

Case report

GIANT FIBROEPITHELIAL STROMAL POLYP OF VULVA IN A YOUNG GIRL

Khumanthem Pratima D¹, Sarkar Sabyasachi²,*Kumari Suman², Nabakishore Singh N³, BimolChandra Singh L⁴, Reeta Devi M⁵

¹Senior Registrar, ²Postgraduate student, ³Professor & Head, ⁴Associate Professor, Department of Obstetrics and Gynaecology, Regional Institute of Medical Sciences Imphal, Manipur, India ⁵Assistant Professor Department of Pathology Regional Institute of Medical Sciences Imphal, Manipur, India

* Corresponding author email: drsumankatewa@gmail.com

ABSTRACT

Fibroepithelial stromal polyps are site-specific mesenchymal lesions that typically occur in women of reproductive age group and present more commonly in vagina than cervix or vulva. These polyps usually do not grow larger than 5 cm in diameter and are most commonly identified during routine gynecological examination. Although benign, sometimes their clinical features may overlap with those of malignant neoplasms so histopathological examination of the polyp is often necessary to make a definitive diagnosis.

Key words: Fibroepithelial stromal polyps, cervix, vulva.

INTRODUCTION

Fibroepithelial stromal polyps (FEPs) are also known as Acrochordons or skin tags. These are site specific mesenchymal lesions which show a predilection for the neck, axilla, and groin and are typically seen in adult obese women. FEPs of the lower genital tract often develop in young to middle-aged women and are more common in the vagina than vulva and rarely seen in cervix. ^[1]These polyps are thought to be hormone sensitive and are usually seen in reproductive age group. however they can also be seen in postmenopausal women who are on hormone replacement therapy. These lesions display a wide range of morphologic appearances and usually present as polypoid or pendunculated growth. Mostly the size of lesions is 1x2 cm but rarely it can reach an extremely large size up to 15- 20 cm.^[2] Small lesions are usually asymptomatic and are detected during gynaecological routine examination. Symptomatology of large lesions includes general discomfort with sensation of a mass as well as bleeding and discharge due to secondary infection of the lesion. Their clinical features may overlap with the malignant lesions of vulvovaginal region so biopsy is often necessary for confirmatory diagnosis. ^[3] We present a case of 8x7 cm large fibroepithelial stromal polyp of the vulva in 22 years old unmarried girl with a brief review of literature.

CASE REPORT

A 22 year old unmarried girl presented to gynaecology department of our institute with swelling in the right labia which was first noticed around 6 year back. Initially the swelling was around 1-2 cm and was static in size. The swelling increased in size over the course of the last 8 months until its current size on presentation. The girl was extremely embarrassed and this was the reason why she had not consulted so far to any health care provider. But polyp's rapid growth and ulceration over the surface forced her to present for evaluation. She complained of itching and discharge from the swelling accompanied with fever since last 5 days. The general physical examination and systemic examination was unremarkable except the swelling. Her menstrual history was normal. The patient denied any significantpast medical or surgical history. No history of sexually transmitted disease or gynaecology-related surgery was present. Local examination revealed a large 8 \times 7 cm pendunculated, globular mass arising from the right labia majora. The proximal end was connected to the right labia majora by 3.5x1.5 cm pedicle. The skin over the growth was ulcerated with signs of inflammation (Figure 1).



Fig 1: Large pendunculated globular mass arising from the right labia majora with signs of inflammation.

The growth was soft and warm on palpation with mild tenderness. No lymph nodes were palpable in the vulvar and inguinal regions. There was no increase in the size of the mass with coughing and valsalva manure. Blood investigations showed polymorphonuclear leucocytosis (Total WBC counts-14000/mm³ with 78% neutrophils) with raised ESR (65 mm in first hour). Other laboratory investigations were within normal limit including random blood sugar. She was treated initially with antibiotics and local antiseptic ointment. Later on total surgical excision of the mass was performed under local anaesthesia. Grossly the cut section of the specimen revealed a solid greyish white mass with yellow brownish area in the centre. Microscopic examination of the tissue showed fibrovascular tissue having myxoid to fibrous stroma with reactive stromal cells. Few stellate cells and multinucleated cells were noted near the epithelial-stromal interface (Figure 2).



Fig 2:Fibrovascular tissue having myxoid stroma(Big arrow) with few stellate cells(small arrow) [40x] These histopathological features were suggestive of fibroepithelial stromal polyp. The patient was discharged and was advised for monthly follow up visit. On follow up the pedicle site was healed and

she did not manifest any signs of recurrence

following excision.

Fibroepithelial stromal polyps of the vulvovaginal region are rare benign tumours which exhibit a wide range of morphological appearances and can be misinterpreted as malignant. Differential diagnosis of fibroepithelial stromal polyp includes cellular angiofibroma, angiomyofibroblastoma, embryonalrabdomyosarcoma and aggressive angiomyxoma.^[4] So histopathological examination is necessary for confirmatory diagnosis. Histologically fibroepithelial polyps are classified in two types: (1) Predominantly epithelial (2) Primarily stromal. Microscopically the most characteristic feature of a fibroepithelial stromal polyp is the presence of stellate and multinucleate stromal cells which are usually identified near the epithelial-stromal interface.^[5] Immunohistochemically FEPs are often positive for desmin, vimentin, oestrogen, and progesterone receptors and less frequent for actin. ^[3]The pathogenesis of FEPs has not been completely understood yet. Frequent irritation seems to be an important causative factor, especially in persons who are obese. Skin aging with many other factors may also be the predisposing factor for genesis and development of fibroepithelial polyp. FEPs are extremely uncommon before the menarche and after menopause. Presence of oestrogen and progesterone receptors in the stromal cells of FEPs, occurrence of these lesions during reproductive age group

especially during pregnancy, spontaneous regression after deliverv and presence of **FEPs** in postmenopausal women on harmone replacement therapy, all these indicate an association between hormonal changes and pathogenesis of fibroepithelial polyp.^[6] Association of FEPs have also been observed with type 2 diabetes mellitus and obesity.^[7] Giant FEPs have also been reported in association with other dermatoses.^[8]

Although polygonal and multinucleate stromal cells are characteristics of FEPs, they can also be seen in normal vulva, vagina and cervix suggesting that these polyps may represent a proliferation of cells normally found in this region. Thus FEPs represent a hyperplastic process involving the subepithelial myxoidstroma of the lower female genital tract rather than a true neoplasm. Beside histopathological examination, imaging is also important in the diagnostic work up of fibroepithelial stromal polyps. It allows for evaluation of blood supply and flow and demonstrates the origin and extent of the lesion. Ultrasonography is preferred over CT and MRI as first line imaging tool.

The small asymptomatic FEPs do not require excision, unless concerns exist about the final tissue diagnosis. Excision is the treatment of choice for symptomatic FEPs. Large FEPs may cause local discomfort, mass sensation and may be secondarily infected after traumatic surface erosion. The inflammation seen in our case was secondary to infection over the eroded surface due to repeated friction between the polyp, thigh and undergarments of the patient.

Local recurrence after excision is rare but has been reported in literature. ^[9] Recurrence may be either related to incomplete excision or if there is continuous hormonal stimulation (e.g. pregnancy, tamoxifen).^{[3][10]}As a result, all patients with this diagnosis should be followed for long term and managed appropriately after initial treatment. However our patient showed no evidence of recurrence during one year follow-up period.

CONCLUSION

FEPs are relatively site-specific mesenchymal lesions of the vulvovaginal region that typically occur in women of child-bearing age. Large FEPs of the vulval region are rare benign tumours. Due to their wide range of morphological appearances, they may be diagnostically challenging and need expert pathological interpretation to exclude other site specific lesions such as deep aggressive angiomyxoma, angiomyofibroblastoma, cellular angiofibroma and embryonalrabdomyosarcoma.

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