Inflammatory Pseudotumour of Urinary Bladder a Management Dilemma: A Rare Case Report

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Keywords: urinary bladder diseases; humans; inflammation; pathology; male.

INTRODUCTION

Inflammatory pseudotumor (IPT) is known in the lung and orbit, but other organs of body can be involved.[1] IPT of urinary bladder is a benign mass of uncertain malignant potential. It is described as non-epithelial, proliferative lesion of the sub mucosal stroma. Different names have been given like inflammatory myofibroblastic tumor, plasma cell granuloma, xanthomatous pseudotumor, pseudosarcomatous myofibroblastic proliferation, inflammatory myofibroblastic proliferation and myofibroblastoma. It is very difficult to differentiate this tumor from malignant lesion on endoscopic or radiological examination. So it must be differentiated by histopathological examina-

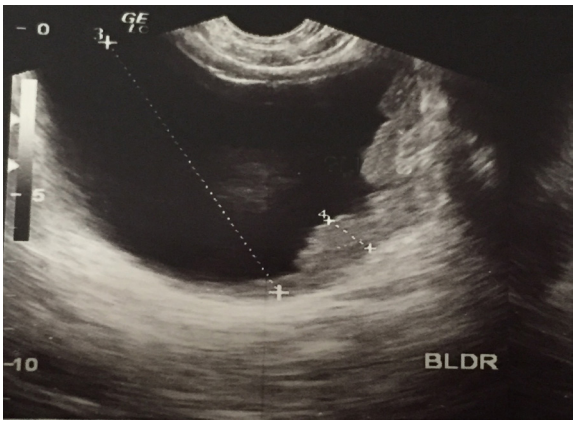

Figure 1. Ultrasonography showing bladder mass.

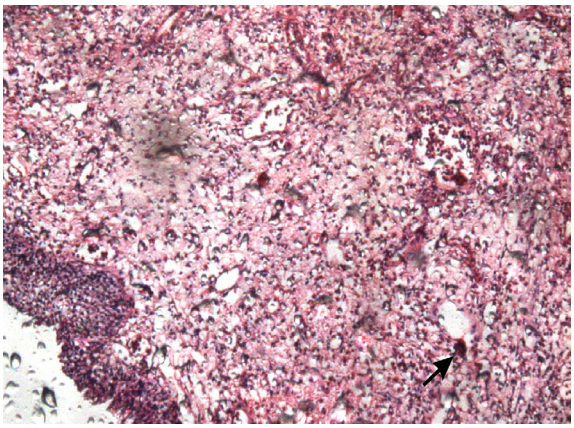

Figure 2. Histopathological examination showing spindle cell proliferation.

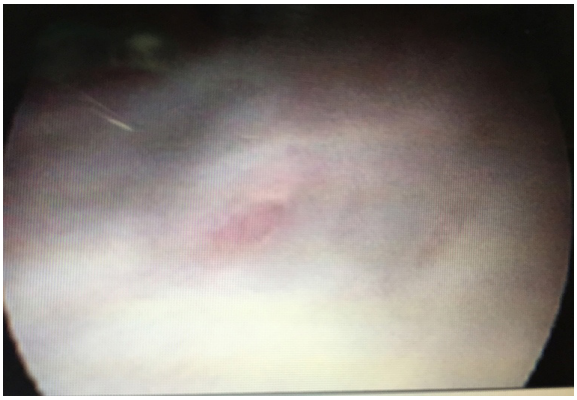

Figure 3. Follow up cystoscopy view (at 6 months).

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tion from malignant lesions to avoid radical surgeries. Most common presentations are hematuria and storage lower urinary tract symptoms (LUTS). Inflammatory pseudotumor has been described at almost any location, in both sexes and at all ages.[2] The pathogenesis of IPT is not clearly known, some have postulated that the lesion develops in response to infection, inflammation, or malignancy, but the causative relationship has not yet been proven.[3] There is no clear cut guidelines regarding management and follow up for this tumor. Various management options have been described including transurethral resection of bladder tumor and partial cystectomy.[4] These tumors are locally aggressive but stop progression after complete removal. We are reporting a case of 62 years old male diagnosed to have IPT of urinary bladder which was managed endoscopically with complete transurethral resection and has been on regular and satisfactory follow up.

CASE REPORT

A 62-year old man presented with storage LUTS and intermittent hematuria with passage of clots for last 6 months. Ultrasonography and Kidney ureter and bladder region (KUB) showed a 20 × 17 mm mass at left lateral wall near left ureteric orifice with normal upper tracts (**Figure 1**). Cystoscopy confirmed two cm polypoidal growth with surrounding bullous edema and hemorrhagic patches at left lateral wall near ureteric office. Urine culture was sterile and urine for malignant cytology was also negative. He underwent transurethral resection of mass (complete resection) with multiple random biopsies from surrounding area. Histopathology showed proliferation of large spindle cells mixed with chronic inflammatory cells, lymphocyte, and plasma cells confirming diagnosis of inflammatory pseudotumor (**Figure 2**). Considering it to be a benign lesion with unknown malignant potential, patient was followed up every 3 months with cystoscopy and urine cytology. At last follow up of 6 months, no recurrence was observed with healthy scar at previous resection site. (**Figure 3**) Urine cytology was negative.

DISCUSSION

Reactive, non-neoplastic proliferations arising within the bladder have been well documented and described in the literature. Inflammatory pseudotumor is most commonly used to describe this entity. Roth in 1980 first described this benign lesion as pseudo sarcoma.[5] World Health Organization has put this mass lesion under benign category with unknown malignant potential. Earlier this lesion has been misdiagnosed as sarcoma and led to radical surgery. So it is crucial to know the exact diagnosis, management and follow up. Various management options have been described including transurethral resection of bladder tumor (TURBT) and partial cystectomy for such cases. To the best of our knowledge there are few cases of recurrences, but no cases of metastasis has been reported in literature.[6,7] We managed this patient by TURBT and as there are reports of recurrence so it is better to keep patient for longer follow up. No recurrence was observed till last follow up.

CONCLUSIONS

Inflammatory pseudotumor of bladder is a benign lesion with a potential of recurrence it is essential for both urologist and pathologist to get a correct diagnosis to avoid radical surgery of bladder. TURBT (complete resection) is the best way of management. Long term follow up is must to rule out any recurrence.

CONFLICT OF INTEREST

None declared.

REFERENCES

1. Coffin CM, Watterson J, Priest JR, Dehner LP. Extra pulmonary inflammatory myofibroblastic tumor (inflammatory pseudotumor): a clinic pathologic and immunohistochemical study of 84 cases. Am J Surg Pathol. 1995;19:859-72.
2. Sugita R, Saito M, Miura M, Yuda F. Inflammatory pseudotumour of the bladder: CT and MRI findings. Br J Radiol. 1999;72:809-11.
3. Narla LD, Newman B, Spottswood SS, Narla S, Kolli R. Inflammatory pseudotumor. Radiographic. 2003;23:719-29.
4. Harik LR, Merino C, Coindre JM, Amin MB, Pedeutour F, Weiss SW. Pseudosarcomatous myofibroblastic proliferations of the bladder: A clinicopathologic study of 42 cases. Am J Surg Pathol. 2006;30:787-94.
5. Roth JA. Reactive pseudosarcomatous response in urinary bladder. Urology. 1980;16:635-637.
6. Difiore JW, Goldblum JR. Inflammatory myofibroblastic tumor of the small intestine. J Am Coll Surg. 2002;194:502-6
7. Harik LR, Merino C, Coindre JM, Amin MB, Pedeutour F, Weiss SW. Pseudosarcomatous myofibroblastic proliferations of the bladder: A clinicopathologic study of 42 cases. Am J Surg. Pathol. 2006;30:787-94.