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Leiomyoma of the Urinary Bladder

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Key Words

Bladder
Leiomyoma
Urinary retention

Abstract

We report a case of urinary retention in a women caused by a leiomyoma of the bladder. The intramural form often causes obstruction, as it is usually located near the bladder base. Treatment is surgical, and the prognosis is excellent. Therefore, cystoscopy is recommended in women with urinary retention.

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Acute urinary retention in women is a rather rare phenomenon and is very seldom caused by tumours of the bladder neck or urethra [1]. Benign mesothelial tumours of the bladder are also rare, but among these leiomyomas are most common [2,3].

Herein, a case of urinary retention in a women caused by a leiomyoma of the bladder is reported, as treatment of these tumours is simple and prognosis is excellent.

Case Report

A 60-year-old woman with a 1-year history of frequent urination, voiding difficulties, urgency and recurrent urinary tract infections presented with acute urinary retention. Bladder catheterization yielded 1.5 litre of urine.

Gynaecological examination and cystometry were normal. Intravenous pyelogram and cystogram demonstrated a vesical filling defect resembling a large prostate (fig. 1). Cystoscopic examination showed trabeculation and a few pseudodiverticula, but was otherwise normal. The patient was treated with urethral dilatations and cholin-ergic drugs, but without any effect.

Six weeks later the cystoscopy was repeated and now revealed a tumour (size 3X4 cm) in the left side of the bladder. The tumour was occluding the outlet of the bladder and was covered with intact vesical mucosa. Transurethral resection of an intramural tumour of 50 g was performed.

Microscopic examination showed leiomyoma. Six weeks later the patient was and remained well.

Discussion

Urinary retention in women is caused by tumours of the bladder neck or the urethra in 10% of the cases [1]. Mesothelial tumours account for 1–5% of the bladder tumours [4], and of this group leiomyomas constitute 35% [3]. Since the first observation of a leiomyoma in the bladder in 1870, approximately 155 cases have been described in the literature [2, 5]. Leiomyomas are more frequent in women (62%) [2]. The tumours are divided in 3 groups: an endovesical (63%), intramural (7%), and extravesical form (30%) [2, 5]. The weight of the tumours ranged from a few grams to 9 kg [3, 5].

The symptoms depend on the location and size of the tumour. When the location is endovesical, there often is haematuria caused by ulceration. Before this symptom occurs, there has usually been a period with dysuria and frequent urination. Intramural tumours often develop near the bladder base and cause symptoms of obstruction. This can also be caused by pedunculated endovesical tumours. The extravesical tumours may remain symptomless until a mass can be palpable in the pelvis. Many of the tumours are found incidentally at autopsy [3]. X-rays reveal a filling defect within the bladder. As in our case, it may resemble a large prostate.

Cystoscopy

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Fig. 1. The intravenous pyelogram shows a filling defect resembling a large prostate. will usually show a well-defined tumour with normal mucosa. The size and relationship of the tumour with adjacent organs can be determined by ultrasound. The final diagnosis is made by histological examination [5]. The treatment is surgical. Smaller endovesical and intramural tumours can be resected through the cystoscope. Large tumours in this group as well as extravesical tumours must be removed by abdominal operation – if necessary, with bladder resection. Prognosis is always favourable, and recurrences have not been reported regardless of the surgical method [2, 5].

Conclusion

In women with urinary retention, where no gynaecological or neurological cause is immediately apparent, the possibility of a bladder tumour makes careful cystoscopy mandatory.

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