

Vulval Fibroadenoma, a Common Tumor at an Uncommon Site - A Case Report

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ABSTRACT

Vulval fibroadenoma is a rare benign tumour with few reported cases in literature. The histogenesis of this tumor has remained controversial. We report a case of 37 year old female presented with a well-defined subcutaneous swelling in the right labia majora with a histopathological diagnosis of Vulval fibroadenoma and positive for hormone receptors which is in favour of origin from ectopic breast tissue.

Keywords: Vulva, fibroadenoma, ectopic breast tissue.

INTRODUCTION

Vulval fibroadenoma is extremely rare mammary like fibroepithelial lesion. Milk lines are precursors to the mammary glands that extend from the armpit to the groin. There may be supernumerary breast tissue-extra nipples and breasts, also known as polythelia and polymastia, respectively, which can be an indication that the milk lines did not entirely disintegrate. Similarly breast tissue can persist in vulva also that subject to many physiologic and pathologic changes. These include swelling and secretion of milk during pregnancy, cysts,¹ peculiar hyperplastic changes,² so-called pseudoangiomatous stromal hyperplasia (PASH),³ fibroadenoma,³⁻⁵ phyllodes tumor,⁶⁻⁷ and carcinoma.^{1,8} Here we report a case of Vulvar fibroadenoma in a young woman.

CASE REPORT

A 37 year old nulliparous woman presented with a painless firm right labia majorum swelling for 3 years. She first noticed a peanut sized swelling but it gradually increased in size in a very slow manner. Physical examination revealed a 7x5x3cm mass located in the subcutaneous area of the right labia majora. The swelling was firm, mobile, and not adherent to skin or other underlying structures. The swelling has no ulceration, puncta or any secretions. USG of the abdomino-pelvic region was unremarkable. Provisional clinical differential diagnosis was Bartholin cyst or lipoma.

The excised specimen on gross examination showed a firm mass measuring 7x5x3cms. Cut surface was homogenous grey-white without any cystic change, haemorrhage and necrosis.

Microscopy showed a biphasic tumour with epithelial and stromal proliferation. Epithelial element consisted of tubular branching glands lined by columnar and myoepithelial cell layers. Stroma was moderately cellular and fibromyxoid in nature. There was no evidence of atypia. Immunohistochemical studies were done and the glandular cells showed strong positivity for Estrogen (ER) and Progesterone Receptors (PR). A final histopathological diagnosis of vulval fibroadenoma was given.

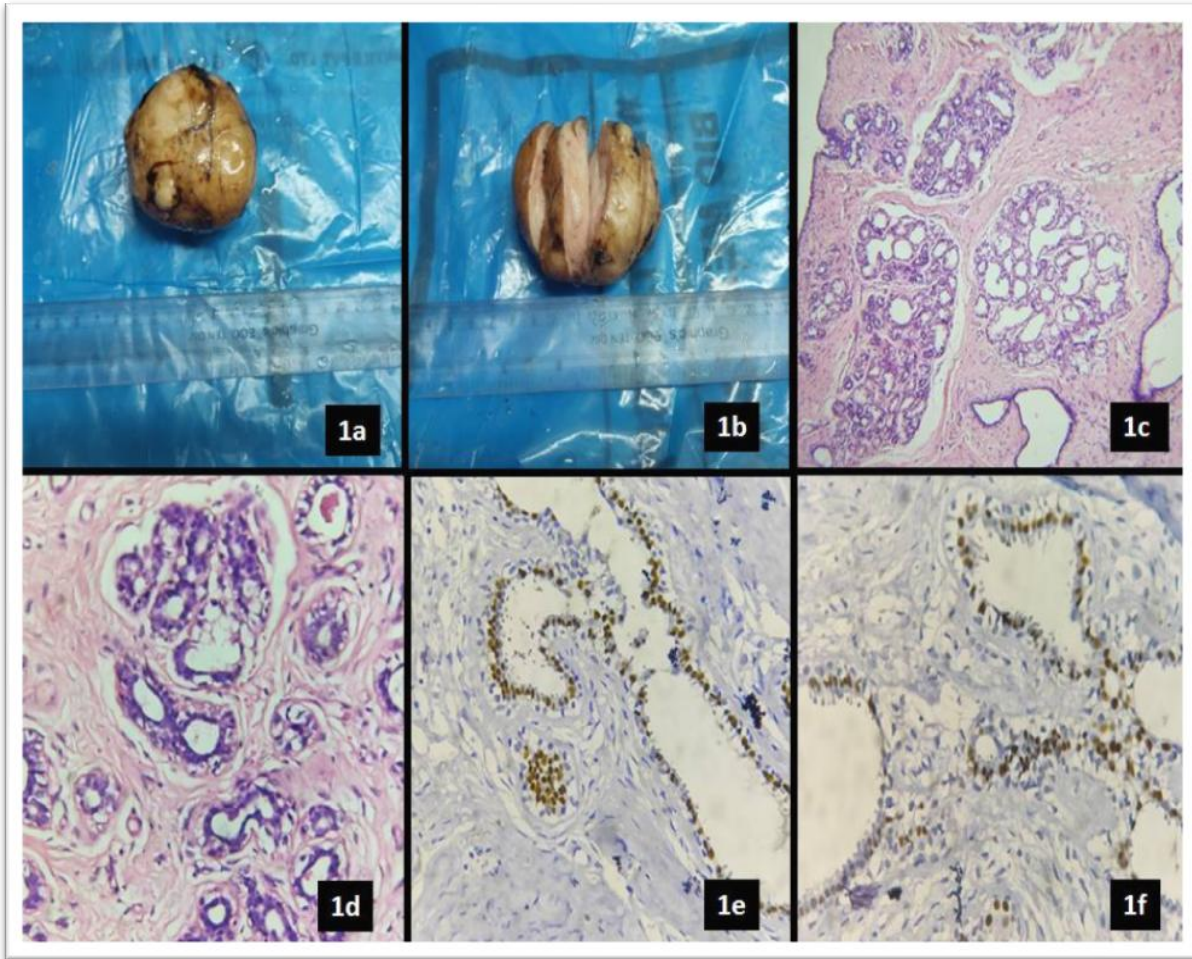


Figure1: 1a and 1b show gross photograph.1c (x100, H&E) and 1d (x400, H&E) show photomicrograph of vulval fibroadenoma.1e (x100) and 1f (x100) show strong nuclear ER and PR positivity.

DISCUSSION

The vulval fibroadenoma is seen between 20–80 years of age and presents as solitary cutaneous or subcutaneous nodule on labia majora, with sharp borders.^{9-10,12}

In 1872 Hurtung first described the fully formed mammary gland in the vulva in human. The histogenesis of vulvar fibroadenoma remains controversial.

Vulva is a rare site for ectopic breast tissue since it is located at the inferior end of the primitive mammary ridge. The vulval ectopic mammary tissue is formed from inferior end of primitive mammary streak. The theory of milk ridge is proposed in early years of 19th century and was stated that the theory could be applied to humans.⁹⁻¹²

Putte suggested the presence of specialised glands identical to mammary glands which exist in the anogenital area

normally and has close relationship with eccrine glands. These glands are called mammary like anogenital glands which is present in vulva.¹

Histopathological features are similar to those in breast, having tubular branching or compressed glands with fibromyxoid stroma surrounding it. The glands are lined by luminal columnar cells, some showing apocrine change and abluminal myoepithelial cells. The tumour is positive for ER,PR,SMA,S100,CK,EMA and GCDF-15 by immunohistochemistry as stated by Mohammad H and Lin WC et.al.^{9,12} In our case we found ER,PR nuclear positivity of the glandular epithelial cells. The vulval fibroadenoma has a good prognosis and rarely recurs following excision.

CONCLUSION

Our case emphasizes the rare manifestation of ectopic mammary tissue in vulva. Fibroadenoma should be kept in mind as a differential diagnosis of benign vulval tumour. Hence we take this opportunity to describe a case to bring the awareness of vulvar ectopic mammary like anogenital glands and occurrence of a common tumour at this uncommon site.

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