Case Report

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Cavernous haemangioma of male breast

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ABSTRACT

We report a rare case of a cavernous hemangioma arising in a male breast. A 53 year old man first noticed 1×1 cm nodule just below his left nipple since 2 years. It was enlarging over a period to the present size. He came to our hospital, it was size of $(2\times1$ cm), was a firm and cystic with a rather smooth surface, and mobile with in breast just medial to left nipple. Fine needle aspiration cytology (FNA) failed to obtain proper material except for old bloody fluid or necrotic connective tissue, precluding a correct diagnosis preoperatively suggesting cystic lesion with bloody aspirate. Lumpectomy or excision biopsy was subsequently performed. Histological, it was found to be a cavernous hemangioma. In such a case, complete excision is recommended to exclude the possibility of an underlying malignant lesion.

Keywords: Haemangioma, Male breast

INTRODUCTION

Vascular tumours of the breast are rare and most can be classified as either angio sarcomas or haemangioma Cavernous haemangiomas are the most common form of mammary hemangioma, but there are only a few published reports regarding this tumor. Most reported cases pertained to the localized form of mammary hemangioma and associated calcifications. In this study, we describe a case with unilateral breast involvement in a male patient.

CASE REPORT

A 53 year old man came to our hospital outpatient department (OPD) complaining of swelling in his left breast. The swelling in breast was painless and was associated with skin tethering & no associated nipple discharge, or fever. There was no history of breast trauma. A physical examination revealed a single swelling 4×1 cm poorly defined, non-tender, partly cystic

and partly firm mass in the left breast just below, medial side of left nipple, except this swelling both the breast appeared normal size, no other abnormality detected clinical diagnosis of adenoma or, rare carcinoma done, sent for FNAC. FNA aspiration of the mass yielded 2ml of bloody aspirate fluid which was cytological negative. For further confirmation excision biopsy was planned. Subcutaneous lumpectomy done under anaesthesia.



Figure 1: Haemangioma.

The lumpectomy specimen weighed 20g and measured $4\times4\times2$ cm oval shaped. Histological specimen consisting of partially encapsulated lesion consisting of ecstatic channels of blood vessels both large and small arranged in lobules containing RBCs, variable sized small cysts. The cysts were between 0.1 cm and 3.5 cm in their greatest dimension and, thus suggesting cavernous hemangioma.

DISCUSSION

Haemangiomas are benign vascular tumours that are usually identified incidentally during histological examination of specimens obtained during lumpectomy or mastectomy. They can occur in patients ranging in age from 18 months to 82 years. There is also no predilection for any particular location in the breast. Haemangiomas are subdivided into 4 types: perilobular, parenchymal, nonparenchymal or subcutaneous, and Perilobular hemangiomas always occur in the extra lobular stroma in the form of microscopic lesions. hemangiomas Parenchymal are microscopically composed of dilated channels filled with red blood cells, and individual vessels of hemangiomas vary in size from capillary to cavernous. Venous hemangiomas are composed largely of venous channels with disorderly vascular proliferation. Nonparenchymal or subcutaneous hemangiomas are located superficial to the anterior pectoral fascia in the subcutaneous fat grossly, haemangiomas tend to be well-circumscribed. The lesion is typically described as a dark red or brown circumscribed mass that may grossly appear to be spongy. Most haemangiomas have well-circumscribed borders grossly, but microscopically the vascular channels may blend with the surrounding breast parenchyma.² Microscopic examination reveals dilated vessels congested with red blood cells, separated by fibrous septa, and with extensive fibrosis and sometimes with phleboliths.^{2,7}

The reported mammographic appearance of a cavernous hemangioma is of a well-defined, lobulated mass that may have fine or coarse calcifications. ^{1,4,7} Coarse or eggshell macro calcifications indicate phleboliths. However, in our patient, the mass had no calcifications and appeared to be well-defined, large, and involving a unilateral breast.

Cavernous haemangiomas may present as masses, depending on their size and location, but most palpable and symptomatic vascular tumours are angiosarcomas. In our case, hemangioma was large enough to be clinically palpable. In the treatment of cavernous hemangioma, excision is recommended to exclude the possibility of an underlying malignant lesion. Re-excision of the biopsy site may be indicated if it appears that a substantial portion of the lesion has not been extirpated. Further surgery is not necessary if only a few peripheral capillaries extend to the margin of excision after ruling out the malignant potential. However, as in our case the

lesion was small and involved only left breast, subcutaneous lumpectomy was indicated.

Reports of breast hemangiomas are not common, and among those reported, most are Cavernous hemangiomas Imaging features appear inconclusive for the diagnosis of hemangiomas. Color Doppler sonography may be used in the diagnosis of Perilobular hemangioma during keen suspicion of clinical diagnosis in most of the reported cases; mammography will be helpful in diagnosing haemangiomas because of the phleboliths they contain. MRI will useful in characterizing of the mass and for evaluating its extent.¹³

Haemangiomas are subdivided into 4 types: perilobular, parenchymal, nonparenchymal or subcutaneous, and venous. Perilobular hemangiomas always occur in the extra lobular stroma in the form of microscopic lesions. Parenchymal hemangiomas are microscopically composed of dilated channels filled with red blood cells, and individual vessels of hemangiomas vary in size from capillary to cavernous. Venous hemangiomas are composed largely of venous channels with disorderly vascular proliferation. Nonparenchymal or subcutaneous hemangiomas are located superficial to the anterior pectoral fascia in the subcutaneous fat. Haemangiomas typically have very thin walls, but those of venous hemangiomas have thick muscular walls. Because the thin muscular walls were observed in our case, the lesion histologically diagnosed as a cavernous hemangioma. No malignancy features seen. In conclusion, we can now add to our collective archive of medical knowledge one more rare case of a cavernous hemangioma.

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