

Case report: Bladder leiomyosarcoma in women

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Abstract

Bladder leiomyosarcoma remain a rare entity of bladder cancers, often considered highly aggressive with poor prognosis.early surgical treatment is associated with higher survival rate, we report a case of a bladder leiomyosarcoma in a woman treated with radical cystectomy.

Keywords: Bladder leiomyosarcoma; Computerized tomography; Hematuria; Ileal conduit; Radical anterior pelvic exenteration

1. Introduction

Non epithelial bladder tumors are a rare entity of bladder tumors; they account for less than 5% of overall bladder malignancies, with Leiomyosarcoma representing 0.1% [1]. Low incidence of this histological type makes it quite a challenge, as there is no standard treatment, and little is known about the evolution and prognosis of this disease. Herein we report a new case of a bladder leiomyosarcoma diagnosed in the Hassan II University Hospital Center in Fez.

2. Case Presentation

we report a case of a 62 years old female, with no medical history, who was presented at emergencies for gross hematuria, evolving for more than a week, clinical examination shown signs of anemia : palor and fatigue, no abdominal or flank pain, digital vaginal examination was normal.

The patient was hospitalized for management of the hematuria and further investigations.

Blood tests revealed a hypochromic anemia with Hg=9.8 g/dl, renal function was normal.

An abdominal CT scan was performed, suggesting the presence of suspected irregular thickening of the anterior bladder wall measuring 43x32 mm.

After a blood transfusion with 2 CG, patient was admitted to the OR two days later, after negative results of urine culture and a complete TURB was performed.

Histopathological and immunohistochemical tests were in favor of a muscle invasive bladder Leiomyosarcoma.

TAP scann performed later shown no lymph nodes nor visceral metastasis.

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No neo adjuvant therapy was indicated, and an anterior pelvicotomy associated with a urethrectomy was performed, we opted for a Bricker type urinary diversion.

Hospital stay after the surgery was 9 days.

Results of the histopathological analysis of the surgical specimen were in favor of a Low-grade bladder leiomyosarcoma, with clear surgical margins and negative lymph nodes.

The 23 months follow of the patient demonstrated no local recurrence nor metastasis, and kept a normal renal function

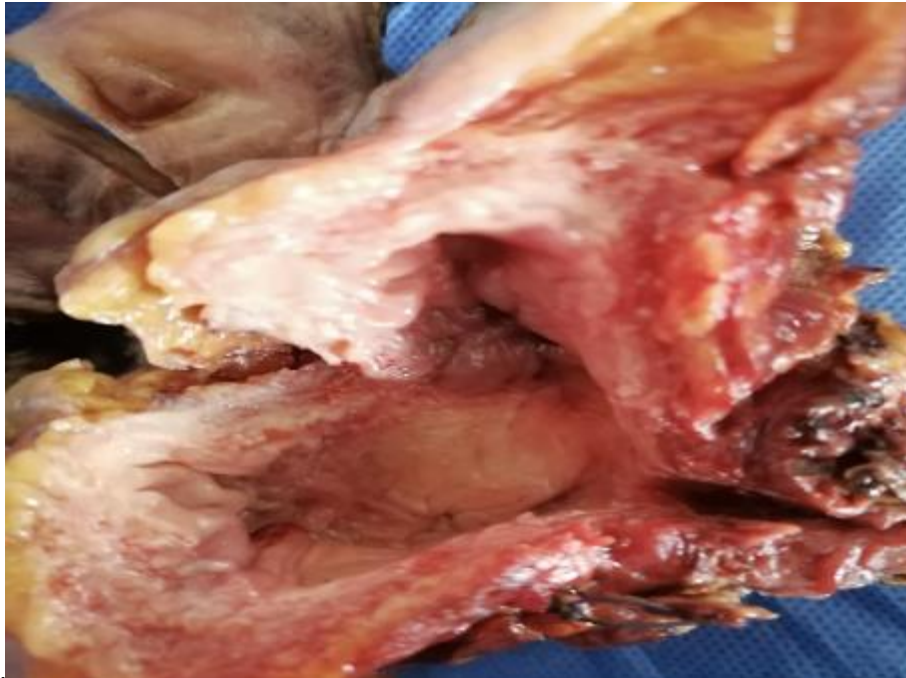


Figure 1 Macroscopic aspect of the bladder and uterus after surgery

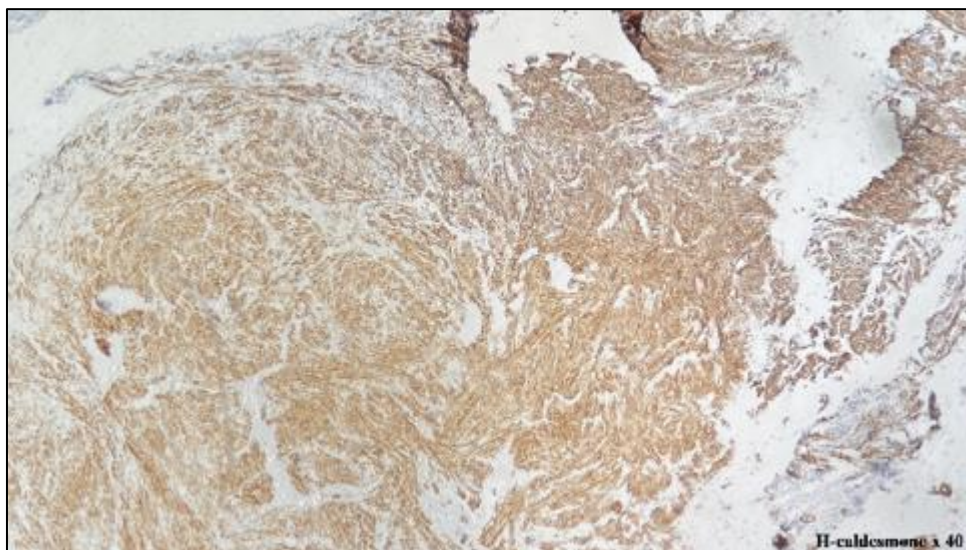


Figure 2 Microscopic findings of analysis of the bladder

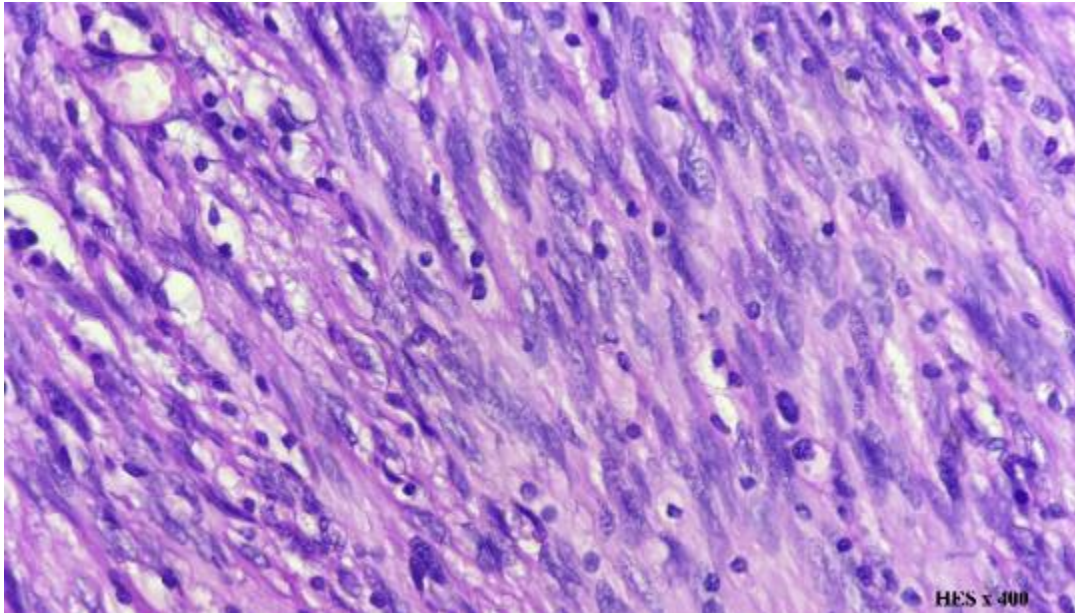


Figure 3 Microscopic findings of analysis of the bladder

3. Discussion

Leiomyosarcoma is a soft tissue tumor that can occur anywhere in the body and may affect the entire urogenital tract. Its location in the bladder is extremely rare, accounting for less than 1% of all bladder tumors.

several incriminated factors have been reported, such as malignant transformation of a leiomyoma [2], chronic bladder irritation, radiation exposure [3], chemical carcinogens, mutations of the retinoblastoma gene, and long-term treatment with cyclophosphamide [4]

Main reported symptoms are especially gloss hematuria in about 75% of cases [5], It may occur alone or with bladder irritation symptoms or a hypogastric mass in advanced stages.

Radiologically, there are no specific features. Cystoscopy allows visualization and biopsy. The tumor is usually oval or polypoid, often near ureteral orifices, explaining early upper urinary tract involvement. It originates in the bladder muscle and extends toward the mucosa. It has a strong tendency for local invasion before metastasis [6].

Diagnosis is confirmed by pathology, showing malignant spindle cells and a high mitotic index, with immunohistochemistry positive for smooth muscle actin.

Treatment is controversial due to rarity, requiring a multidisciplinary approach in specialized centers. Surgery is the only curative option, aiming for complete removal with clear margins.

Partial cystectomy may be considered for small (<5 cm) localized tumors, but recurrence rates are high, so most authors recommend total cystectomy. Some recommend systematic urethrectomy due to frequent urethral involvement [7]

If complete resection is not initially possible, chemotherapy may be used to shrink the tumor. Adjuvant chemotherapy is not standard but may be considered in poor prognostic cases. Radiotherapy is recommended postoperatively for high-grade tumors, size >5 cm, or incomplete margins.

Combined radiochemotherapy has improved outcomes, with recurrence-free survival ranging from 3 to 8 years [6] Reported survival rates are about 88.6% at 1 year and 62% at 3–5 years [7]

4. Conclusion

Bladder leiomyosarcoma is a rare and highly aggressive tumour. The anatomopathological examination provides diagnosis and prognosis assessment. Radical surgery remains the most suitable therapeutic approach.

Compliance with ethical standards

Disclosure of conflict of interest

No conflict of interest to be disclosed

Statement of informed consent

Informed consent was obtained from all individual participants included in the study.

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