

Case Report

Ectopic Breast at a Rare Site - A Case Report

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ABSTRACT

Ectopic breast tissue is encountered in 1% to 6% of women and considerably less frequently in men. We report a case of ectopic breast presenting as vulval mass. MRI reported as ?Soft tissue hemangioma .we report this case in view of its rarity.

Keywords: ectopic breast, vulval mass.

INTRODUCTION

The primary milk line develops in the human embryo at 6-week gestation.¹ Incomplete resorption of the milk line leads to ectopic remnants of breast tissue. Most of the reported cases in the literature tend to occur at the upper end of the embryonic ridge where very few cases were arising from the inferior end of the embryonic mammary ridge.² Unilateral axillary involvement is frequent presentation followed by bilateral axillary involvement. Histopathological examination is required for confirmation of the diagnosis.

CASE HISTORY

32 years female presented with complaints of swelling in vulval region since one year which were observed after her first delivery.



Figure 1: A skin covered soft tissue mass measuring 8x5x5cms.Cutsection showed solid grey white nodular areas.

The swelling was progressive increasing in size. USG of the swelling was a well-defined heterogeneously echogenic lesion with internal vascularity measuring 7x3 cm.

MRI showed a well-defined pedunculated, exophytic rounded lesion measuring 6.2x5.9x4.6cm. Lesion showing small serpiginous vascular channels.? Soft tissue hemangioma.

Case was operated under spinal anaesthesia. She also had a swelling in right side axilla which was noted after the diagnosis of vulval lesion was made.

Gross: We received a skin covered soft tissue mass measuring 8x5x5cms.Skin flap measuring 8x6cm.Cutsection showed solid grey white nodular areas. (Figure 1)

Histopathology showed tissue lined by stratified squamous epithelium with sub epithelium showing normal looking lobules of breast acini and dilated ducts surrounded by fibrofatty tissue. (Figure 2,3 &4)

DISCUSSION

Ectopic breast tissue in the vulva was first reported in 1875. ³The lack of regression of milk line leads to ectopic breast tissue. This line forms a ridge of ectoderm joining the bases of the upper and lower limb buds on either side of the ventral trunk from the mid-axillae through the normal breasts and then inferiorly to the medial groins. This ridge atrophies except in the thoracic region from which the orthotopic pair of breast develops. Persistence of portions of the mammary ridge results in ectopic breast tissue. ¹

It is more frequent in Japanese women and less frequently among Caucasians. ^{4,5} The clinical presentation is highly variable. Physiologic changes can occur during menstrual cycle causing pain and swelling of the gland. They respond to hormonal stimulation during pregnancy or lactation. ⁶ During pregnancy high levels of hormones cause growth and proliferation of breast tissue. Pathological changes can also occur leading to neoplastic changes that occur in normal breast.



Figure 2: H&E stained 4X10 view of tissue covered by stratified squamous epithelium with sub epithelium showing lobules of ducts and acini.



Figure 3: H&E stained 10x10 view of lobules and ducts

Van der Putte proposed the normal existence of mammary like anogenital glands and dismissed the traditional theory of ectopic breast tissue.⁷ However, this theory seemed not to be universally accepted, with some authors suggesting the presence of both mammary-like glands and ectopic breast tissues in the anogenital region.⁸ Currently, a dis-

inction is made between ectopic breast tissues and mammary-like anogenital glands, which are located at more medial site proximal to the labia minora.⁷ They also lack lobular architecture and have a greater frequency of columnar cell change and columnar cell hyperplasia.⁹

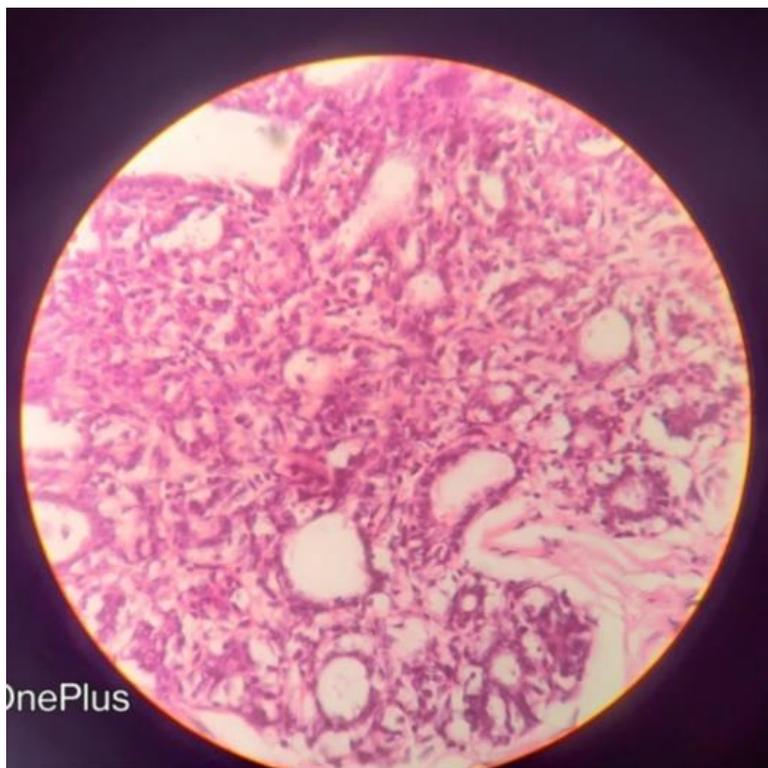


Figure 4: H&E Stained 40x10 view of ducts

The differential diagnosis of a mass in the vulva includes both benign and malignant neoplastic lesions. Most common benign masses in this region are Bartholin cyst and sebaceous cysts, lipomas, lymphangiomas and hidradenoma papilliferum. Malignant diseases include squamous cell carcinoma, melanoma, Paget's disease, adenocarcinoma arising from Bartholin glands and metastatic disease. The definitive diagnosis is confirmed by histopathology which shows glandular breast tissue.¹⁰ In some cases glandular tissue is partly or entirely replaced by fat and may be diagnosed clinically as lipoma.¹

Excision is recommended for the pathologic confirmation and treatment of vulvovaginal lesions.

CONCLUSION

Ectopic breast tissue at vulva must be considered as a differential diagnosis by surgeon for the lesions in vulva though it is rare. Surgical excision is the treatment of choice and histopathological examination confirms the diagnosis.

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