

Fibroepithelial polyp of Nipple: A Rare Clinical Entity

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Abstract: *Fibroepithelial polyps (FEPs) are mesoderm-derived benign tumors of the integumentary system. They are usually located in the skin, oral cavity, urinary tract, and urogenital tracts. Rarely (incidence <2%), they can be located in the nipple area.⁽¹⁾ A 40-year-old woman presented with a mass arising from the tip of the right nipple for last 5 years since she stopped breastfeeding her second child. There was no history of lump in the breast, no pain and no discharge from nipple. On physical exam, a single pedunculated polyp, with rubbery consistency, arising from the right nipple was noted. In order to exclude malignancy and confirm the diagnosis, histopathology was done. Excision was performed and sent for histopathologic analysis which showed extensive fibrovascular tissue with dense collagen fibers deposition consistent with FEP. Surgical excision was done.*

1. Introduction

Fibroepithelial polyps (FEPs) or acrochordons are common slow growing mesoderm-derived benign tumors of the integumentary system. They are usually located in the skin, oral cavity, urinary tract⁽⁵⁾, and urogenital tracts and are very rarely seen over the breast. Usually FEPs grow less than 5cm in size but rarely can grow more than 5 cm. FEPs are considered to be estrogen sensitive and thus making women more susceptible⁽¹⁾. The incidence of the fibroepithelial polyps increases with increasing age⁽²⁾. The aim of this report is to illustrate a case of FEPs emerging from an uncommon location, the right breast nipple.

2. Case Report

A 40-year-old woman presented with a mass arising from the tip of right nipple for the last 5 years since she stopped breastfeeding her second child. The lesion was painless,

non-pruritic. The lesion was initially smaller in size and progressively increased in size. There was no history of breast lump or any nipple discharge. She has two children with the last pregnancy 5 years back and normal menstrual history. She has no family history of breast cancer. On physical examination, a single large 3.0 x 2.0 x 2.0 cm short pedunculated polyp lesion, with rubbery consistency, arising from the right nipple was noted (figure 1,2). There was no apical or axillary lymphadenopathy. The other breast and nipple areola complex was normal. Surgical excision of the polyp sparing the right nipple was performed and the specimen was sent for histopathological examination. The histopathological examination showed a polypoidal tissue lined by hyperplastic stratified squamous epithelium. Subepithelium shows focal keratinous cysts and loss of collagenous stroma with congested blood vessels mild chronic inflammatory infiltrate and focal edema which is suggestive of fibroepithelial polyp (Figure 3, 4).

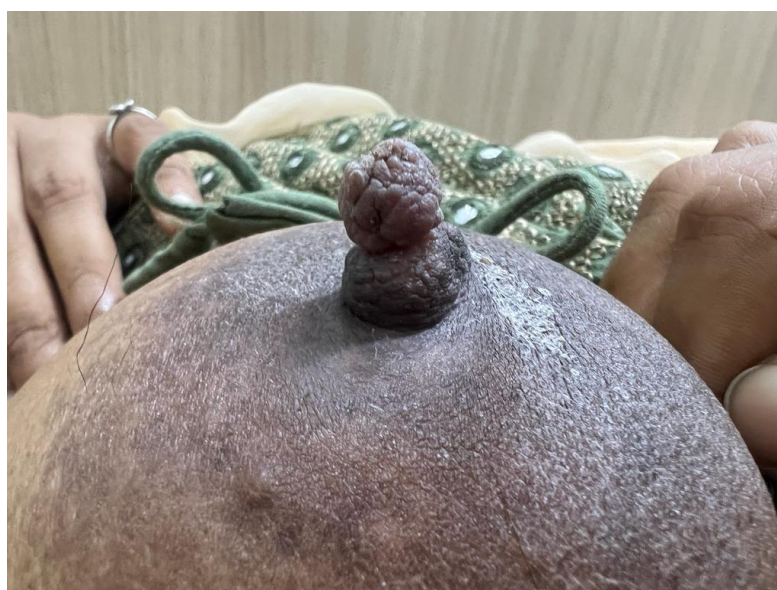


Figure 1



Figure 2

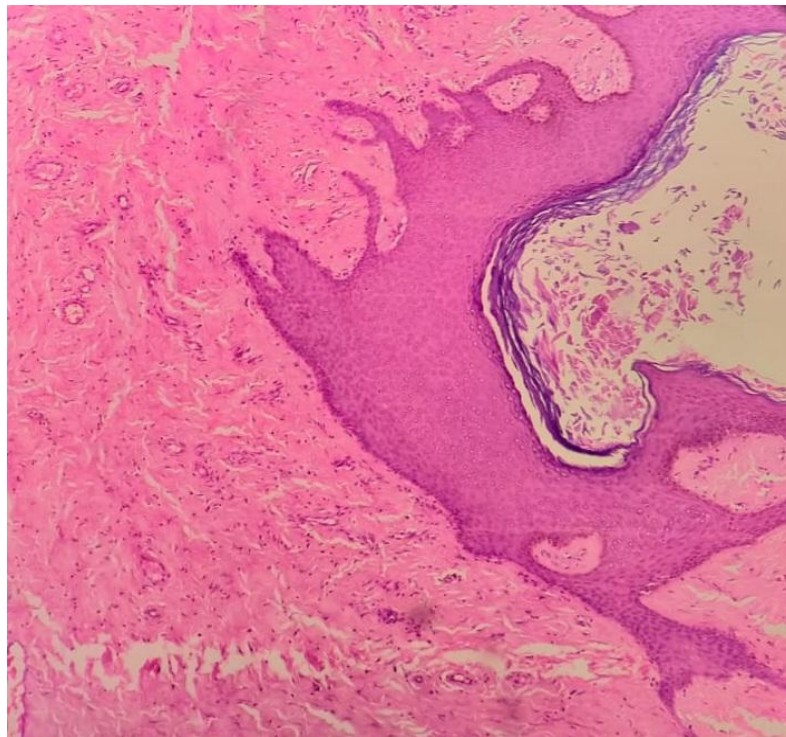


Figure 3

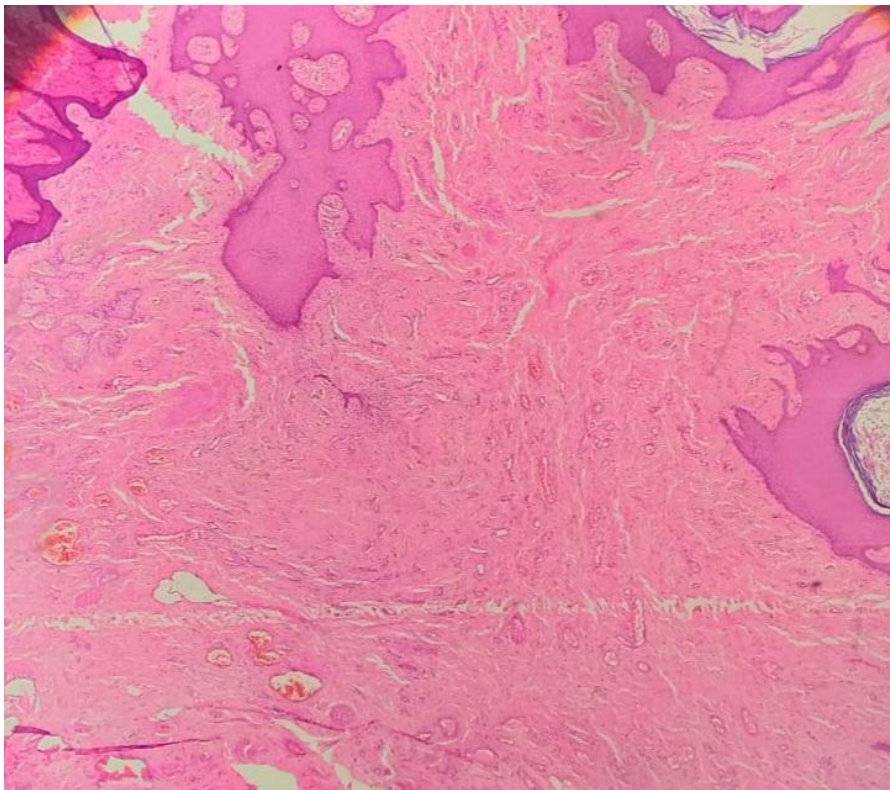


Figure 4

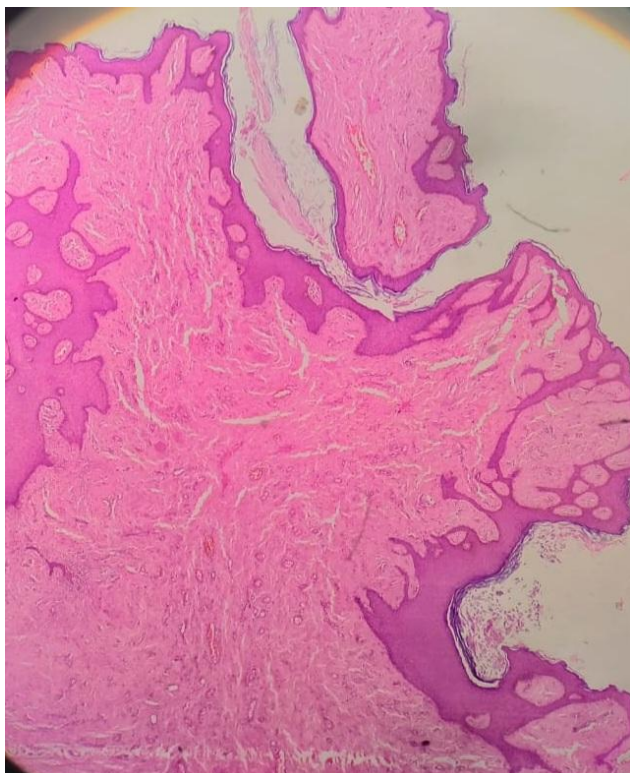


Figure 5

3. Discussion

Fibro epithelial tumours are slow-growing benign tumor of mesodermal origin most frequently arising in skin folds in locations like the neck, axilla, perineum, eyelids and chest wall. Rarely (incidence <2%), they can be located in the nipple area. They might also occur on female genitalia like vulva as well as male external genitalia like penis and

urethra. ⁽⁴⁾These tumors on the nipple present as a diagnostic challenge due to the rarity of the location as only few cases have been reported in the literature. The differential diagnoses for fibroepithelial polyp on the nipple includes benign conditions like adnexal polyp, supernumerary nipple, neurofibroma, adenoma, wart ⁽⁶⁾ and few malignant conditions like leiomyoma and epidermal cystintraductal papilloma, and metaplastic (spindle cell) carcinoma can also mimic fibroepithelial polyp, so it is important to undergo histopathological analysis for definitive diagnosis

The histology shows

Epidermis may be hyperplastic and papillomatous and may have keratotic cysts and pigment in basal epidermal keratinocytes ⁽³⁾

Loose fibrocollagenous stroma, abundant vessels

Usually no adnexa

Variable adipose tissue in larger ones - lipofibroma

Traumatic changes: lichen simplex chronicus, epidermal necrosis, ulceration, pagetoid dyskeratosis, lichen sclerosus-like change

4. Conclusion

Fibroepithelial polyp of the nipple is a very rare, but benign tumor and can be easily managed with surgical excision and so it becomes important to differentiate this lesion from other benign and malignant growths.

References

- [1] Shaaban AM, Turton EP, Merchant W. An unusual case of a large fibroepithelial stromal polyp presenting as a nipple mass. BMC research notes. 2013 Dec;6(1):1-5.
- [2] Banik R, Lubach D. Skin tags: localization and frequencies according to sex and age. Dermatology. 1987 Oct 13;174(4):180-3.
- [3] .Banga V, Jain S. Fibroepithelial polyp (Acrochordon) of breast nipple-A rare clinical presentation. IP Arch Cytol Histopathol Res. 2022;28:54-6.
- [4] Belli AK, Somuncu E, Aydogan T, Bakkaloglu D, Ilvan S, Aydogan F. Fibroepithelial polyp of the nipple in a woman. The Breast Journal. 2013 Jan;19(1):111-2.
- [5] Kaba M, Kaba S, Kaya TY, Eren H, Pirinççi N. A giant pedunculated urothelial polyp mimicking bladder mass in a child: a rare case. Case Reports in Pediatrics. 2014 Feb 23;2014.
- [6] Spyropoulou GA, Pavlidis L, Trakatelli M, Athanasiou E, Pazarli E, Sotiriadis D, Demiri E. Rare benign tumours of the nipple. Journal of the European Academy of Dermatology and Venereology. 2015 Jan;29(1):7-13.