Leiomyoma of Bladder in a Male Patient with Unusual Presentation

Sir,

Leiomyoma of bladder, a benign mesenchymal tumor, is an extremely rare entity. So far only 250 cases have been reported in literature.1 Mesenchymal bladder tumors belong to heterogenous group of neoplasm and comprise 1-5% of all bladder tumors. This tumor accounts for less than 0.5% of all bladder tumors.2,3 This is even more rare in male patients. In women, the incidence of leiomyoma bladder is 3 times higher than in men.4 These lesions may be intravesical, which constitute 63% of leiomyoma of bladder; extravesical about 30%; or intramural 7%.5

We report a case of 48-year male patient who was diagnosed with leiomyoma of bladder. He had presented with burning micturition for a month, increased urinary frequency, urgency and urethral pain. There was no fever, chills or gross hematuria. He was a non-smoker and had no comorbid condition or previous surgery. On physical examination, abdominal examination was normal. Digital rectal examination (DRE) revealed an enlarged prostate without any nodule or induration. His full blood count and serum creatinine were within normal limits. On ultrasonography, prostate was enlarged to 62 grams. Urine analysis revealed red blood cells 1-2/HPF and white blood cells more than 100/HPF. Urine culture revealed Klebsiella oxytoca, which was treated with culture sensitive antibiotics. He was also given 5-alpha-reductase inhibitors and alpha blockers.

Patient came for follow-up after six months with no improvement of symptoms. His PSA, which was 5.75 ng/ml on presentation, had declined to 3.63 ng/ml after antibiotic therapy. However, there was failure of decline below 2.7 ng/ml with 6 months of 5-alpha-reductase inhibitor use (corrected PSA was 5.4 ng/ml). A repeat DRE also revealed an indurated nodule on prostate.

His ultrasound was also repeated after six months, which showed urinary bladder wall thickness of 1.6 mm; and his prostate size also decreased to 28 grams. An MRI was done for further evaluation of prostate lesion as his symptoms were not improving. This showed a well defined rounded hypointense intravesical enhancing lesion adherent to superior wall of urinary bladder, measuring 1x2 cm in size, with no extravesical extension. Prostate measured 4.4 x 3.5 cm. There was peripheral differentially enhancing T2 hyper intense signal area at left aspect of prostate measuring 2.1 x 1 cm, which was well confined within the prostate capsule. Posteriorly and towards right, the prostatic parenchyma showed slightly low T2 signal intensity with heterogenous post-contrast enhancement.

A flexible cystoscopy was done, which showed trilobar prostatic enlargement and rounded mass in bladder on left posterolateral wall. The differential diagnosis was transitional cell bladder carcinoma along with prostatic carcinoma.

Under general anesthesia, transrectal finger guided 12 core prostate biopsy was done along with transurethral resection of bladder growth. His histopathology revealed benign spindle cell neoplasm consistent with leiomyoma in bladder and benign prostatic tissue with mild chronic inflammation.

In this case, as the patient was having severe irritative lower urinary tract symptoms (LUTS) along with raised PSA, so ultrasonography was not able to detect bladder lesion. However, MRI led to the diagnosis. Computed tomography, MRI and/or flexible cystoscopy can be helpful in identifying pathologies, which could be missed by routine workup. CT and MRI can not only identify but also show fine details of mass, although these may not be able to differentiate between leiomyoma, leiomyosarcoma or transitional cell carcinoma, all of which may
appear as enhancing lesions after contrast administration. Flexible cystoscopy under local anesthesia can play a major role in preoperative diagnosis of lesions. As most tumors are well-encapsulated, complete resection by transurethral approach is curative in most cases.

To our knowledge, this is the first case of leiomyoma bladder reported from Pakistan. Most of the internationally reported cases were females; however, our patient was a male.

REFERENCES


