

Angiomatosis of the Breast: A Rare Lesion

MEENAKSHI SUNDARAM

ABSTRACT

Benign vascular lesions are extremely rarely seen in the breast. Angiomatosis, one of the vascular lesions, is an uncommon benign vascular tumour. It presents as a painless, slowly enlarging mass which is composed of vascular and lymphatic

spaces which surround the acini and the lobules of the breast. Only few such cases have been presented in the literature. This report documents a rare benign vascular tumour in a young female. The lesion recurred within 8 months. Wide local excision or simple mastectomy is the mode of treatment.

Key Words: Angiomatosis, Vascular tumours of the breast

INTRODUCTION

The vascular tumours of the breast are rare, except for angiosarcoma. The benign vascular tumours are very few and angiomatosis is extremely rare. Only a few cases of angiomatosis has been reported. This lesion presents as a slowly enlarging mass in the breast and it is prone for recurrence. Complete excision with wide local clearance is the treatment of choice. Mastectomy is done in the cases with recurrence.

CASE REPORT

An 18-years old female presented with a rapidly enlarging mass in the left breast, which was there since six months. She had a similar complaint eight months back, for which excision of the mass was done. The details of the previous histopathology report was not available and since it had recurred in a short span of time, a clinical diagnosis of cystosarcoma phyllodes was made and complete excision of the mass was done. The specimen was sent for histopathological examination.

PATHOLOGICAL FINDINGS

The macroscopic examination showed a soft tissue mass of size, 14*12*8 cm. The external surface was smooth, brownish and vaguely nodular. [Table/Fig-1] The cut surface was solid brownish with grey white areas and slit like spaces [Table/Fig-2].

The microscopic examination revealed a lesion which was composed of large irregular spaces which were lined by flattened endothelial cells without a muscular wall, some empty and some containing red blood cells [Table/Fig-3 and 4] Surrounding the lesions, ducts and lobules were seen. The ducts and lobules were not invaded [Table/Fig-5]

DISCUSSION

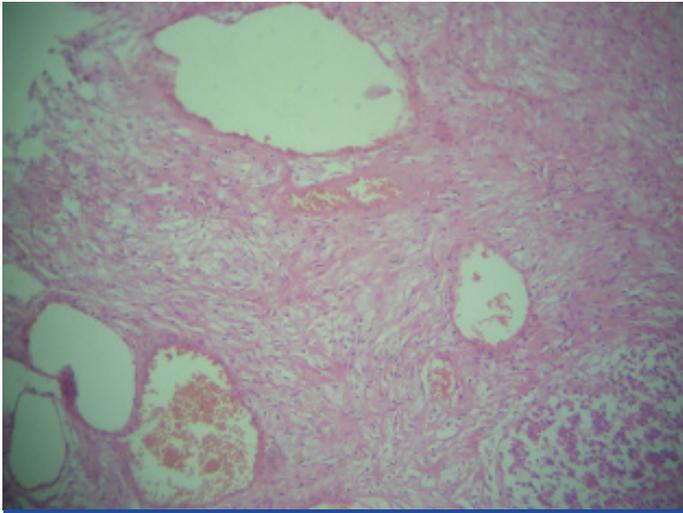
The vascular tumours of the breast are extremely rare and a majority of them are malignant. The vascular lesions of the breast include hemangiomas, perilobular hemangiomas, pseudoangiomatous stromal hyperplasia, angiomatosis and angiosarcomas [1,2,3].



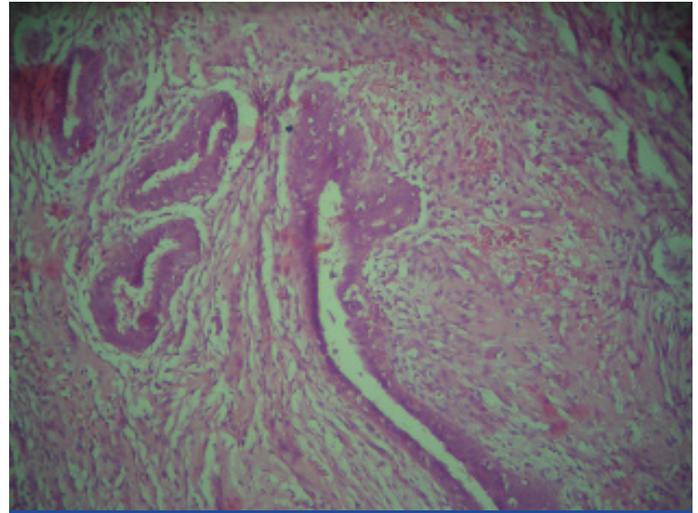
[Table/Fig-1]: Soft tissue mass with smooth external surface and vaguely nodular



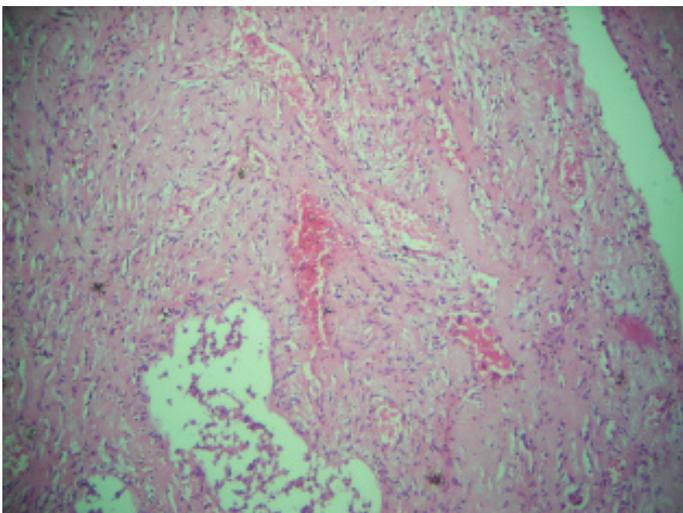
[Table/Fig-2]: Cut surface shows congestion and slit like areas



[Table/Fig-3]: Microscopic picture shows dilated vascular and lymphatic spaces [H&E stain 10X]



[Table/Fig-5]: Microscopic picture shows breast acini not involved by the vascular growth.[H&E stain 10X]



[Table/Fig-4]: Microscopic picture shows dilated vascular and lymphatic spaces lined by flattened endothelial cells. [H&E stain 10X]

Hemangioma is a benign vascular lesion which is rarely more than 2cm in size. It is a well circumscribed lesion which is composed of cavernous spaces with feeder vessels at the periphery. The lesion may merge with the surrounding tissue, but it does not invade or destroy the lobules. A fibrous septa divides the lesion into lobules and no atypia, papillae or tufting is seen in the lesion. Haemorrhage or necrosis is absent [4,5,6].

Perilobular hemangioma is an incidental microscopic vascular lesion which occurs within the lobular stroma or it may also occur in the extra lobular stroma. It is composed of localized clusters of vascular channels which range from capillary to small cavernous vessels. There are no atypia, papillae or mitotic figures [4,5,6].

Pseudoangiomatous stromal hyperplasia is also known as nodular myofibroblastic stromal hyperplasia. This lesion shows variable cellularity with the dense collagenous stroma which presents as hyalinized collagen bundles which are punctuated by slit like spaces. There are anastomosing pseudovascular slit like spaces in the collagen bundles without a true vascular lining or red blood cells within [1].

Angiosarcoma is a malignant neoplasm which exhibits vascular differentiation which presents as a haemorrhagic mass of

size more than 2cm. It is diffuse and infiltrative, with complex anastomosing vascular channels which show cytological atypia [1].

The angiomatosis in any anatomical site is composed of vascular channels which grow diffusely in the stroma [7].

Angiomatosis in the breast is a rare vascular lesion. It is a diffuse benign lesion which presents as a mass which is composed of large irregular vascular spaces without a muscular wall. It grows diffusely in the breast and surrounds the ducts and the lobules without invading them [2,3]. The spaces are lined by a flat endothelium that shows no atypia. The lesion can have lymphatic channels also. This rare lesion can recur after surgery. No metastases have been reported to occur with this lesion [8].

SUMMARY

Benign vascular tumours are rare lesions in the breast. Angiomatosis of the breast is an extremely rare benign vascular tumour and only few such cases have been reported in the literature. This case is of particular interest because the tumour recurred after surgery in a short time and underwent a massive enlargement. Angiomatosis is prone to local recurrence. Complete excision or simple mastectomy is the treatment.

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AUTHOR(S):

Dr. Meenakshi Sundaram

PARTICULARS OF CONTRIBUTORS:

1. Dr. Meenakshi Sundaram
Associate Professor
Department of Pathology
Saveetha Medical College
Thandalam, Chennai – 602105, India.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Meenakshi Sundaram
Associate Professor,
Department of Pathology,
Saveetha Medical College,
Thandalam, Chennai – 602105 (India).
Phone: 094444161999
E-mail: drkms75@gmail.com

FINANCIAL OR OTHER COMPETING INTERESTS:

None.

Date of Submission: **Dec 28, 2011**

Date of Peer review: **Feb 25, 2012**

Date of Acceptance: **Apr 23, 2012**

Date of Publishing: **May 31, 2012**