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Case Report

Giant vulvar polyp in a postmenopausal woman: a rare clinical case

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Abstract

The increased frequency of precancerous lesions and malignant diseases of the vulva is a hallmark of the postmenopausal period. However, the development of fibroepithelial polyps, which are benign neoplasms, is also possible. The exact etiology and pathogenesis remain unclear. These mesenchymal neoplasms are mostly diagnosed in women who received hormone replacement therapy or those who are of reproductive age, with pregnancy being a predisposing factor. We present a clinical case in which surgical treatment was the first choice, and histopathological examination confirmed the diagnosis.

The authors report a case of a postmenopausal patient not taking hormone replacement therapy with a single, large, benign, pedunculated fibroepithelial polyp of the vulva (more than 5 cm long) that appeared more than 15 years ago. The polyp was successfully excised, with a good prognosis for the patient. This clinical case emphasizes the accurate clinical diagnosis and the importance of histopathological examination. It illustrates delayed help-seeking in the absence of mandatory prophylaxis.

Keywords

fibroepithelial polyp, vulvar neoplasm, postmenopause

Introduction

Vaginal polyps were first described by Norris and Taylor in 1966, followed by Östör et al. in 1988, who described a polyp of the vulva. These are benign neoplasms of mesenchymal and ectodermal origin and most often affect women of reproductive age, pregnant or on the background of hormone replacement therapy, often without clinical manifestations.[1] Multiple vulval polyps have been described in the literature in women of reproductive age, ranging in size from a few millimeters to over 15 cm in diameter and weighing more than 2000 g, most often on a pedicle and with or without infection.[2-5] In the postmenopausal age, the most common neoplasms are precancerous and malignant vulval lesions, which require radical surgical treatment followed by radiation therapy.[6]

We present a rare clinical case of a 55-year-old female patient with a single, large, benign fibroepithelial polyp of the vulva and a 15-year history of tumor progression, who underwent organ-preserving surgery. The most important aspect here is confirmation of the diagnosis and rejection of a malignant process, emphasizing the importance of ongoing prevention in women after menopause.

Case description

Following informed consent from the patient, we present a clinical case and include photographic material from the operative intervention in accordance with ethical standards for the use of personal information and images.

Medical history of the patient

In early July 2024, a 55-year-old woman was admitted to the Obstetrics and Gynecology Clinic with a tumor on her vulva that had appeared 15 years earlier and had progressively grown over time. During this time, she did not see a gynecologist and avoided sexual intercourse. She felt embarrassed to disclose the presence of a large tumor on her vulva.

She had one normal vaginal birth at the age of 29 and she went into menopause at the age of 53, without taking hormone replacement therapy.

The patient has no accompanying diseases or bad habits. Past surgical history included appendectomy and partial resection of the right ovary for a ruptured corpus luteum cyst.

Physical examination

The only deviation from the general status was obesity with a BMI of 31.3 kg/m^2.

During the gynecological examination, the external genitalia revealed a parous woman with a pedunculated tumor formation of the same color as the rest of the skin, with a pedicle of 10 cm and a tumor diameter of 5.2 cm. The tumor formed painlessly, had a soft-elastic consistency, and a non-hyperemic scrotal surface. It originated in the middle one-third of the right labia majora of the vulva. The labia in the photo had no regional lymphadenopathy, the vagina had atrophic changes, the vaginal portion of the cervix was cylindrical, the cervical canal was closed, the uterus was not enlarged, there was anteversion flexion, and the adnexal areas were free of tumor formations on both sides ***(Fig. 1A)****.*

Instrumental and laboratory investigations

Pelvic transvaginal ultrasound and laboratory tests were unremarkable.

Management

Following the patient's informed consent for surgical treatment, the operative field was thoroughly disinfected under general anesthesia, and the polypoid mass was excised with a 15-mm margin away from the site of peduncle formation. A labiaplasty using single absorbable sutures was performed on the right labia majora ***(Fig. 1B)****. Blood loss was minimal.*

The postoperative period was uneventful and without complications. The patient was discharged after a two-day hospital stay. At follow-up within one month, there was no recurrence.

Histopathological examination

The histopathological analysis of the tumor formation showed a pearly white cut surface with one feeding vessel, and the microscopic examination revealed a benign fibroepithelial polyp of the vulva lined with multilayered, poorly keratinizing squamous epithelium ***(Fig. 2)****. The weight of the polyp was 115 g* ***(Fig. 3)****.*

Discussion

Polyps of the vulva are benign neoplasms with mesenchymal origin, composed of stroma and covered by squamous epithelium.[1] Their etiopathogenesis is unclear, but the appearance of these lesions results from a reactive hyperplastic process arising from subepithelial stromal cells.[1,7]

A hormonal response is induced in these cells as a result of the expression of estrogen and progesterone receptors at

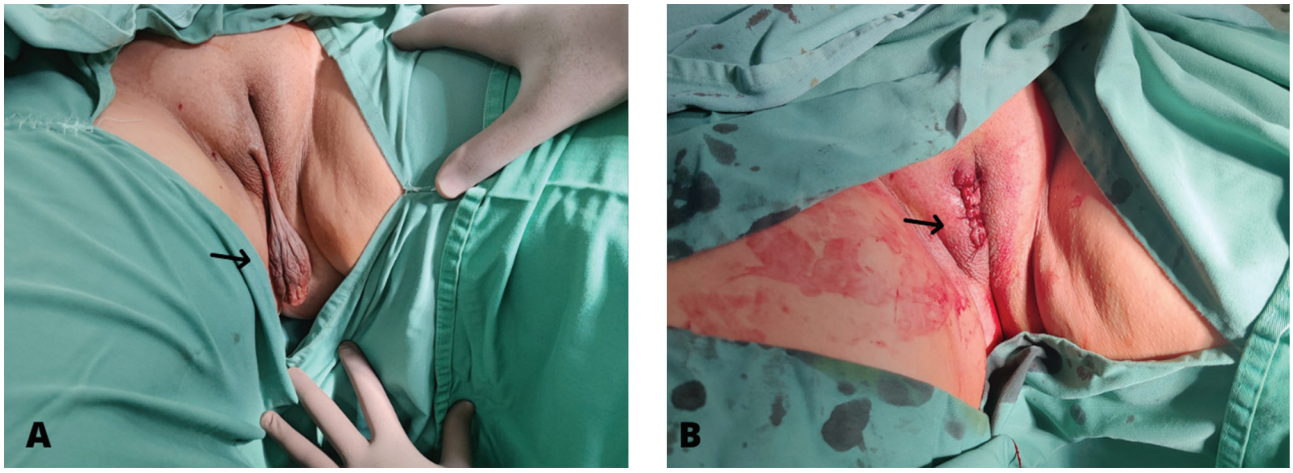

Figure 1. A. A single vulvar polyp with a peduncle emerging from the middle third of the long labia majora; **B**. State after excision and plastic surgery of the right labia majora.

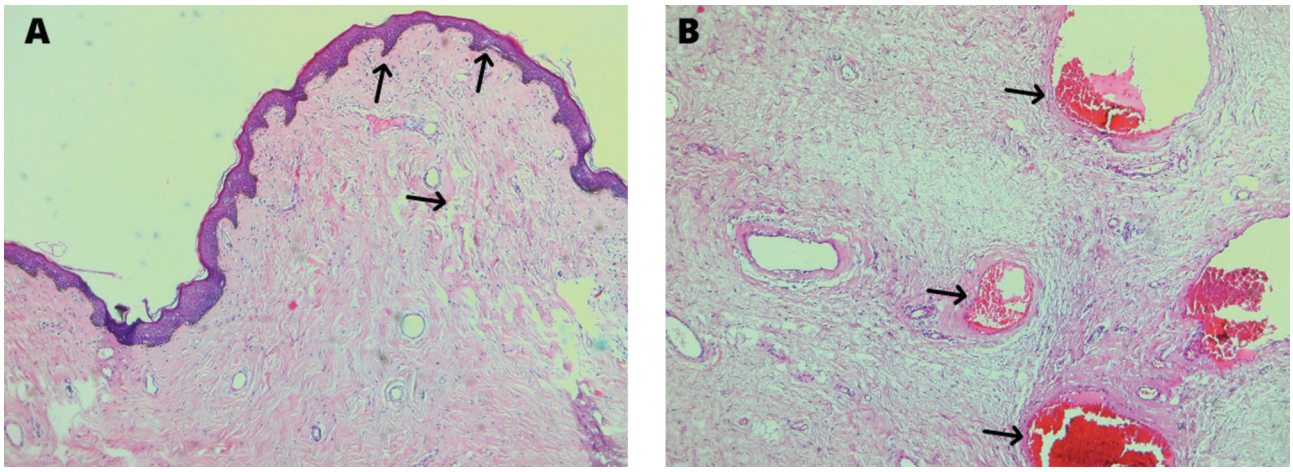

Figure 2. A. Fibroepithelial polyp covered by squamous epithelium with focal keratinization; **B**. Transverse section through the pedicle of the polyp shows thick-walled vessels (the underlying stromal component extends to the epithelium, hematoxylin-eosin, ×50).

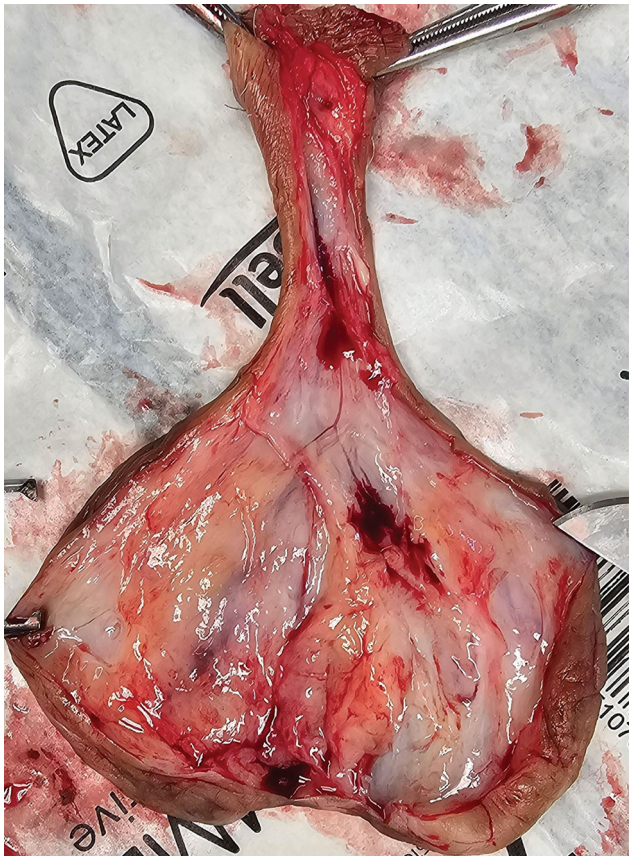

Figure 3. Sectional surface of the polyp, the feeding vessels, and pearly white stroma are visible.

increased levels of these hormones in reproductive age and during pregnancy and immunological reactivity. Another theory attributes their origin to inflammatory mechanisms and the final stages of granulation inflammation.[1,7,8]

Risk factors for the appearance of vulvovaginal neoplasms of the lower genital tract are pregnancy, some genetic diseases, and metabolic diseases such as diabetes mellitus, dyslipidemia, overweight, and obesity.[9,10] In 1988, Ostor et al. described the first case of a fibroepithelial polyp of the vulva.[4] Since then, single and multiple unilateral or bilateral polyps of the vulva, on a broad base or on a pedicle, up to 25 cm in diameter, have been described in the literature in children and adolescents and in reproductive age, as well as during pregnancy.[2,4,11,12]

In postmenopausal women, the incidence of fibroepithelial polyps is rare.[7] In our case, the woman is in postmenopausal period without hormone replacement therapy, but with the risk factor of obesity. The weight of the fibroepithelial polyp of more than 2000 g is associated with inflammatory changes in it and even sepsis as the first manifestation, reported by Amin et al.[5] Most of the vulvar polyps are asymptomatic.[7] As in the presented case, the polyp is asymptomatic, long-standing, single, pediculated with a pedicle size of 10 cm and its widest part 5.2 cm without evidence of an inflammatory process or regional lymphadenopathy. Ultrasound examination of vulvovaginal formations is an additional diagnostic method for differential diagnosis with hernia in this area.[2]

Neoplasms of the vulva in the postmenopausal period are mostly malignant. This necessitates their histopathological examination and the exclusion of diseases such as sarcoma.[2] Aggressive and superficial angiomyxoma, angiomyofibroblastoma, perineuroma and neurofibromas, and cellular angiofibroma are characteristic of the reproductive age but are also part of the differential diagnosis due to frequent localization in the vulvovaginal area.[2,4] The complete excision of vulvar polyps is extremely important because of the risk of recurrence and even the appearance of giant fibroblastoma, described by Ostör et al.[1,7,13,14] The risk of recurrence following surgical treatment necessitates long-term patient follow-up, which has not been reported in most cases for more than four years.[11,14] In our case, for a period of two months, there was no evidence of recurrence.

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Conclusions

This clinical case illustrates the possibility of fibroepithelial polyps of the vulva occurring in a postmenopausal woman who has not taken hormone replacement therapy but has concomitant risk factors. In this case, clinical diagnosis is of primary importance, and surgical treatment is the first choice. The volume of operative treatment depends on the clinical characteristics of the tumor formation and the histopathological examination verifies the correct diagnosis by rejecting a malignant process.

A preventive visit to a gynecologist will ensure early, timely diagnosis and treatment of benign and malignant neoplasms of the female reproductive system. Preventive gynecological examinations should be carried out not only during the reproductive years but also in postmenopausal women, especially in case of concomitant risk factors for tumor neoplasms.

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Competing interests

The authors have declared that no competing interests exist.

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References

1. Alhatem A, Heller SD. Fibroepithelial (stromal) polyp. PathologyOutlines.com; 2022 [cited 2024 Sep 20]. Available from: https://www.pathologyoutlines.com/topic/vaginafibroepithelial.html.
2. Lawal BK, Yahya A, Zubair SY, et al. Giant fibro-epithelial polyp of the vulva: A case report. J West Afr Coll Surg 2024; 14:229–32. doi: 10.4103/jwas.jwas_117_23
3. Madueke-Laveaux OS, Gogoi R, Stoner G. Giant fibroepithelial stromal polyp of the vulva: largest case reported. Ann Surg Innov Res 2013; 7. doi: 10.1186/1750-1164-7-8
4. Kurniadi A, Rinaldi A, Yulianti H, et al. Multiple vulvar giant fibroepithelial polyps: a rare case occurrence. Case Rep Obstet Gynecol 2022; 2022:1–4. doi: 10.1155/2022/5712925
5. Amin A, Amin Z, Farsi ARA. Septic presentation of a giant fibroepithelial polyp of the vulva. BMJ Case Reports 2018; bcr-222789. doi: 10.1136/bcr-2017-222789
6. Olawaiye AB, Cuello MA, Rogers LJ. Cancer of the vulva: 2021 update. Int J Gynecol Obstet 2021; 155:7–18. doi: 10.1002/ijgo.13881
7. Dura MC, Aktürk H, Sungur GŞ, et al. A giant fibroepithelial polyp of the vulva. Cureus 2023;15(5). doi: 10.7759/cureus.39152
8. Pharaon M, Warrick J, Lynch MC. Fibroepithelial stromal polyp of the vulva: case report and review of potential histologic mimickers. Int J Gynecol Pathol 2017; 37:e1–e5. doi: 10.1097/pgp.0000000000000437
9. Donata E. Giant fibroepithelial stroma polyp of vulva: A rare case. Journal of Pakistan Association of Dermatologists 2022; 32(3):647–9. Available from: https://www.jpad.com.pk/index.php/jpad/article/view/1983
10. Navada MH, Bhat PR, Rao SV. Large fibroepithelial polyp of vulva. Case Reports in Dermatological Medicine 2011; 2011(1):273181. doi: 10.1155/2011/273181
11. Rexhepi M, Trajkovska E, Besimi F, et al. Giant fibroepithelial polyp of vulva: a case report and review of literature. PRILOZI 2018; 39:127–30. doi: 10.2478/prilozi-2018-0051
12. Smet C, Gomes TG, Silva L, et al. Giant fibroepithelial vulvar polyp in a pregnant woman. BMJ Case Reports 2021; 14:e236106. doi: 10.1136/bcr-2020-236106
13. Östör 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. doi: 10.1097/00004347-198812000-00006.
14. Han X, Shen T, Rojas-Espaillat LA, et al. Giant cell fibroblastoma of the vulva at the site of a previous fibroepithelial stromal polyp. J Lower Gen Tract Dis 2007; 11:112–7. doi: 10.1097/01.lgt.0000245041.52718.90