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Case Report

Bladder's Neurofibroma Revealed by Chronic Pelvic Pain: Case Report

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ABREVIATIONS

UTI: Urinary Tract Infection; NF-1: Neurofibromatosis type 1; BN: Bladder Neurofibroma; MRI: Magnetic Resonance Imaging

INTRODUCTION

Urinary bladder neurofibroma, also known as schwannoma or neurammoma, is an incredibly rare tumor. Prostatic plexus, bladder, and pelvic nerves are the sources of urogenital involvement. The bladder is the urinary system organ that is most commonly impacted. Both immunohistochemistry and histopathology support the diagnosis. Although reports of surgical therapies have been made, conservative treatment is typically the norm. It is important to follow up the patient to see if any new lesions have developed.

CASE PRESENTATION

T.M, a 67-years-old male patient with no notable medical or surgical history, came to our clinic with intermittent pelvic pain lateralized to the right, with no signs of bladder irritation or hematuria.

Pelvic touch revealed a soft, rounded mass lateralized to the right of the bladder. The patient's general condition remained unchanged.

The patient underwent MRI, which revealed a 90x63x60 right latero-vesical partitioned cystic mass, initially suggestive of a cystic lymphagion (Figure1).

Hydatid serology was performed and returned negative.

A diagnostic flexible cystoscopy was performed, revealing a healthy-looking bladder with no particular abnormalities.

The mass was removed by open suprapubic laparotomy (Figure 2).

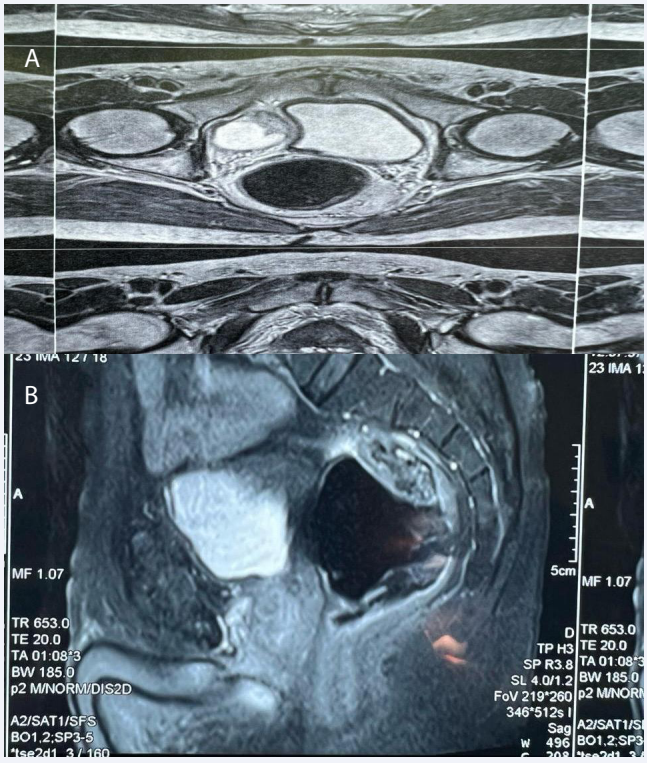

Figure 1 MRI images in the axial (A) and sagittal (B) showing the latero-vesical mass.

Postoperative follow-up was unremarkable, with improvement of symptoms after 2 weeks.

Pathological examination revealed a bladder neurofibroma.

DISCUSSION

Although the prostate, urethra, testis, spermatic cord, and ureter can all be affected by neurofibromas of the genitourinary tract, the bladder is the most often affected location, with about 70 examples documented in the literature [1]. Usually, the bladder,

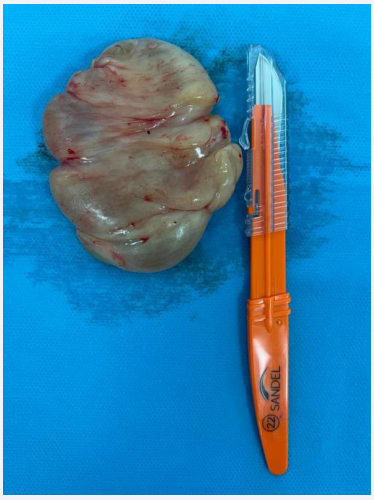

Figure 2 Postoperative picture of the mass.

pelvic, or prostatic nerve plexus is where these cancers start. They originate from the nerve cells that line the bladder wall. It frequently impacts younger age groups. (7 to 28 years old), with a majority of men [2]. Clinical characteristics such as hematuria, dysuria, recurrent UTIs, irritative symptoms, and pelvic mass are frequently present. It is always important to exclude out leiomyosarcoma, ganglioneuroma, and paraganglioma in solitary cases of bladder neurofibroma [3].

While NF-1 is typically present in association with neurofibromas, there have been isolated reports of neurofibroma in patients without any other disease-related stigmata [4]. In light of the patient's denial of any family history of NF-1 and lack of symptoms, it is strongly advised that the patient continue with NF-1 genetic testing. Although there are no specific follow-up guidelines for this condition, we advise routine imaging to be part of the patient's follow-up to check for local recurrence given the possibility of malignant change [5].

Neurofibromas have distinctive radiological features, particularly on MRI, and they typically suggest the diagnosis, which is confirmed by biopsy. We think MRI might be a great non-invasive follow-up technique. It can manifest as a plexiform lesion, which is a diffuse infiltrating process with thickened wall, or as an isolated focal mass within the bladder wall [6].

There is currently no consensus on how to treat people with bladder neurofibroma. It seems that the preferred course of treatment for those with symptoms is surgical intervention [7].

The prognosis for neurofibromas is excellent, and malignant transformation is quite uncommon. The majority of cases documented in scholarly works have been addressed with local excisions. In situations where a disease has no symptoms, surveillance is crucial [8].

CONCLUSION

Bladder neurofibroma (BN) is an extremely rare. Often discovered by chance, it can nevertheless be symptomatic, particularly irritative symptoms and pelvic pain, dysuria including hematuria. These tumors are benigns and malignant transformation is uncommon.

Their rarity explains why, at present, there are no recommendations for treatment and monitoring. We recommend surveillance or surgery and regular follow-up based on imaging to check for local recurrence.

Scare Guidelines

The work has been reported in line with the SCARE criteria [9].

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