



## Case Report

# Urethral Fibroid - An Uncommon Entity

Authors

**Sanyukta Goyal<sup>1</sup>, Shiv Pankaj Khanna<sup>2\*</sup>, Aditi Gupta<sup>3</sup>**

<sup>1</sup>Resident, Department of Pathology, Maharishi Markandeshwar Institute of Medical Sciences and Research, Maharishi Markandeshwar (Deemed to be) University, Mullana (Ambala-Haryana)

<sup>2\*</sup>Associate Professor, Department of Pathology, Maharishi Markandeshwar Institute of Medical Sciences and Research, Maharishi Markandeshwar (Deemed to be) University, Mullana (Ambala-Haryana)

<sup>3</sup>Resident, Department of Pathology, Maharishi Markandeshwar Institute of Medical Sciences and Research, Maharishi Markandeshwar (Deemed to be) University, Mullana (Ambala-Haryana)

\*Corresponding Author

**Shiv Pankaj Khanna**

Associate Professor, Department of Pathology, MMIMSR, Mullana – Haryana, India

## Abstract

*Extrauterine leiomyomas are rare and, therefore, pose a greater diagnostic challenge. We report a case of 27 year old woman who had a protruding mass per urethra. The lesion was excised. Histopathological examination confirmed the diagnosis of well differentiated paraurethral leiomyoma.*

**Keywords:** *Leiomyoma, Paraurethral, Hemostasis.*

## Introduction

Leiomyomas are benign neoplasms of the smooth muscle and have been described to occur in uterus, renal pelvis, ureter, bladder, urethra, prostate and rarely in spermatic cord, vas deferens and seminal vesicle.<sup>1,2,3</sup>

Leiomyomas are rare in female urethra. A total of 29 cases in this location have been reported by Cheng et al<sup>4</sup>. These leiomyomas are generally asymptomatic when small but present with voiding difficulties as they enlarge. Of all Paraurethral masses in women, Paraurethral leiomyomas contribute just 5%.

We describe a case of Paraurethral leiomyoma in a young female who had a protruding mass and bleeding per urethra of 5 years duration.

## Case Report

A 27 year old multiparous lady presented with a 5 year history of bleeding per urethra and a protruding mass per urethra. The mass suddenly increased in size with history of dysuria and low grade fever.

Physical examination revealed a 5\*4cms growth arising from left anterior urethra.

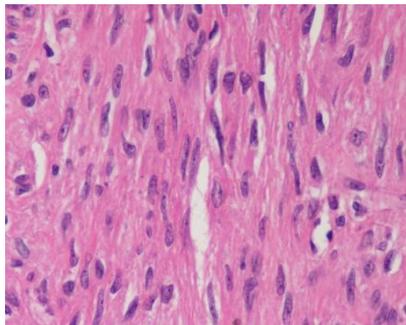
The mass was completely excised surgically, hemostasis was ensured and damage to urethra was prevented. Foley's catheter was placed in the ureter and the excised mass was sent for histopathological examination.

The biopsy showed a greyish white well circumscribed soft tissue mass measuring 5\*3\*2cms. (Fig 1) It was firm to smooth, grey

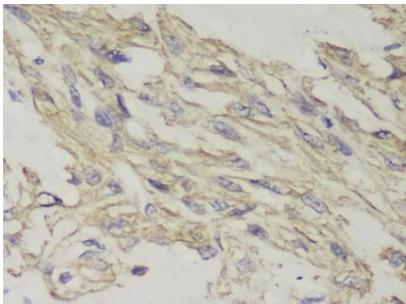
white in colour. No areas of haemorrhage or necrosis were noted.



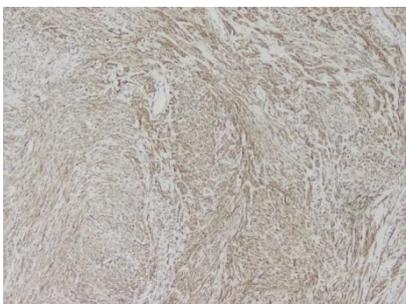
**Fig 1:** Excised Paraurethral mass.



**Figure 2:** H&E (40X) spindle cells with cigar shaped nuclei and blunt edges.



**Fig 3:** Immunohistochemical study showing SMA positivity.



**Fig 4:** Immunohistochemical study showing Desmin positivity.

Microscopically well differentiated spindle cells arranged in interlacing fascicles were seen. Individual cells had eosinophilic cytoplasm, were bland looking with cigar shaped nuclei having blunt edges, resembling smooth muscle cells. (Fig 2) They showed minimal atypia and focal areas of hyalinization. The mitotic count was  $<5/10\text{HPF}$ . Histopathological diagnosis of leiomyoma was offered which was confirmed by immunohistochemistry for smooth muscle Actin (SMA) (Fig 3) showing diffuse intense positivity and Desmin positivity. (Fig 4)

### Discussion

A benign neoplasm, confined commonly to the uterus, leiomyoma is a hormone sensitive tumor generally present in the reproductive years.<sup>6</sup> Various intrauterine sites of the leiomyoma have been described in literature.<sup>7</sup>

Paraurethral leiomyomas are rare and are usually grouped in studies with other smooth muscle tumors of the urinary tract. Although the exact etiology of bladder, urethral and paraurethral leiomyomas is unknown, an increased incidence during reproductive age group leads to the speculation that the growth is enhanced by circulating female hormones.<sup>8</sup> Also, it is hypothesized that the origin of leiomyoma is from the smooth muscle cells of the myometrium due to somatostatin and progressive loss of growth regulators.<sup>9</sup>

In this case, patient had a asymptomatic lump and bleeding for a long duration but suddenly presented with enlargement of the mass and profuse bleeding.

Profuse bleeding has been documented in literature<sup>10</sup> as bleeding from a mucosal vessel.

Owing to the anatomic proximity distinction between urethral, paraurethral and anterior vaginal wall masses can be difficult.

Among the differential diagnosis entertained, cystocele, Gartner duct cyst, urethral diverticula, vaginal cyst and vaginal malignancy need to be considered and hence a histopathological diagnosis is considered mandatory,

Urethral leiomyoma is a rare pathology. Leiomyomas associated with the urethra are either periurethral leiomyoma arising from urothelial smooth muscle cell layer or paraurethral leiomyoma which generally do not require excision.

### Conclusion

Paraurethral leiomyomas are benign tumors of smooth muscles and extra urethral leiomyomas are extremely rare. A histopathological examination is considered essential to establish the benign nature of the lesion as also to document the site of origin of the lesion.

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