

**Case Report**

## LEIOMYOMA PRESENTING AS A CAUSE OF OBSTRUCTIVE UROPATHY IN A POSTPARTUM FEMALE

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### ABSTRACT

Urethral leiomyoma is a morphologically common but rare according to location. Only few case reports of the same found in literature. The patient usually presents with obstructive urological symptoms. Excision cures the patients except with rare case reports of recurrence. We present a case of postpartum female with urethral leiomyoma.

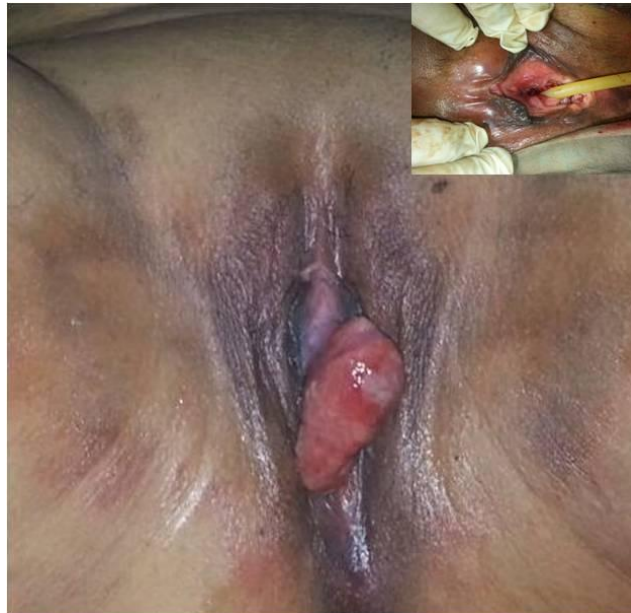
**Keywords:** Urethral Leiomyoma, Genitourinary Leiomyoma, Postpartum

### INTRODUCTION

Leiomyoma is one of the most common pathogenic entity found in humans. Though most commonly in uterus, we present with a case with uncommon site of origin i.e. the urethra (Maciel de Lima *et al.*, 2014). These are benign smooth muscle neoplasms, the cause of which remains to be discerned. The first case was reported by Buttner (1894). By extensive literature search we could only see reports of less than 100 cases of urethral leiomyoma (Sharma *et al.*, 2015). We report a case of a 22 year old female presenting with urethral leiomyoma and review the gross features and histology, clinical presentation, differential diagnosis and management.

### CASE

A 22 year old female, six months postpartum, presented with complaints of obstructive uropathy symptoms and dyspareunia. She complained of mass in vagina since second trimester which had been increasing in size. On local and cystourethroscopic examination, a mass was seen arising from the anterior wall of mid-urethra (Figure 1).

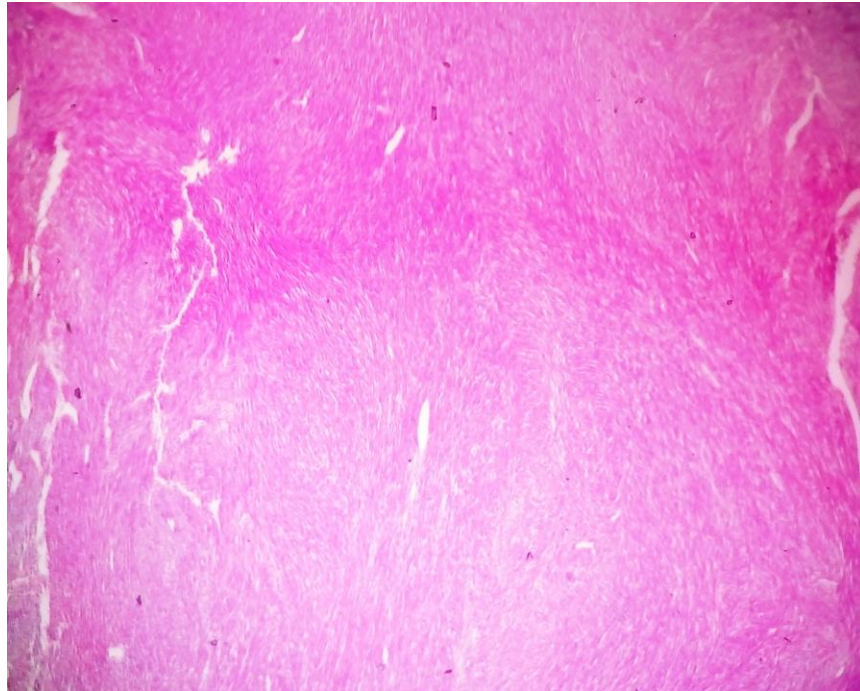


**Figure 1: Shows a Mass Protruding from Urethra (Inset: The Mass was Excised and Urethra was Sutured over Foleys 16Fr Catheter)**

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Per vaginal examination was normal. Ultrasonography of abdomen did not reveal any abnormality. Under spinal anesthesia, mass was excised from base along with portion of urethra. Urethra was sutured with 4-0 over 16 Fr Foleys catheter (Figure 1-Inset). The mass was sent for histopathological examination. Grossly the tumor was measuring 2x2x1.5 cm. On cut section, it was well encapsulated, firm and grey white. On histological examination, the tumor was comprised of fascicles of benign, mitotically inactive, spindle shaped cells and was reported as leiomyoma (Figure 2).

After discharge and follow up, the patient was free of complaints.



**Figure 2: Histopathology of the Tumor Showing Bundles and Fascicles of Benign Spindle Shaped Cells**

### DISCUSSION

Leiomyoma is the commonest tumor of smooth muscle origin. It is known to occur at many places like uterus, cervix, gastrointestinal tract and skin (Maciel de Lima M Jr *et al.*, 2014), however, very few cases are reported from urethra in literature. The other genitourinary sites of origin of this tumor can be kidney, bladder, ureters and testes. The origin of leiomyomas is a topic of controversy, though hormones like estrogen and progesterone are implicated in enlargement of these tumors. The patient can present with mass, retention of urine, difficulty in passing urine, hematuria or dyspareunia. The presentation depends on size of tumor which can be very small, hence asymptomatic to very huge leading to pressure symptoms. Our patient presented with a history of a mass since 2<sup>nd</sup> trimester and dyspareunia in postpartum period. Urethral leiomyomas are usually present on posterior wall in proximal third of urethra (Maciel de Lima *et al.*, 2014). However, this patient of ours had an attachment to anterior wall in middle third of urethra which was protruding through the urethral meatus. Cystourethroscopy is most helpful investigation in localizing the extent of these lesions. The differentials to be considered may include urethral diverticulum, urethral mucosal prolapse, urethral caruncle, Skene duct abscess, Bartholin gland cyst, Gartner duct cyst, urethral carcinoma, vaginal wall cysts, endometriosis, neurofibromas, and ectopic ureterocele (Fry *et al.*, 1988 and Parashar *et al.*, 2000). Histopathology remains the gold standard in diagnosis. The characteristic appearance of a well encapsulated tumor showing interlacing bundles of benign spindle shaped cells showing no nuclear atypia, mitosis or necrosis is diagnostic. Immunohistochemical markers like actin, desmin and caldesmon are positive (Sharma *et al.*, 2015). The

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treatment is surgical excision. Though complete removal is the treatment but few cases of recurrences have been documented.

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