Giant Fibro-Epithelial Polyp of the Vulva: A Case Report

Abstract

Fibro-epithelial polyps (FEPs), also referred to as acrochordons or skin tags, are benign tumours that generally occur in women of reproductive age. They are uncommonly found in the vulva and vary in clinical appearances from small papillomatous growths to large pedunculated tumours. Typically, they are less than 5 cm. The wide range of morphological appearances of these tumours, especially when they are large, can be misinterpreted as malignant. This case involved a 30-year old multipara, 14-month post-partum who presented with a huge, irregular, firm, pedunculated mass on the right labium majus. The mass had patchy areas of skin ulceration and measured 25 cm × 15 cm × 10 cm on a 4-cm × 2-cm long stalk. It started as a 3-cm long finger-like projection with globular distal end that progressively increased in size over 7-month period. There were no swellings in other body parts. She had excisional biopsy of the mass which weighed 588 grams with histological diagnosis of inflamed FEP and had no recurrence at follow-up. This case illustrates an uncommon presentation of the second largest FEP of the vulva reported, which could be misinterpreted as malignant. Clinical, and pathological expertise with complete surgical excision are paramount for effective management to exclude atypia or malignancy and prevent recurrence.

Keywords: *Benign tumour, giant fibro-epithelial polyp, vulva*

Bilkisu Kankia Lawal, Anisah Yahya, Surayya Yaakub Zubair[1], Murtala Abubakar[2], Balarabe Kabir[2], Adekunle Olarenwaju Oguntayo, Abimbola Omolara Kolawole

Department of Obstetrics and Gynaecology, College of Medical Sciences, Ahmadu Bello University/Ahmadu Bello University Teaching Hospital, [1]Department of Obstetrics and Gynaecology, Ahmadu Bello University Teaching Hospital, [2]Department of Histopathology, College of Medical Sciences, Ahmadu Bello University/Ahmadu Bello University Teaching Hospital, Zaria, Kaduna State, Nigeria

Introduction

Fibro-epithelial polyps also known as acrochordons are benign tumours of mesenchymal and ectodermal origin that usually occurs in areas with skin folds.[1] They are uncommonly found in the vulva and few cases of giant FEPs of the vulva have been reported.[2] The first description of FEP was by Norris and Taylor[3] in 1966 while first case of vulva FEP was described by Ostör *et al.*[4] in 1988. They vary in sizes, but typically do not exceed 5 mm. However, giant FEP of up to 42-cm long in the groin has been reported.[5] The exact triggers of growth are unknown, however it is stated to be due to increase in sensitivity of the epithelium to hormones and hormonal changes, especially for those located in the genital tract.[6] The growth of FEPs in other body locations are, however, linked to metabolic profile as positive correlations have been found with obesity, insulin resistance and diabetes.[7] With increase in hormones in the reproductive age, FEPs of the genital tract occur more frequently in that age group and more frequently in women.[8]

Review of literature has shown reports of giant FEPs, with some involving the vulva. However, giant FEPs of the vulva reaching excessive sizes are rare.[2,9] This case reported one of the largest giant FEP of the vulva with inflammatory changes in a woman of reproductive age.

Case Report

A 30-years-old multipara, whose last child birth was 14 months prior to presentation presented with huge mass arising from the right labium majus. It started as a 3-cm long finger-like projection with globular distal end that progressively increased in size over a period of 7 months. There was associated pain, skin ulceration with offensive discharge and occasional contact bleeding that necessitated her presentation. There were no other swellings in other body parts and she had no co-morbidities. On evaluation at presentation, her general condition was stable except anaemia (packed cell volume 24%).

There was a huge, irregular, firm, pedunculated mass with patchy areas of skin ulceration that measured 25 cm × 15 cm × 10 cm strapped to the suprapubic area with wrapper attached with 4-cm × 2-cm

How to cite this article: Lawal BK, Yahya A, Zubair SY, Abubakar M, Kabir B, Oguntayo AO, *et al.* Giant fibro-epithelial polyp of the vulva: A case report. J West Afr Coll Surg 2024;14:229-32.

Received: 16-Jun-2023
Accepted: 18-Jul-2023
Published: 22-Feb-2024

Address for correspondence:
Dr. Bilkisu Kankia Lawal, Department of Obstetrics and Gynaecology, Ahmadu Bello University/Ahmadu Bello University Teaching Hospital, P.M.B. 06, Shika, Zaria, Kaduna State, Nigeria.
E-mail: balklaw@yahoo.com

Access this article online

Website: www.jwacs-jcoac.com

DOI: 10.4103/jwas.jwas_117_23

Quick Response Code:

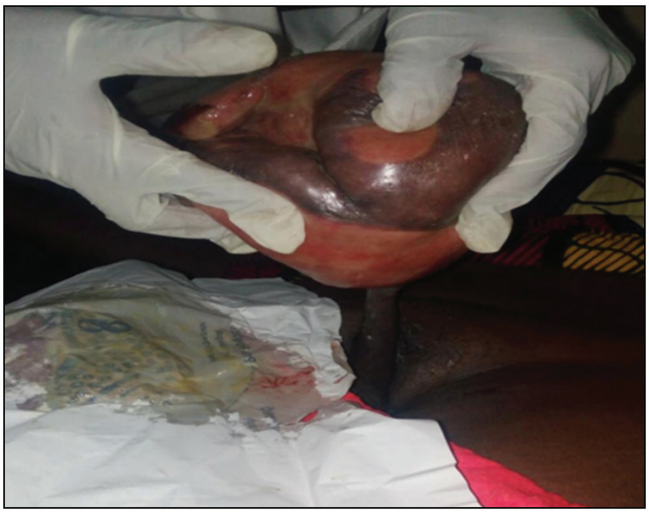

Figure 1: Giant ulcerated fibro-epithelial polyp on a stalk arising from the right labium majus

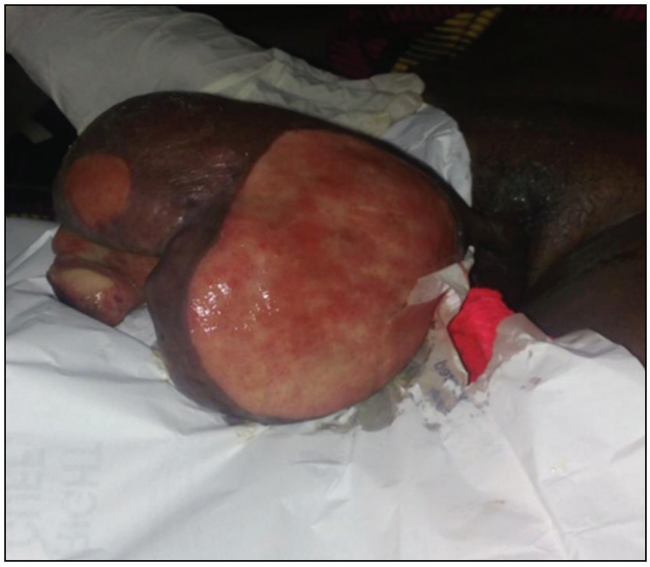

Figure 2: Giant fibro-epithelial polyp of the vulva showing area of extensive ulceration (dorsal surface) attached by a stalk to right labium majus

long stalk to the right labium majus [Figures 1 and 2]. No regional lymphadenopathy. Other investigations including blood glucose profile, serum electrolytes, hepatitis B, hepatitis C and retroviral screenings were normal. She was referred from a General Hospital because of strong suspicion of malignancy.

She was counselled on the findings and management option which she consented to and had an initial incisional biopsy of the lesion on December 19, 2018 with histological report that revealed; Macroscopy: four fragments of grey-white tissues that aggregate 15 mm × 10 mm × 5 mm AE. Microscopy shows keratinised parakeratotic, acanthotic, stratified squamous epithelium with foci of ulceration overlying a fibro-collagenous stroma. Interspersed within are intense chronic inflammatory cells infiltrates. Other areas show crushing artefacts and congested vascular

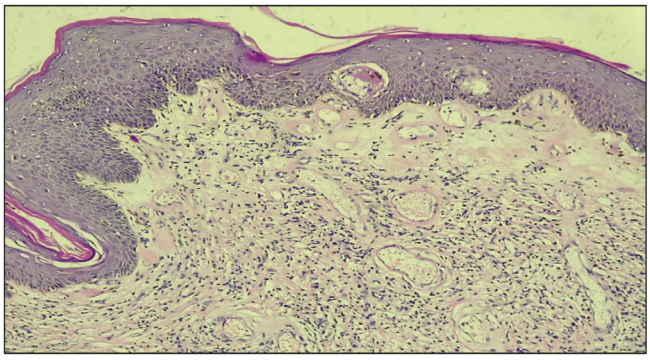

Figure 3: Haematoxylin and Eosin (H & E) stained photomicrograph of the FEP at magnification of ×40; section showing polypoidal lesion having fibrovascular stroma interspersed with chronic inflammatory cellular infiltrates lined by unremarkable keratinised stratified squamous pigmented epithelium

channels. Conclusion inflamed FEP of the right labium majus. Anaemia was corrected with two units of blood and she was placed on oral antibiotics; ciprofloxacin and metronidazole. She subsequently had total excision of the mass a month after the initial biopsy on January 18, 2019. The mass was excised from the base of the stalk leaving 2 mm margin under local anaesthesia with minimal blood loss. The mass weighed 588 g and was sent for histology. Postoperatively, she was continued on oral ciprofloxacin, metronidazole, haematinics and counselled on perineal hygiene.

The histology report of the excised mass revealed; macroscopically, an irregularly shaped piliphoid partially skin covered tissue with cut sections that reveal tan grey surfaces with haemorrhagic areas. Microscopically, sections show a hyperkeratotic, focally acanthotic, stratified squamous epithelium exhibiting pseudo-epitheliomatous hyperplasia with foci of ulceration and denudation overlying a fibrovascular to fibromyxoid stroma. Interspersed within the stroma is intense chronic inflammatory cellular infiltrates comprising lymphoplasma cells and histiocytes [Figure 3]. Conclusion of an inflamed fibro-epithelial polyp of the vulva.

By the second postoperative week [Figure 4], the surgical site was healing satisfactorily and the patient was satisfied. There was no recurrence up to a year and then loss to follow-up (last seen on February 19, 2020).

Discussion

Fibro-epithelial polyps are benign skin tumours of mesenchymal and ectodermal origin that are popularly known as skin tags.[10] They occur in about 25% of population and frequency increases with age.[1] They occur commonly in areas with skin folds, such as the neck, axilla, submandibular, or inguinal regions; however, they can be found in the genital tract[9]; commonly in the vagina, uncommon in the vulva and rarely in the cervix,[2,11] and have been reported in rarer sites such as anterior chest

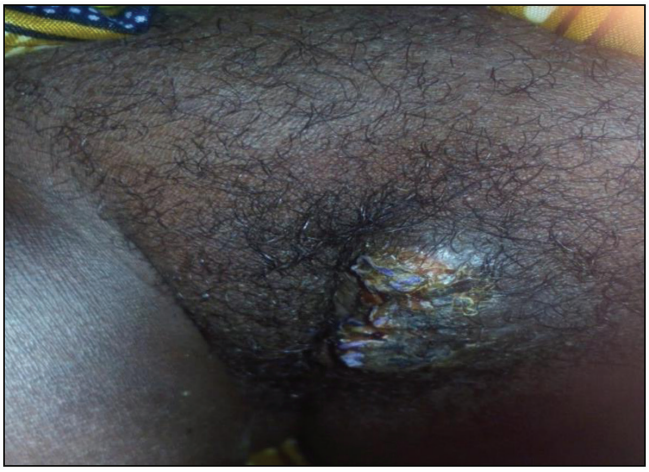

Figure 4: Second week post total excision of the fibro-epithelial polyp of the vulva

wall,[1] colon,[12] and ureter.[13] This is a case of vulva FEP arising from the right labium majus.

The clinical appearances of FEPs vary from small papillomatous growth of approximately 2–5 mm to large pedunculated (bag-like) tumours, but typically, are less than 5 cm.[2] Generally, the term acrochordon is used for the smaller lesions which are <5 mm, while FEP is used when they are larger,[2] however, most literatures use them interchangeably. They occasionally grow more than 5 cm referred to as giant FEPs, with reports of larger than 15 cm in vulva,[2,6,9,14,15] axilla,[16] thigh,[17] and anterior chest wall.[1] The largest case of FEP reported in the literature is in the groin area measuring 42-cm long,[5] while largest in vulva measured 32 cm × 29 cm and weighed 1.84 kg.[15] We report one of the largest FEP of the vulva. They are usually solitary, like in this index case, but occasionally multiple lesions could occur in same or different body regions[2,15,18] with reports of involvement of labia bilaterally.[8,15,18]

The pathogenesis of FEP is not clearly understood, but the origin is most probably from a regressing nevus.[6] The epithelium of the FEPs in the genital tract are hormone-sensitive, hence their growth in this region is attributed to hormonal influence from extended hormone intake, hormonal changes in pregnancy, thus explaining their occurrence in women of reproductive age.[6] The hormones commonly implicated are high levels of oestrogen and progesterone.[9] Other factors attributed to their growth especially in the extra-genital region include, obesity, insulin resistance,[16] chronic inflammatory conditions due to foreign body reactions[1,19] or effect of skin ageing. This index case is neither obese nor diabetic but within the reproductive age supporting hormonal influence.

The usual symptoms necessitating presentation include bleeding, discharge and general discomfort because of sensation of a huge mass[2] like in our patient. Infection of FEP is an unknown entity; however, Navada *et al.*[20] reported inflammation that may have been from infection at site of traumatic surface erosion, similar to our report. Chan *et al.*[21] also reported 20.5 cm labial FEP associated with pain, ulceration and discharge while, Amin *et al.*[22] reported a large infected FEP of the vulva measuring 20 cm × 21 cm complicated with sepsis. There have also been reports of FEPs of the vulva associated with other conditions such as type two diabetes mellitus, genital psoriasis, lymphedema,[18,23] angiomyxoid tumour of the vulva[24] retroperitoneal fibromatosis,[17] and Crohn's disease.[25]

There are site-specific mesenchymal lesions of the vulvo-vaginal region that must be considered in the differential diagnosis of FEPs. These include aggressive angiomyxoma, angiomyo-fibroblastoma, cellular angiofibroma, and superficial angiomyxoma, which all occur in reproductive age. While prepubertal vulval fibroma and Botryoid Embryonal rhabdomyosarcoma occur typically in the prepubertal age.[2] Imaging may be important in the diagnostic work-up of FEPs to evaluate blood supply and flow and also demonstrate the origin and extent of the lesion. Ultrasonography is suitable as first line imaging tool because it is widely available and cost-effective, although computed tomography scan and magnetic resonance imaging may be used.[11] The standard management is surgical excision especially when large, while cryotherapy or cauterisation can be used as treatment options for FEPs whose sizes are in millimetres.[23] The risk of malignancy is very low, however, histological diagnosis is very paramount for exclusion of atypia and malignancy especially when they are huge, have rapid growth or have ulcerations, like in our index case because of the gross similarity of the FEP with sarcomas.[2] Recurrence is very uncommon, probably related to incomplete excision or multifocality.[2,23] Ostör *et al.*[4] reported cases of recurrence while Hanx *et al.*[26] reported growth of a giant cell fibroblastoma at the site of a previously excised FEP. Therefore, long-term follow-up is advocated even with complete excision to detect recurrence at the earliest.[2,26] Our index case had total excision with no recurrence up to a year of follow-up.

Conclusion

Fibro-epithelial polyp of the vulva region is a rare benign tumour that can present with wide range of morphological appearances which can be misinterpreted as malignant. They can grow as large as 588 g and 25 cm in widest diameter as seen in this case. Clinical and pathological expertise are paramount to diagnosis, effective management and exclusion of atypia or malignancy. Long-term follow-up is advocated.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The

patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

References

1. Can B, Ozluk AY. Giant fibroepithelial polyps: Why do they grow excessively? Sisli Etfal Hastanesi tip bulteni 2020;54:257-60.
2. Madueke-Laveaux OS, Gogoi R, Stoner G. Giant fibroepithelial stromal polyp of the vulva: Largest case reported. Ann Surg Innov Res 2013;7:8.
3. Norris HJ, Taylor HB. Polyps of the vagina. A benign lesion resembling sarcoma botryoides. Cancer 1966;19:227-32.
4. Ostör AG, Fortune DW, Riley CB. Fibroepithelial polyps with atypical stromal cells (pseudosarcoma botryoides) of vulva and vagina. A report of 13 cases. Int J Gynecol Pathol 1988;7:351-60.
5. Kumar A, Hasin N, Sinha AK, Kumar S, Bhadani P. Giant fibro epithelial polyp in a young girl: A rare case report. Int J Surg Case Rep 2017;38:83-5.
6 Agrawal A, Garg C, Mukherjee S, Kakkar K. Giant acrochordon of vulva: A rare occurrence. Nepal J Dermatol Venereol Leprol 2016;13:70.
7. Sari R, Akman A, Alpsoy E, Balci MK. The metabolic profile in patients with skin tags. Clin Exp Med 2010;10:193-7.
8. Banik R, Lubach D. Skin tags: Localization and frequencies according to sex and age. Dermatologica 1987;174:180-3.
9. Kurniadi A, Rinaldi A, Yulianti H, Bazar AR, Prasetyawati RD, Tjandraprawira KD. Multiple vulvar giant fibroepithelial polyps: A rare case occurrence. Case Rep Obstet Gynecol 2022;2022:5712925.
10. Fridrich RE, Ilodi GH. Cutaneous tag or acrochordon of the lower extremity. J Am Podiatr Med Assoc 1986;76:479.
11. Bozgeyik Z, Kocakoc E, Koc M, Ferda Dagli A. Giant fibroepithelial stromal polyp of the vulva: Extended field-of-view ultrasound and computed tomographic findings. Ultrasound Obstetr Gynecol 2007;30:791-2.
12. Sunkara T, Caughey ME, Dadana S, Gaduputi V. Fibroepithelial polyp of colon: An extremely rare but benign condition: 1501. Off J Am Coll Gastroenterol 2017;112:S820-1.
13. Gupta M, Roy S, Wann C, Eapen A. Giant fibroepithelial polyp of the ureter. BMJ Case Rep 2017;2017:bcr-2016.
14. Yoo J, Je BK, Yeom SK, Park YS, Min KJ, Lee JH. Giant fibroepithelial stromal polyp of the vulva: Diffusion-weighted and conventional magnetic resonance imaging features and pathologic correlation. J Pediatr Adolesc Gynecol 2019;32: 93-7.
15. Raphael Avidime A, Usman H. Bilateral giant fibroepithelial labial mass: A case report. J Obstetr Gynaecol Canada 2017;39:564-6.
16. Alkhalili E, Prapasiri S, Russell J. Giant acrochordon of the axilla. BMJ Case Rep 2015;2015:bcr2015210623.
17. Gupta R, Smita S, Sinha R, Sinha N, Sinha L. Giant fibroepithelial polyp of the thigh and retroperitoneal fibromatosis in a young woman: A rare case. Skeletal Radiol 2018;47:1299-304.
18. Attri A, Singh K, Thakur S, Sharma P. Giant fibroepithelial polyp of vulva with fibroid uterus with primary lymphedema (Meige disease/lymphedema praecox): A rare case report. Int J Reprod Contracept Obstet Gynecol 2021;10:3607.
19. Fetsch JF, Davis CJ, Jr, Hallman JR, Chung LS, Lupton GP, Sesterhenn IA. Lymphedematous fibroepithelial polyps of the glans penis and prepuce: A clinicopathologic study of 7 cases demonstrating a strong association with chronic condom catheter use. Hum Pathol 2004;35:190-5.
20. Navada MH, Bhat PRB, Rao SV, G N. Large fibroepithelial polyp of vulva. Case Rep Dermatol Med 2011;2011:273181.
21. Chan MM, Yong TT, Sittampalam K. Giant labial fibroepithelial stromal polyp. Malays J Pathol 2013;35:91-4.
22. Amin A, Amin Z, Al Farsi AR. Septic presentation of a giant fibroepithelial polyp of the vulva. BMJ Case Rep 2018;2018: bcr2017222789.
23. Orosz Z, Lehoczky O, Szoke J, Pulay T. Recurrent giant fibroepithelial stromal polyp of the vulva associated with congenital lymphedema. Gynecol Oncol 2005;98:168-71.
24. Can B. Giant fibroepithelial polyp with angiomyxoid tumor. Ann Plast Reconstr Surg 2019;3:1034.
25. Papiez JS, Hassenein A, Wilkinson E, Meynen CA. Recurrent atypical myxoid fibroepithelial polyp associated with vulvar Crohn's disease. Int J Gynecol Pathol 2001;20:271-6.
26. Han X, Shen T, Rojas-Espaillat LA, Hernandez E. Giant cell fibroblastoma of the vulva at the site of a previous fibroepithelial stromal polyp: A case report. J Low Genit Tract Dis 2007;11:112-7.