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Isolated shwannoma of the bladder: A rare entity

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ABSTRACT

Isolated shwannoma of the urinary bladder is a very rare entity. We report a case of a shwannoma of the bladder that was diagnosed by an MRI and confirmed by histopathology after the patient underwent TURB.

1. Introduction

Schwannoma is a benign tumor derived from Schwann cells, the origin of which is neuroectodermal. The site of predilection is cervico-facial. The bladder location is exceptional with a difficult preoperative diagnosis. Although the vast majority of schwannomas are benign, there are malignant forms commonly associated with Von Recklinghausen syndrome (4%). Its diagnosis is histological and his surgical treatment consists of complete resection of the mass due to a risk of tumor degeneration.

2. Case presentation

A 70-year-old man, with no past medical history, was diagnosed for prostate cancer Gleason 8 (4 + 4) after PSA screening (PSA = 22). He presented with a prostate MRI performed as part of an extension workup for prostate adenocarcinoma showing a bladder polyp. The patient has no family history of neurofibromatosis and had no clinical symptoms such as nocturia or hematuria. The clinical examination did not reveal any abnormality. The MRI showed a budding image with a large implantation base of the left lateral wall measuring 17 mm being intensely enhanced from the periphery to the center after injection of gadolinium suggesting a superficial lesion (Fig. 1). As for prostate cancer, it was classified T3b N0 M0. He subsequently underwent a rigid cystoscopic examination that showed a bladder lesion with normal overlying mucosa suggesting an intramural location (Fig. 2). Under general anesthesia, the patient underwent e *trans*-urethral resection of the polyp. Pathological examination showed spindle-shaped cells that are arranged in fascicles and the immunohistochemical profile confirmed the diagnosis of shwannoma (Fig. 3). Despite a complete examination, no evidence for Von Recklinghausen's disease was found and the diagnosis of isolated schwannoma was therefore definitively accepted. The patient had radiotherapy for a locally advanced prostate cancer associated with long term hormone therapy. He was subsequently followed up with a flexible cystoscopy and ultrasound scan 6 months later; these did not show any evidence of recurrence.

3. Discussion

Schwannoma is a rare tumor arising from Schwann cells of the myelinated nerves. It usually occurs in patients with Von Recklinghausen's disease.[1] The most frequent localization is the head and neck region though it can affect other organs. Isolated primary Schwannoma of the bladder is a very rare disease. Its occurrence is lower the 0.1%.[2] The diagnosis of schwannoma is most often based on histology rather than on clinical presentation. Its differential diagnosis is usually transitional cell carcinomas, adenocarcinomas or squamous cell carcinomas. The malignant transformation is extremely rare and can recur after incomplete resection.[3] Although Imaging such as CT scan and MRI scan have commonly been used in the evaluation of patients with a bladder mass, there are no specific features on imaging that may differentiate this from other bladder tumors. Jallad et al. revealed only 14 other reported cases of isolated bladder schwannoma.[4] In 13 out of the 14 cases of isolated bladder schwannoma, the mode of presentation was clearly described, of which, the majority was symptomatic and presented with lower urinary tract symptoms (45%), hematuria (45%), pelvic pain (10%), recurrent urinary tract infections (10%), and/or dyspareunia (10%). In our case, the disease was revealed incidentally. In Jallad et al.,

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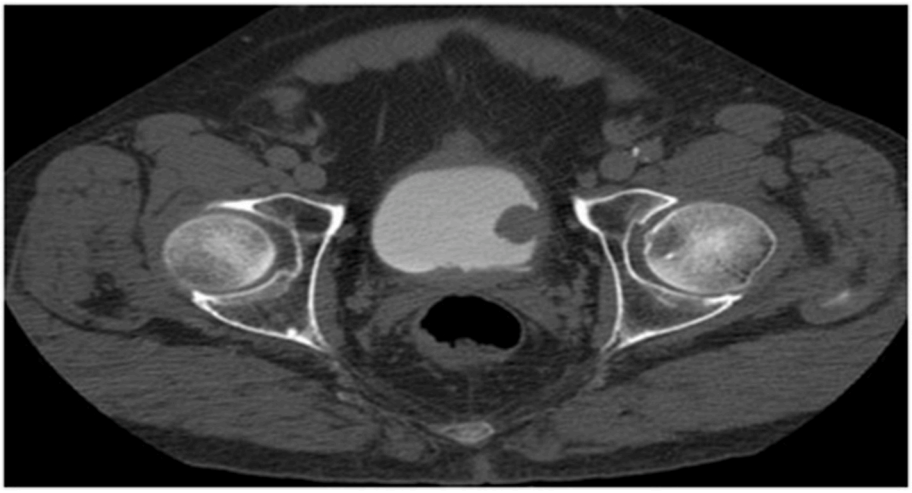

Fig. 1. MRI showing intramural bladder polyp.

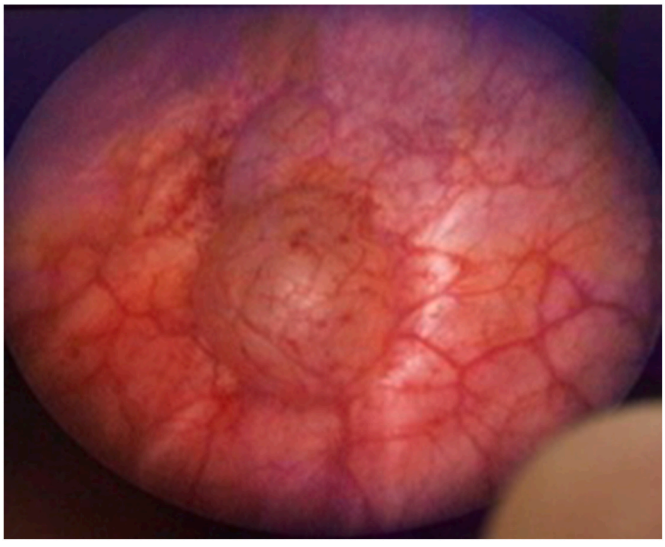

Fig. 2. Cystoscopy revealing a bladder polyp.

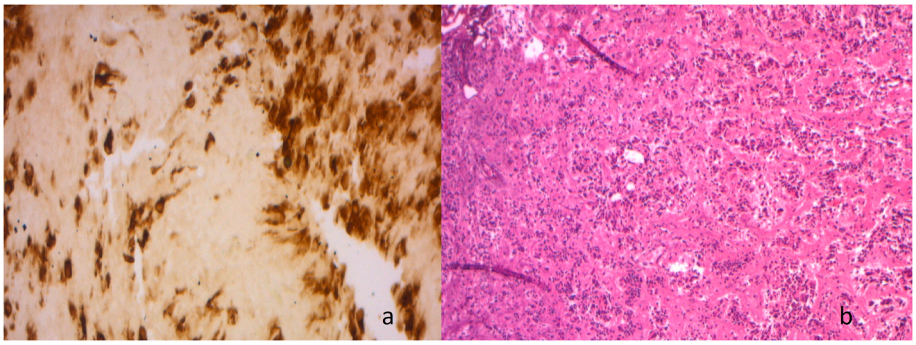

Fig. 3. a- immunohistochimie showing expression in both cytoplasmic and nuclear compartments of GFAP.
b- spindle-shaped cells that are arranged in fascicles.

The follow up was done using flexible cystoscopy and ultrasound after 6 months showing no recurrence.

4. Conclusion

Isolated shwannoma of the bladder is a rare entity with only few cases reported. Diagnosis is by histopathological examination after TURB.

References

1. Cummings JM, Wehry MA, Parra RO, Levy BK. Schwannoma of the urinary bladder: a case report. *Int J Urol*. 1998;38:496–499.
2. Mazdar A, Asseban M, Aboussalah H, et al. Schwannoma of the urinary bladder: a case report. *Pan Afr Med J*. 2014;18:84.
3. Srinivasa Y, Bhat S, Paul F. Isolated primary schwannoma of urinary bladder. *J Clin Diagn Res*. 2016;10:12–13.
4. Jallad S, Ghani S, Omar MA, et al. *BMJ Case Rep*. 30 January 2018. https://doi.org/10.1136/bcr-2017-223154.