Breast Schwannoma: A Rare Entity

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Abstract
Though benign breast lesions are common, but schwannoma which develops out of nerve sheath cells usually arises in extremities, trunk & head region is a rare presentation in breast. This is a case of 43 yr female presenting as lump breast for 6 months which was diagnosed as schwannoma. Grossly, it was a well defined, oval shaped, firm mass measuring 4x3x1.5 cm with a rim of fatty tissue. External surface was grey white and smooth. It was well circumscribed. Cut surface of the tumor was grey white in colour. Microscopic examination revealed closely packed bundles of woven spindle cells with pallisading of the nuclei.

Keywords: schwannoma, varocay bodies

Case Report
A 43 year old female presented with a painless breast lump. The mass was in the upper outer quadrant of the left breast. The mammography findings indicated that mass was benign, USG showed a well circumscribed, homogenous solid mass. Lumpectomy was done under general anaesthesia and the excised lump was submitted for histopathological examination. Grossly, it was a well defined, oval shaped, firm mass measuring 4x3x1.5 cm with a rim of fatty tissue. External surface was grey white and smooth. It was well circumscribed. Cut surface of the tumor was grey white in colour. Microscopic examination revealed closely packed bundles of woven spindle cells with pallisading of the nuclei. Spindle shaped cells had poorly defined eosinophilic cytoplasm, and pointed basophilic nuclei set in collagenous stroma. At places forming varocay bodies\(^1\). Varocay bodies (Antoni A bodies) are cellular areas surrounded by nuclear palisades. Other areas showed myxoid and few micro cystic areas probably due to degenerative changes along with Schwann cells. Also noted presence of many blood vessels, few of them showing thick hyalised walls.
Fig.1  Picture showing blood vessels in loose myxoid connective tissue background

Fig 2. Picture showing formation of varrocay body
Discussion

Most primary tumors of the breast have an epithelial origin. Tumors of the nerve cell origin arising from the Schwann cells enveloping the peripheral nerves are schwannoma. These are usually seen in extremities, trunk and head regions. Neurilemmoma of the breast is rarely seen. We report a case of benign schwannoma presenting as a breast lump.

Benign schwannoma commonly occur between 20-50 years with an almost equal male to female ratio. Most patients present with a painless slow growing mass. Breast schwannoma can arise from the parasympathetic or sympathetic division of the autonomic nervous system present in the organ and is rare. Only 17 cases have been reported previously in literature.

Adequate treatment of solitary benign schwannoma consist of simple enucleation of the encapsulated tumor. Recurrences after excision has not been reported.

References