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Rare Case of Scrotal Schwannoma

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INTRODUCTION

Schwannomas are usually benign tumors arising from Schwann cells of the peripheral nerve sheath.¹ Most schwannomas are benign, although malignant cases are known to occur. These masses rarely occur in the retroperitoneum, comprising 0.5% to 5% of all schwannomas.^{3,4} Involvement of the urinary tract is rare, but the involvement of the testis, penis, spermatic cord, and tunica vaginalis has been previously reported.⁴

Case summary:

A 45-year-old male presented with a 1-year history of a painless, slowly growing, left-sided scrotal mass. There is no significant medical or family history. The mid-scrotally located mass measured 2.5×2 cms and was nodular, hard and clinically separate from the testes. It was not attached to the scrotal skin or other underlying structures. No Lymphadenopathy.

Clinically Testicular Neoplasm was suspected



INVESTIGATION

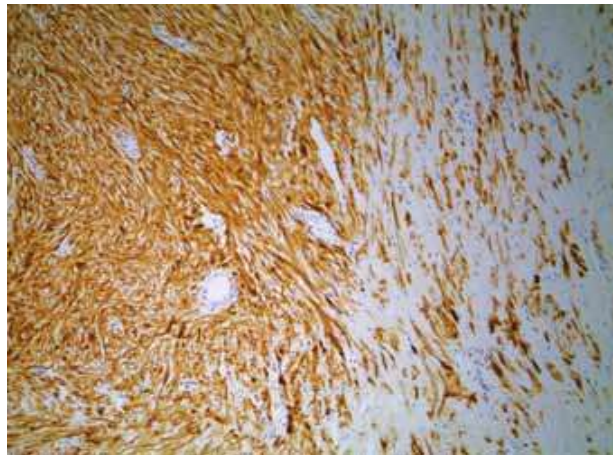
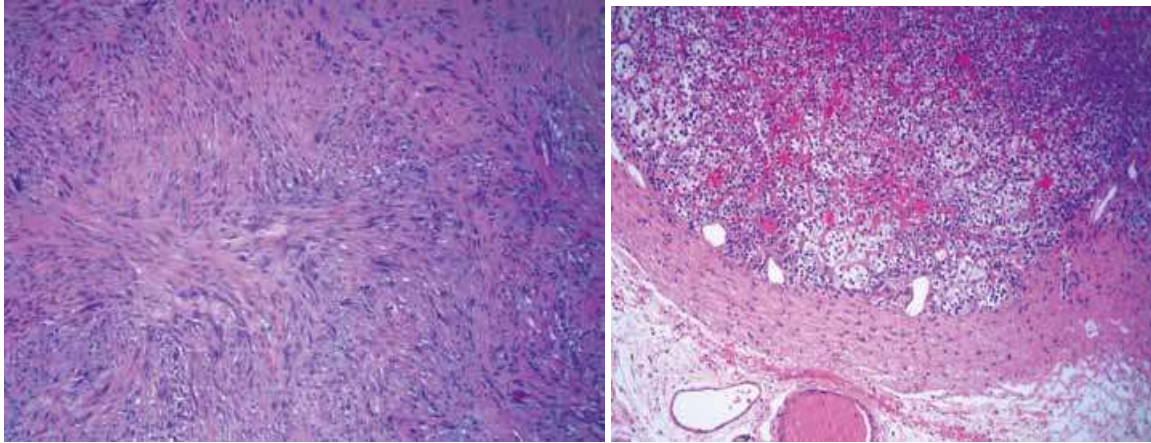
Ultrasonography showed extra-testicular, nodular mass in the midline of the scrotum. The nodule was located behind the left testis and it was predominantly solid with few cystic areas. Both testes appeared normal. There was no evidence of distant or nodal metastases. Fine needle aspiration cytology was inconclusive. So, surgical excision with partial scrotoectomy was undertaken for removal of the mass and for definitive diagnosis. At resection, the tumour appeared to be superficial to the tunica vaginalis, testes and corpus spongiosum.

HISTOPATHOLOGY

On the cut surface, a well encapsulated, well circumscribed, the grey-white mass was seen, which was predominantly solid microscopically proliferation of spindled shaped cells with fibrillary cytoplasm was seen, with dense fibrous bands arranging the cells into nodules. In some cells, marked nuclear hyperchromatism and atypia were seen Mitoses were not present. Within the lesion, cellular areas were interspersed with looser myxoid and cystic areas. Blood vessels with thickened hyalinized walls were noted.

THE MASS WAS SUCCESSFULLY AND COMPLETELY EXCISED





DISCUSSION

Schwannoma is a benign encapsulated neoplasm derived from Schwann cells of the nerve sheath. The exact incidence of schwannoma is unknown, but they are rare. These benign tumours are found in all age groups but are more common in the first four decades and affect both sexes equally. They have been associated with neurofibromatosis or may arise sporadically. The microscopic appearance of schwannoma is distinctive, with two recognisable patterns. Antoni A areas are composed of compacted spindle cells often arranged in palisades or in an organoid arrangement (Verocay bodies). Antoni B areas consist of tumour cells suspended in a myxomatous matrix that may appear microcystic based on appearances several variants of schwannomas have been observed, including cellular, glandular, epithelioid and ancient types, and all exhibit benign features with benign progression. Cellular schwannomas are almost exclusively composed of Antoni A areas but lack Verocay bodies. The glandular and epithelioid variants compose of epithelioid areas and glandular component, respectively, to acquire their descriptive names.

Schwannomas pose a difficult diagnostic challenge. Radiological findings are often nonspecific. Ultrasonography can differentiate between solid and cystic tumors. Either computed tomography (CT) or magnetic resonance imaging (MRI) can be helpful in determining the size, location, local involvement, and distant spread. Fine-needle aspirate (FNA) cytology is not often helpful. Tissue architectural information by either biopsy or excised specimen histology is the only gold standard diagnostic investigation.

CONCLUSION

Surgical excision has remained the mainstay of treatment. Although benign large or incompletely excised lesions are capable of recurrence, malignant change is exceedingly rare.

REFERENCES

1. Sebastiano Pante et al. Perineal Schwannoma. *Can J surg.* 2009; 52(1): E 8-9.
2. Rosai .J: *Ackerman's surgical pathology.* Mosby 8th edition 1995; 2:2264-66.
3. Chan P. T, Tripathi .S, Low SE and Robinson LQ. Case report – ancient schwannoma of the scrotum. *BMC Urology*2007; 7(1). PMID: 17244372.
4. Matsui .F, Kobori .Y, Takashima .H, Amano .T, Takemae K: A case of intrascrotal schwannoma. *Acta Urol Jap*2002; 48:749-51. PMID: 12613010.
5. Zarate R. E, Fernandez G. I, Lujan G. M, Ortega M. P, Berenguer SA: Schwannoma of the scrotum: report of case and review of the literature. *Actas Urol Esp*1997; 21:1012-3. PMID: 9494170.
6. Safak .M, Baltaci .S, Ozer .G, Turkolmez .K, Uluoglu .O: Long-term outcome of a patient with intrascrotal extratesticular malignant schwannoma. *Urol Int*1998; 60:202-4.PMID:9644798.
7. Isobe .K, Shimizu T, Akahane .T, Kato H: Imaging of ancient schwannoma. *AJR Am J Roentgenol*2004; 183:331-6.PMID:15269020.
8. Daneshmand .S, Youssefzadeh .D, Chamie .K, Boswell W, Wu N, Stein JP, Boyd S, Skinner DG: Benign retroperitoneal schwannoma: a case series and review of the literature. *Urology*2003; 62:993-7.PMID:14665342