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# Solitary Fibrous Tumor of the pelvis involving the bladder. Case report and literature review

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ABSTRACT

A case of a patient with diagnosis of Solitary Fibrous Tumor of de urinary bladder is presented.

A 69 year old man presented with abdominal pain localized at the hypogastrium. In the computed tomography appears a mass of 100 × 80 mm at the minor pelvis. Mass resection, radical cystoprostatectomy and ileal conduit diversion were done.

A Solitary Fibrous Tumor of the urinary bladder was diagnosed. CD 34 (+).

Surgical resection with negative margins has curative intention. Is necessary long-term follow up to assure there is not local or distant recurrence.

## Introduction

Solitary Fibrous Tumor (SFT) is a rare neoplasia of mesenchymal origin, that most often arises from the visceral pleura.[1] Most tumors are benign. Occurs equally in both sexes and the age of presentation varies from the second to sixth decade of life. The diagnosis is based on histological and inmunohistochemical examinations.[2]

## Case report

A 69-year-old man presented to the emergency room with a history of abdominal pain (hypogastrium) associated with hematuria and low urinary tract symptoms. On physical exam, digital rectal examination revealed benign prostate hyperplasia grade II/IV. Laboratory revealed urine creatinine 2.43 mg/dl, PSA 1.64 ng/ml. Computed tomography revealed right uronefrosis and 100 × 80 mm solid mass at the minor pelvis with intimate contact with the prostate and the posterior wall of the urinary bladder (Fig. 1). Right nephrostomy was placed, cystoscopy was performed, with which a mass at the posterior wall of the urinary bladder was identified and biopsied. Pathology: Solitary Fibrous Tumor (SFT); CD 34 (+), CD 117 (−), Ki67 3%. Mass resection, radical cystoprostatectomy and ileal conduit diversion were done (Fig. 2A–B). Pathology: Solitary Fibrous Tumor, negative margins. Necrotic areas, low mitotic count. It was classified as intermediate risk according to Demicco et al. model.[3] The patient did not present postoperative complications.

## Discussion

SFT is a rare neoplasia of mesenchymal origin, that most often arises from the visceral pleura. Derive from dendritic interstitial cells, which express CD 34, CD 99, bcl – 2.[1] The urogenital tract (urinary bladder) involvement is rare. The most common presenting symptoms are low

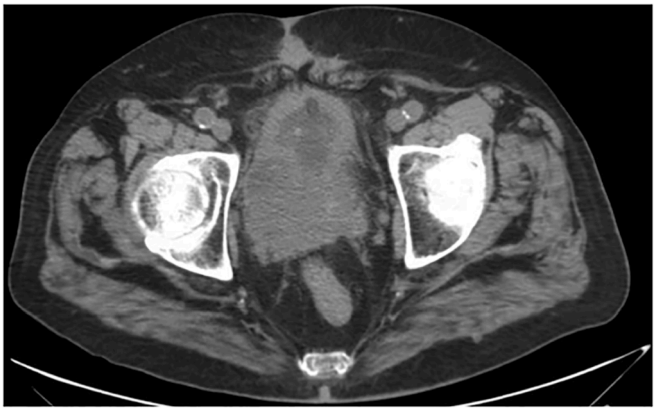

**Fig. 1.** Computed tomography. Solid mass at the minor pelvis with intimate contact with the prostate and the posterior wall of the urinary bladder.

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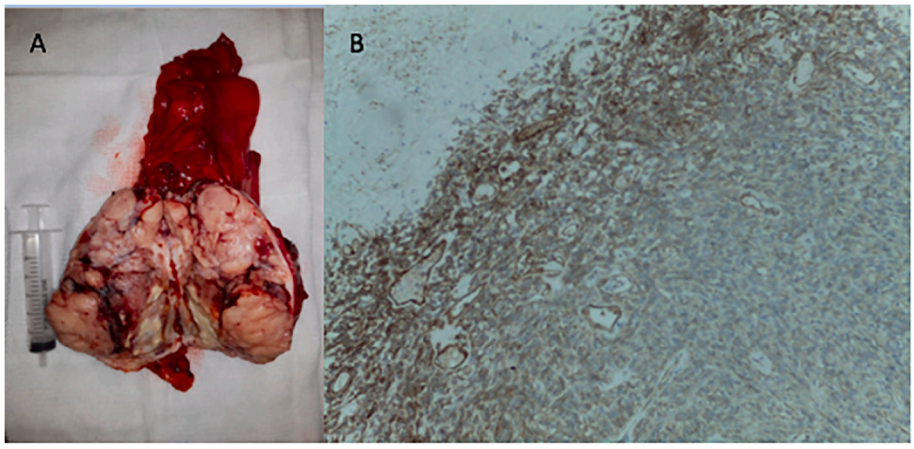


**Fig. 2.** A)Surgical specimen corresponding to the tumor (10 cc syringe side) and radical cystoprostatectomy. B) CD34 diffusely positive.

**Table 1**
Risk stratification model proposed by Demicco et al.[3]

| Risk factor | Score | Our case |
|---|---|---|
| Age | | |
| <55 | 0 | 1 |
| >0 = 55 | 1 | |
| Tumor Size (cm) | | |
| <5 | 0 | 2 |
| 5 a <10 | 1 | |
| 10 a <15 | 2 | |
| >0 = 15 | 3 | |
| Mitotic count (/10 high-power fields) | | |
| 0 | 0 | 0 |
| 1–3 | 1 | |
| >0 = 4 | 2 | |
| Tumor necrosis | | |
| <10% | 0 | 1 |
| >0 = 10% | 1 | |
| Risk class | Total score | Total score |
| Low | 0–3 | |
| Intermeditate | 4–5 | 4 |
| high | 6–7 | |

urinary tract symptoms, hematuria, urinary retention or inespecific abdominal pain.[4] Malignancy indicators are high mitotic count and pleomorphism. There are some cases with benign histology and unfavorable clinical course. Thus, the prognosis of the extra pleural SFT cannot be determinate only with histological parameters.[5] Among extra pleural SFTs, metastasis and local recurrence are both uncommon after surgical excision with negative margins with curative intent.[3] Previously, a close surgical margin (< 0.1 cm) and positive surgical margin for SFT were considered to have the same risk for local recurrence and metastasis. However, follow-up studies have been unable to determine the significance of surgical margins because the incidence of local recurrence is so rare (occurring in approximately 2%).[3] Given the older age at which solitary tumors typically arise, and the relative indolence of even metastatic tumors, patients often die of other causes before tumor recurrence.[3] Recently, a risk assessment measure has become available for patients with SFT, which is listed in Table 1. Age at diagnosis, tumor size, mitotic count, and tumor necrosis are scored to stratify patients into low, intermediate, and high risk of SFT metastasis long term.[3] The case presented was a patient with intermediate metastasic risk: > 55 years, > 10% of tumor necrosis, 0 mitotic count (per high power field) and a tumor size between 10 and < 15 cm.

## Conclusion

Pelvic SFT is a rare pathology. Factors associated with aggressive behavior include positive surgical margins, tumor size greater than 10 cm, and poor histology. Surgical resection with negative margins has curative intention. Is necessary long-term follow up to assure there is not local or distant recurrence.

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