# **Case Report**

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# Angiomatosis of breast - an extremely rare benign vascular lesion of the breast: a case report

#### Lanka Krishna\*, Padma Sunetri, Podili Venkata Ramana, Shravan Kumar

Department of Pathology, Gandhi Medical College, Secunderabad, Telangana, India

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## \*Correspondence: Dr. Lanka Krishna,

E-mail: lanka.krishna1@gmail.com

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#### **ABSTRACT**

Angiomatosis of the breast extremely rare benign vascular tumor. Very few cases reported in the literature. Complete excision and examination is required for the diagnosis of any benign vascular lesion in the breast. If the diagnosis of a benign vascular lesion is made on a partial excision, it must be stated to be contingent upon complete excision. These tumors are prone to local recurrence. Complete excision or simple mastectomy is the treatment of choice.

**Keywords:** Angiomatosis, Vascular tumors of the breast

#### INTRODUCTION

The vascular lesions of the breast are rare except for angiosarcoma. The benign vascular lesions are very few and angiomatosis is extremely rare. Only a few cases of angiomatosis have been reported. This lesion presents as a slowly growing mass in the breast and it is prone for recurrence. Complete excision with wide local clearance is the treatment of choice. Mastectomy may be reserved for cases with recurrence.

## **CASE REPORT**

18 years old female presented with 10 cm mass in right breast since 6 months. Complete excision of the mass was done and sent for histopathological examination with a clinical diagnosis of phyllodes tumor. The macroscopic examination showed a soft tissue mass of size 9 x 6 x 5 cm. The external surface was smooth, brownish and vaguely nodular. The cut surface was solid brownish with grey white areas and slit like spaces. Microscopically the lesion 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. Surrounding the lesion, ducts and lobules were seen. There is no invasion into the ducts and lobules.



Figure 1: The macroscopic examination showed a soft tissue mass of size 9 x 6 x 5 cm. The external surface was smooth, brownish and vaguely nodular.



Figure 2: The cut surface of soft tissue mass was solid brownish with grey white areas and slit like spaces.

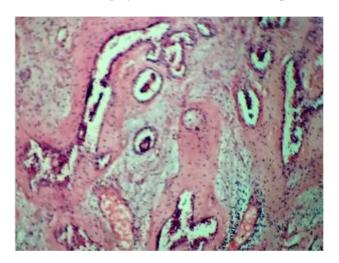


Figure 3: Microscopically the lesion was composed of large irregular spaces which were lined by flattened endothelial cells without a muscular wall.

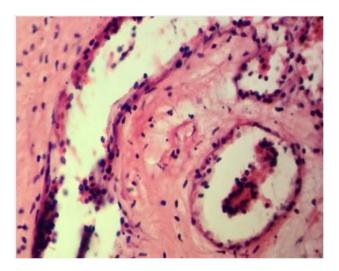


Figure 4: Microscopically flattened endothelial cells without a muscular wall, some empty and some containing red blood cells.

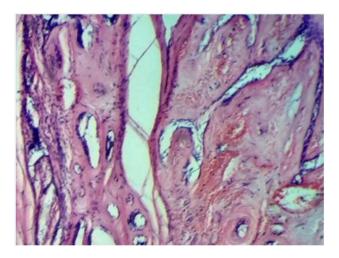


Figure 5: Microscopically surrounding the lesion, ducts and lobules were seen. There is no invasion into the ducts and lobules.

#### **DISCUSSION**

The vascular tumors of the breast are extremely rare and a majority of them are malignant. The vascular lesions of the breast include hemangioma, perilobular hemangiomas, pseudoangiomatous stromal hyperplasia, angiomatosis and angiosarcomas.<sup>1-3</sup>

Hemangioma is a benign vascular lesion. It is rarely more than 2 cm in size. It is a circumscribed lesion composed of cavernous spaces with feeder vessels at the periphery. It does not destroy or invade the lobules but may merge with surrounding tissue. The lesion may present with lobules separated by fibrous septa and no atypia, papillae or tufting is seen in the lesion. Haemorrhage or necrosis is absent. <sup>4-6</sup>

Perilobular hemangioma is an incidental microscopic vascular lesion which occurs either within the lobular stroma or in the extralobular stroma. It is composed of vascular channels which range from capillary to small cavernous vessels. There are no atypia, papillae or mitotic figures. <sup>4-6</sup>

Pseudoangiomatous stromal hyperplasia shows variable cellularity with the dense collagenous stroma with hyalinized collagen bundles which are punctuated by slit like spaces. Anastomosing pseudovascular slit like spaces are seen in the collagen bundles without a true vascular lining or red blood cells within.<sup>1</sup>

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.<sup>2,3</sup> The spaces are lined by flat endothelial cells without 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.<sup>7</sup>

Angiosarcoma is a malignant neoplasm which presents as a hemorrhagic mass of size more than 2 cm. it is diffuse and infiltrative with complex anastomosing vascular channels which show cytological atypia.<sup>1</sup>

#### **CONCLUSION**

Angiomatosis of the breast extremely rare benign vascular tumor. Very few cases reported in the literature. Complete excision and examination is required for the diagnosis of any benign vascular lesion in the breast. If the diagnosis of a benign vascular lesion is made on a partial excision, it must be stated to be contingent upon complete excision. These tumors are prone to local recurrence. Complete excision or simple mastectomy is the treatment of choice.

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