



Case Report

Female Urethral Leiomyoma- A Rare Tumor Treated with Transurethral Resection (TUR)

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Received: 28/01/2015

Revised: 24/02/2015

Accepted: 26/02/2015

ABSTRACT

Female urethral leiomyoma is a rare benign condition. We present two cases who were treated with transurethral resection of tumor. Case 1:A- 60-year-old female presented with complains of dysuria and suprapubic pain. Case 2: A 40- years- old female presented with repeated episodes of urinary tract infection and obstructive urinary complaints. Cystourethroscopy was done in both the case which revealed urethral masses. Both the patients underwent Transurethral resection (TUR) using monopolar cautery and glycine. On histopathology it was diagnosed as leiomyoma. Urethral leiomyomas should be kept in mind as differential diagnosis for urethral mass. Transurethral resection should be the treatment of choice.

Key Words: Female Urethra, Leiomyoma, Transurethral resection.

INTRODUCTION

A leiomyoma (plural leiomyomas or leiomyomata) (*leio-* + *myo-* + *-oma*.) "smooth-muscle" tumor benign in nature, is very rarely (0.1%) premalignant. They can occur in any organ, but most commonly occur in the small intestine & uterus. Leiomyoma of urethra is a rare benign tumor having mesenchymal origin, more common in females. The most common sites in urogenital system in decreasing order are the uterus, kidney, urinary bladder and very rarely in the urethra. Presenting symptoms could be dysuria, dyspareunia and painless urethral bleeding. Approximately 40 odd

cases have been reported in world literature. [1,3,4]

We report two female patients of urethral leiomyoma.

CASE REPORTS

Case 1:-

A 60- years old female presented with complaints of dysuria and suprapubic pain, without obstructive or irritative voiding symptoms. Physical examination revealed normal urethral meatus with bulge arising from the right lateral wall of the urethra. Urine routine examination showed no evidence of infection or haematuria.

Ultrasound of KUB was normal. Cystourethroscopy revealed a large, non-pedunculated mass arising from right lateral wall of the urethra and completely occluding it. The tumor surface showed congested blood vessels. The tumor was extending from bladder neck up to the urethral meatus antero- posteriorly and cranio-caudally from 11 o'clock to 5 o'clock position. The urinary bladder appeared normal. The tumor was resected with the resectoscope using glycine and monopolar electrical cautery as an energy source. The bladder neck was spared.

Histopathology revealed a tumor composed of spindle shaped smooth muscle fibres arranged in fascicles and bundles. The cells had elongated blunt end nuclei and moderate to scanty amount of eosinophilic cytoplasm. In the follow up of 18 months there was no recurrence and the patient had good stream.

Case 2:

A 40- years- old female presented with repeated episodes of urinary tract infection and obstructive urinary complaints. Examination revealed normal urethral meatus. Urine routine showed pus cells. The patient was treated with antibiotics according to the culture and sensitivity report. Again the patient had urinary tract infection. After repeated episodes of urinary tract infection; the decision for cystoscopy was taken.

Cystourethroscopy showed a large mass extending from 5 o'clock to 12 o'clock position. The mucosal surface over the tumor was smooth and well circumscribed. Complete transurethral resection of the mass was done using resectoscope. H& E stain of the mass revealed feature of leiomyoma. Follow up showed no recurrence at the end of 6 months.

Photographs of videoclipping during cystoscopy :



Figure 1: Tumour on right lateral wall of urethra completely occluding the lumen.



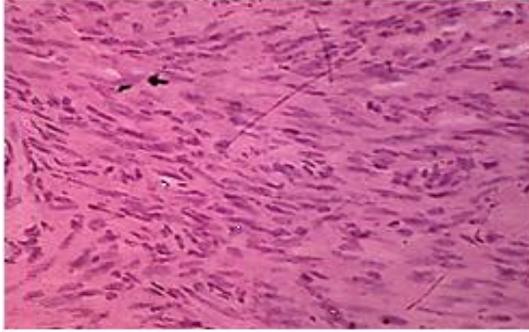
Figure 2: Congested vessels over the tumour surface.



Figure 3: Bladder neck & tumour.



Figure 4: Resected tumour.



Photomicrograph showing spindle shaped cells with elongated blunt-end nuclei and moderate amount of eosinophilic cytoplasm.

DISCUSSION

First case of urethral leiomyoma was reported by Buttner in 1894. [2] These are very rare benign tumors having smooth muscle origin. It is most commonly seen in the females of reproductive age group. i.e is 3rd to 4th decade, with mean age 34 years, the tumors ranged from 1 to 40 cm. [3] The tumor shows accelerated growth during pregnancy as they are hormonally sensitive. [3,4] Clinical differential diagnosis is urethral diverticulum, ureterocele, urethral carcinoma, ectopic ureterocele, Gartner's duct cyst, papilloma, polyp and mesenchymal tumor. [3,4] A leiomyoma can be differentiated from the first two of these by careful examination, cystourethroscopy and radiology of the lower urinary tract. Imaging in the form of transvaginal sonography, MRI helps in establishing diagnosis. [5] However, only histological examination can distinguish it from malignancy. Immunoperoxidase staining employing specific monoclonal, anti-smooth muscle antibody confirms smooth muscle origin.

Obstructive symptoms are rare due to paraurethral rather than periurethral position of this neoplasm. Simple surgical or transurethral excision is the recommended treatment. [6] Recurrence is rare and malignant transformation has not been reported.

CONCLUSION

Urethral leiomyomas should be kept in mind as differential diagnosis for urethral mass. Transurethral resection should be the treatment of choice as it is under vision and thus helps in sparing the bladder neck. The second advantage is that it can be done at the time of cystoscopy.

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How to cite this article: Chougule V, Chougule M, Chivate SD. Female urethral leiomyoma- a rare tumor treated with transurethral resection (TUR). *Int J Health Sci Res.* 2015; 5(3):422-424.
