Intrascrotal Non-testicular Schwannoma: A Rare Case Report

Sir,

A schwannoma is a benign nerve sheath tumour composed of schwann cells, which normally produce the insulating myelin sheath covering peripheral nerves. It arises most frequently from the acoustic nerve. In the peripheral nervous system, it is usually found in association with one of the main nerves of the limbs, usually on the flexor aspect near the elbow, wrist or knee, the hands or the head and neck.^[1] Schwannoma of the scrotum and testis though described in literature, it is very rare.^[2] We herein, report a very rare and unusual case of intrascrotal non-testicular schwannoma.

A 24-year-old male presented with a history of slowly growing, right-sided scrotal swelling of 15 years duration having occasional tenderness. No similar swellings were appreciated elsewhere in the body and there was no other significant history or clinical findings. The physical examination revealed an oval, firm mass, measuring 3 cm × 2.5 cm in size at the root of the scrotum on right-side close to the testis [Figure 1]. The overlying scrotal skin was stretched, thinned out and showed telangiectasia. There was no inguinal lymphadenopathy. A provisional clinical diagnosis of skin appendageal tumour was considered.

On ultrasound examination, there was paratesticular scrotal mass with a scant amount of fluid collected within the tunica vaginalis. Both tests were normal.

The swelling was excised in to under local anaesthesia after informed consent. The specimen submitted for histopathological examination.

Histopathological report showed spindle shaped cells with poorly defined cytoplasm and elongated, wavy, basophilic nuclei. The nuclei were palisading and arranged in parallel rows with intervening eosinophilic cytoplasm in a typical appearance as Verocay bodies. The classical cellular Antoni A interspersed with myxomatous Antoni B areas are seen in Figures 2 and 3. The diagnosis of schwannoma was reported. This was further confirmed with immunomarker S100 positive staining. Thus, the final diagnosis of intrascrotal extratesticular schwannoma was reached.

Schwannomas arise from the cranial, spinal and the peripheral nerves of the body. It may involve many sites and the rare sites reported being face, neck, scalp, hands, tongue, palate and the larynx. Among all, the testicular



Figure 1: An oval, firm mass, measuring 3 cm × 2.5 cm in size at the root of the scrotum on right-side close to the testis

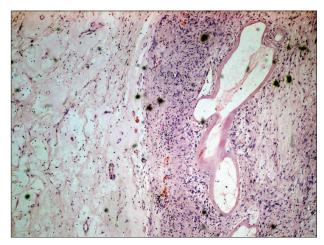


Figure 2: Classical cellular Antoni A interspersed with myxomatous Antoni B (×10)

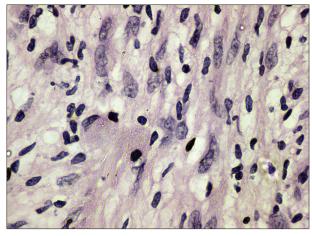


Figure 3: Spindle shaped cells with poorly defined cytoplasm and elongated, wavy, basophilic nuclei (×40)

schwannomas are the rarest.^[2-4] Schwannoma in male genital system may involve testis, penis, spermatic chord, tunica vaginalis and prostrate.^[5,6] Scrotal schwannoma may be testicular or non-testicular in origin. Most of them occur in young and middle aged adults.^[7]

Clinically, schwannomas are round or oval, circumscribed nodules varying in size up to 5 cm, usually firm in consistency and tend to be asymptomatic; however, when they enlarge, they result in symptoms related to compression of the surrounding structures.^[8]

Histologically, benign schwannoma are composed of an alternating pattern of Antoni A (highly cellular areas) and B areas (hypo cellular areas with myxoid change). ^[9] On electron microscopy tumour cells shows typical features of Schwann cells. ^[10] Immunohistochemistry shows strong and uniform staining with S100. ^[11]

Surgical excision is a mainstay of treatment. Recurrence after complete surgical excision is uncommon. Similarly, malignant transformation in a schwannoma is extremely rare. [12]

In the present case, the clinical suspicion was that of a skin appendageal tumour while the radiologic impression was that of a paratesticular tumour. The differential diagnosis of benign paratesteticular tumours includes leiomyoma, lipoma, fibroma or haemangioma. [13] There was no evidence of neurofibromatosis.

As far as our knowledge is concerned, this is the second case reported from India and only the seventh case of benign intrascrotal non-testicular schwannoma in the literature. [2,5,14-19]

We have reported this case for its rarity and to consider it as differential in the evaluation of scrotal swelling.

> Nitin G Barde, S Sacchidanand, C Madura, Vishal Chugh

Bangalore Medical College and Research Institute, Bangalore, India E-mail: nitinbarde@gmail.com

REFERENCES

- Stout AP. The peripheral manifestations of the specific nerve sheath tumor (neurilemmoma). Am J Cancer 1935;24:751-96.
- Matsui F, Kobori Y, Takashima H, Amano T, Takemae K. A case of intrascrotal schwannoma. Hinyokika Kiyo 2002;48:749-51.
- Rodríguez EZ, González IF, Galán ML, Muñoz PO, Sánchez AB. Schwannoma of the scrotum: Report of case and review of the literature. Actas Urol Esp 1997;21:1012-3.
- Amano T, Nikura S, Kouno M, Takemae K. A case of intrascrotal extratesticular malignant schwannoma. Acta Urol Jpn 2002;48:749-51.
- Jiang R, Chen JH, Chen M, Li QM. Male genital schwannoma, review of 5 cases. Asian J Androl 2003;5:251-4.
- Sighinolfi MC, Mofferdin A, De Stefani SS, Celia A, Micali S, Saredi G, et al. Benign intratesticular schwannoma: A rare finding. Asian J Androl 2006;8:101-3.
- 7. Oberman HA, Sullenger G. Neurogenous tumors of the head and neck. Cancer 1967;20:1992-2001.
- Mercantini ES, Mopper C. Neurilemmoma of the tongue. AMA Arch Derm 1959;79:542-4.
- Sian CS, Ryan SF. The ultrastructure of neurilemoma with emphasis on Antoni B tissue. Hum Pathol 1981;12:145-60.
- Waggener JD. Ultrastructure of benign peripheral nerve sheath tumors. Cancer 1966;19:699-70.
- Weiss SW, Langloss JM, Enzinger FM. Value of S-100 protein in the diagnosis of soft tissue tumors with particular reference to benign and malignant Schwann cell tumors. Lab Invest 1983;49:299-308.
- Geschikler CF. Tumours of the peripheral nerves. Am J Cancer 1935;25:377-89.
- Agarwal PK, Palmer JS. Testicular and paratesticular neoplasms in prepubertal males. J Urol 2006;176:875-81.
- Cowen R. Tumor of the tunica vaginalis testis: Case report of neurilemmoma. J Urol 1957;77:59-61.
- Fernandez MJ, Martino A, Khan H, Considine TJ, Burden J. Giant neurilemoma: Unusual scrotal mass. Urology 1987:30:74-6.
- Arciola AJ, Golden S, Zapinsky J, Fracchia JA. Primary intrascrotal nontesticular schwannoma. Urology 1985;26:304-6.
- Montgomery JS, Hollenbeck BK, Fisher PC, Murphy HS, Underwood W 3rd. Benign paratesticular schwannoma. Can J Urol 2004;11:2393-5.
- Shimizu H, Tsuchiya A, Kusama H. A case of intrascrotal neurilemmoma. Hinyokika Kiyo 1991;37:303-4.
- Bhanvadia V, Santwani P. Intrascrotal extratesticular schwannoma. | Cytol 2010;27:37-9.

Access this article online	
Quick Response Code:	Website: www.jcasonline.com
	DOI: 10.4103/0974-2077.118434