is necessary to look for other compressive findings including vasal obstruction and vasitis.

Keywords: Vasitis, Pelvic lipomatosis, Lower urinary tract symptoms, Case report

1 Background

"Vasitis" (Plural: Vasitides) or "Deferentitis" refers to diffuse induration and inflammation of vas deferens. Chan and Schlegel [1] categorized vasitis as either acute infectious type or asymptomatic vasitis nodosa (commonly after vasectomy). Clinically symptomatic vasitis has been described in patients with HIV infection [2] and also following certain surgeries like radical prostatectomy [2]. It may involve the scrotal, suprascrotal and prepubic portions. This condition may be mistaken for funiculitis, epididymitis [3] or incarcerated hernia [4, 5] as in case of suprascrotal vasitis. Pelvic lipomatosis is an uncommon condition of overgrowth of benign adipose tissue in pelvis surrounding the bladder and rectum [6]. It is known to cause lower urinary tract symptoms (LUTS) and bowel dysfunction [7]. It sometimes causes serious complications such as hydroureteronephrosis [8, 9] and venous occlusions [8] that are secondary to compression of luminal structures. Pelvic lipomatosis presenting with bilateral vasitis is not reported. We report a rare presentation of vasitis in a patient with pelvic lipomatosis.

2 Case presentation

A 25-year-old male presented with bilateral scrotal pain for 8 months. The pain was constant, dull aching, aggravated by sexual intercourse and affecting quality of life. He also had lower urinary tract symptoms like frequency, urgency and incomplete evacuation which were not bothersome. He is married with 2 children. He denies history of urethritis or other sexually transmitted diseases in the past. He was treated in different places as urinary tract infection, epididymitis and has taken multiple courses of antibiotics. He did not have any relief of symptoms. He later underwent left inguinal hernioplasty 6 months back in another hospital. There is no available record of the surgery. But his symptoms persisted. He then presented to our clinic. He had no medical comorbidities. Clinical examination revealed bilateral grossly enlarged, thickened and tender vasa, which were cord like, up to external ring. Both testes and epididymis were, however, normal. Rectal examination was unremarkable. Complete hemogram and renal parameters were normal. Urine culture was sterile. Uroflowmetry showed intermittent

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flow pattern. Peak flow rate was 10.5 ml/s with residual urine of 55 ml. Suspecting a diagnosis of stricture and to rule out reflux vasitis, retrograde urethrogram and micturition cystourethrogram (RGU and MCU) were done (Fig. 1).

RGU showed normal urethra without any reflux into prostatic ducts or seminal vesicles. Surprisingly, cystogram showed a "pear shaped bladder" suggestive of pelvic lipomatosis. Magnetic resonance imaging (MRI) confirmed "Pelvic lipomatosis with bilateral thickened and edematous vasa (Vasitis)." The dilated vas was prominently seen in the pelvis with hour glass compression of bladder and surrounding pelvic lipomatosis giving a "Donald Duck" appearance (Fig. 2). Since he had already taken different antibiotic courses in the past, he was not given any further antibiotics. Patient was treated with anti-inflammatory medication (Celecoxib) for 4 weeks. He is on regular follow-up for the last few months and is symptomatically better. Clinical examination revealed persistent dilated vas, but the tenderness was no longer present even after completion of anti-inflammatory medication. Follow-up ultrasound abdomen and scrotum did not show any new compressive conditions. He has been advised to come for regular review.

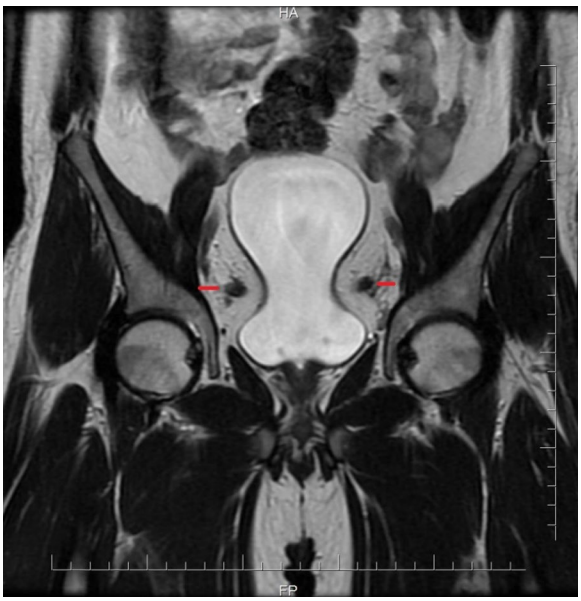

Fig. 2 Coronal MRI pelvis showing 'Donald duck' appearance with pelvic lipomatosis compressing the bladder and 'eye' formed by dilated vas

3 Discussion

Pelvic lipomatosis is a rare non-malignant condition with diffuse overgrowth of adipose tissue in the perivesical and perirectal space. It was first reported by Engels in 1959 [6].The etiology of the disorder is not known [7]. Common presenting symptoms are typically lower urinary tract symptoms [7] (LUTS). There may also be suprapubic pain, backache and chronic pelvic pain [7]. Bowel symptoms like tenesmus, chronic constipation with altered caliber of the stool [7] can also occur. In severe cases, compression of the ureter [8, 9] and iliac veins [8] leading to complications has been reported.

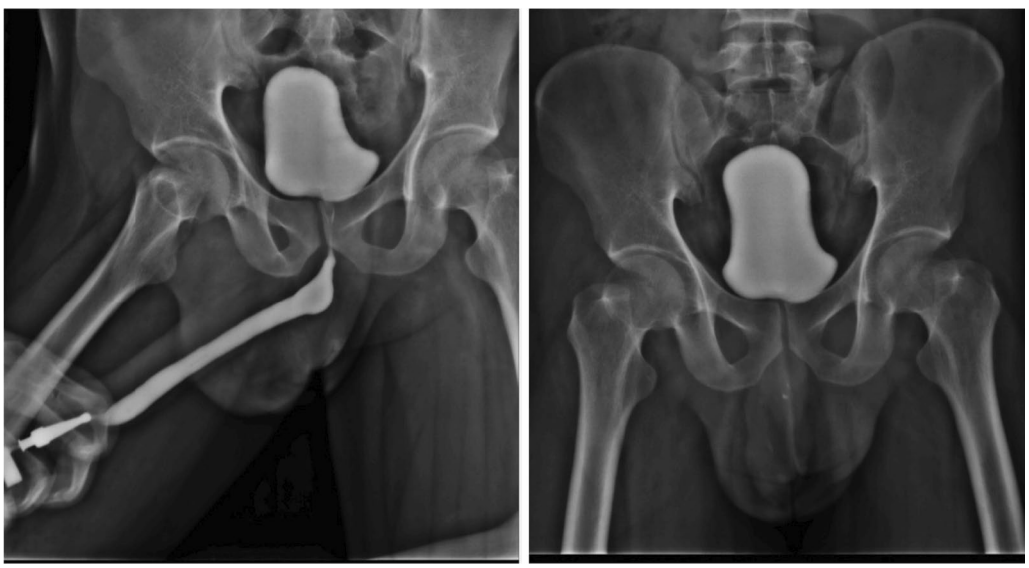

Fig. 1 RGU and cystogram showing normal urethra and pear-shaped bladder

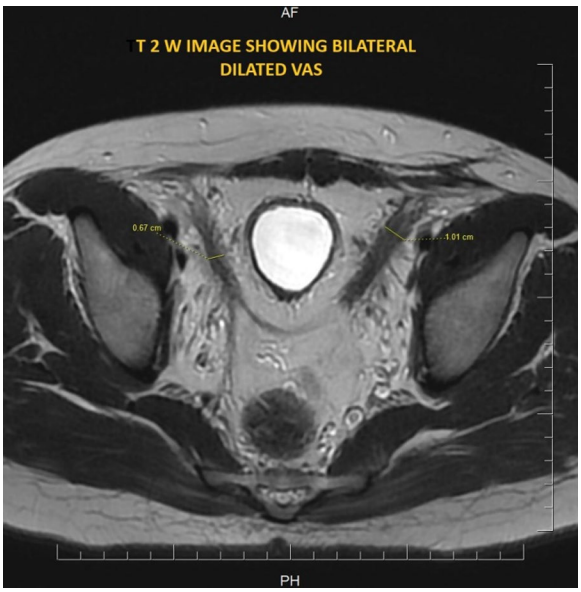

Fig. 3 Axial MRI pelvis showing extensive pelvic lipomatosis with bilateral dilated vas. The diameter of dilated right vas was 0.67 cm and left vas was 1.01 cm

There have been reports of vasitis mimicking incarcerated inguinal hernia [5] or even paratesticular mass [10]. Sexually transmitted infective type has also been reported [11]. To date, no paper has been published of pelvic lipomatosis presenting with vasitis.

The normal diameter of vas has been mentioned as 0.15–0.27 cm in the supra scrotal portion [3]. In our patient, the right vas was dilated to 0.67 cm, and left vas was grossly dilated to 1.01 cm (Fig. 3). The cause of vasitis in this patient is likely to be compression of both vasa by the lipomatosis. The patient is being followed at regular intervals to see if he develops further luminal compressive pathologies.

4 Conclusion

Pelvic lipomatosis with bilateral symptomatic vasitis is a rare combination that has not been reported earlier. The above case is an example of varied presentation of pelvic lipomatosis which requires regular follow-up and rarely requires surgical treatment.

Abbreviations

LUTS: Lower urinary tract symptoms; RGU: Retrograde urethrogram; MCU: Micturition cystourethrogram; MRI: Magnetic resonance imaging.

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Authors' contributions

SN, SBV and GG evaluated and managed the patient. SSP followed up on the patient. SN and SSP wrote the initial manuscript and reviewed the literature. SBV and GG edited the manuscript. All authors have read and approved the manuscript.

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Declarations

Ethics approval and consent to participate

Not applicable.

Consent for publication

Written informed consent for publication of identifiable details like photographs and/or radiology images and/or case history and/or details within the text was obtained from the patient.

Competing interests

The authors declare that they have no competing interests.

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