

# Leiomyoma of Urethra - A benign tumour of female urethra a case report

Ambalal Gurram<sup>1</sup>, Annjalii (Ghadage) Gurram<sup>2\*</sup>

<sup>1</sup>Consultant Laparoscopic Surgeon and Gynaecologist Pune at Oyster and Pearl Tulip Hospital Pune, Lokmanya Hospital Pune, Maharashtra.

<sup>2</sup>Gynaecologist and Director, Ashwinii Nursing Home Pune, Maharashtra, INDIA.

Email: [ambalalgurram@gmail.com](mailto:ambalalgurram@gmail.com)

## Abstract

Female urethral leiomyoma is a rare clinical entity. These are rare benign mesenchymal tumours that arise from the smooth muscles of urethra. Cystoscopy and MRI are helpful tools for establishing diagnosis. Such tumours often appear in females during reproductive age group. We present a case of female urethral leiomyoma presenting with dyspareunia, feeling nodulation in vagina and on/off pain in urethral region. The urethral mass was completely excised surgically with a good outcome.

**Key Words:** Benign, Leiomyoma, smooth muscle tumour, urethra.

## \*Address for Correspondence:

Dr. Annjalii (Ghadage) Gurram, Gynaecologist and Director, Ashwinii Nursing Home Pune, Maharashtra, INDIA.

Email: [ambalalgurram@gmail.com](mailto:ambalalgurram@gmail.com)

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## CASE REPORT

A 33-year-old female presented with complaints of dyspnoea, feeling nodulation in vagina and on/off pain in peri urethral region for last one year. Her obstetric history of two cesarean deliveries. On general examination her vital parameters were stable. On local examination there is soft to firm nodular mass felt in urethral region without signs of inflammation. Ultrasound Scan was done which showed 18x16 mm mass located between urethra and vagina. It is not seen as total separate mass but closely abutting the posterior urethral wall. MRI pelvis was done to rule out malignancy. MRI showed mass arising from posterior urethral wall. No lymph node enlargement nor any extension and fat planes are well maintained. Patient's all routine investigations were within normal range. Oncosurgeon and urologist opinion taken. Surgery planned as total excision of mass. Patient and husband counselled about surgery and well-informed consent taken. Risk of injury to urethra during surgery explained. Surgery done under spinal anaesthesia. Preoperative Cystoscopy done to rule out any growth in the bladder. Saline adrenaline infiltration done in vaginal tissue around mass. Allis forceps applied above and below mass. Incision taken over vaginal wall, careful and meticulous dissection done to separate mass from urethra. Mass held with Babcock's forceps and "intoto" separated from urethra. Hemostasis confirmed. Postoperative cystoscopy and urethroscopy done to rule out any injury. Specimen sent for histopathological examination. Foley's catheter kept for 1 week. Postoperative period was

## INTRODUCTION

Leiomyomas are benign tumours of the smooth muscles. Although the tumours tend to be relatively common in genitourinary and gastrointestinal tracts, the occurrence are less frequent in the skin and rare in deep tissues. Urethral leiomyomas are, in fact, classified under leiomyomas of deep soft tissues and are rare benign mesenchymal tumours that originate from soft smooth muscles of urethra, proximal urethra being the common site. (1-3) Most patients present with mass protruding from urethra. Prompt diagnosis, exclusion of malignancy and proper treatment should be done. We present a case of female urethral leiomyoma where mass was located in posterior part of distal urethra, which is not the common site of presentation.

uneventful. Patient was discharged on 3<sup>rd</sup> postoperative day. Histopathological study of mass revealed spindle shaped smooth muscle fibres in a whirling pattern confirming the diagnosis of leiomyoma of urethra. Patient

was symptom free at the time of last follow up. Complaints like fistula, dyspareunia, infection and incontinence were not reported.



Figure 1



Figure 2



Figure 3

## DISCUSSION

Urethral tumours are rare and may arise from the lining or glandular epithelium, the smooth muscle fibres or the striated muscle fibres. Polyps and papillomas are the most common and leiomyomas the least common clinical entities. Primary urethral leiomyomas are seen most frequently in females than in males, and it usually develops in the posterior wall of proximal urethra.<sup>4,5</sup> Our case was different in that the mass was located in distal urethra. The most common symptoms found in 50% of the cases is swelling near the periurethral region<sup>6-7</sup>. Other symptoms include haematuria, dysuria, repeated urinary tract infection and dyspareunia<sup>4,8</sup>. Obstructive voiding symptoms are rare. In extremely rare cases, patient may present with acute and chronic renal failure while other patient may be completely asymptomatic<sup>9-10</sup>. Differential diagnosis of this tumour mainly includes urethral diverticulum, urethral mucosal prolapse, urethral caruncle, Bartholin gland cyst, gartner duct cyst, urethral carcinoma and vaginal wall cyst.<sup>3,7</sup> Proper clinical examination, cystourethroscopy and ultrasound scan and MRI are helpful in establishing the definitive diagnosis. However, only histopathological examination can distinguish a leiomyoma from malignant tumour. Simple excision is the treatment of choice.<sup>9</sup> Other treatment options include transurethral resection and GnRH therapy but these have not been well established yet. The prognosis is excellent as so far malignant transformation has not been reported and tumour recurrence is rare.<sup>9-10</sup>

## CONCLUSION

The present case of urethral leiomyoma is a rare case as the mass was located in distal urethra an uncommon site of presentation. Histopathological examination confirmed urethral leiomyoma and surgery completely resolved the symptoms. Her uneventful postoperative recovery

without any complications suggests surgical excision is the best option for urethral leiomyoma.

**Consent:** Written informed consent was obtained from the patient for publication of this case report and accompanying images. A copy of the written consent is available for review by Editor of this journal.

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## REFERENCES

1. Dioszeghy F, Kiss A, Kondas J : Leiomyoma of the female urethra. *Int Urol and Nephrol* 1998;30:603-607
2. Goldman HB, McAhran SE, MacLennan GT : Leiomyoma of the urethra and bladder. *J Urol* 2007;177:1890
3. Jalde DD, Godhi SA, Uppin SM, Chako SP, Agrawal Am: A Case of urethral leiomyoma – a rare representation. *World J Sci Technol* 2012;2:27-28
4. Leidinger RJ, Das S: Leiomyoma of female urethra – a report of two cases. *J Reprod Med* 1995;40:229
5. Lee MC, Lee SD, Kuo HT, Huang TW: Obstructive leiomyomas of female urethra : report of a case *J Urol* 1995;153:420-1
6. Cheng C, Mac-Moune Lai F, Chang PS: Leiomyoma of the female urethra: a case report and review. *J Urol* 1992;148:1526-7
7. Dmochowski R, Ganabathi K, Zimmern PE, Leach GE, Benign female periurethral masses. *J Urol* 1994;152:1943-51
8. Leung YL, Lee F, Tam PC: Leiomyoma of female urethra causing acute urinary retention and acute renal failure. *J Urol* 1997;158:1911-2
9. Joshi HB, Beck RO: Leiomyoma of the female urethra with upper tract dilatation and treatment with transurethral resection: a case report and literature review. *Tech Urol* 2000; 6(3):223-5
10. Goldman HB, MacLennan GT. Leiomyoma of urethra and bladder. *J Urol* 2007; 177(5):1890.

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