Giant Fibroepithelial Polyp of the Nipple with Dermatitis Neglecta

A 23-year-old woman presented with a brownish-black, pendulous, polypoid mass hanging freely from her left nipple with its surface resembling a cauliflower [Figure 1A]. It was present since childhood and did not cause any discomfort. However, she started getting concerned in her late teens due to its increasing size. After marriage, she and her husband decided to seek consultation. The pedunculated mass was approximately 6 cm in its long axis with no bleeding, discharge, or ulcers on the surface. The rest of the nipple–areola complex was normal. No breast mass was palpable in the surrounding area and axillary lymphadenopathy was absent. The rest of the skin was normal. The uncharacteristically pigmented grooves of the mass showed inspissated black material that could be removed by firmly rubbing with isopropyl alcohol [Figure 1B and C]. She admitted to not having cleaned the growth for several years for the fear of causing trauma. She had no other lesions elsewhere and was not obese. There was no personal or family history of dyslipidemia or diabetes mellitus. Her father had a history of multiple skin tags. A clinical diagnosis of a giant fibroepithelial polyp (FEP) with lesional dermatitis neglecta was made. Radiofrequency ablation was carried out under local anesthesia [Figure 1D]. There was no evidence of scar formation after 1 month of follow-up. Histopathological examination showed a polypoid growth with areas of atrophic epidermis with associated attenuation of some rete ridges and focal acanthosis. Microscopic evidence of dermatitis neglecta could be appreciated as keratin strands and whorls in the interlobular grooves. The core of the polyp was filled with longitudinally oriented collagen bundles and elongated blood vessels in the center. No appendageal structures were visible [Figure 2].

FEPs, also known as soft fibromas and acrochordons, are essentially enlarged skin colored or hyperpigmented, skin tags.[1-3] They are often pedunculated with a variably sized stalk, cauliflower-like surface, and are usually seen in axillae, groin, and gluteal region. They are occasionally seen on oral mucosa, penis, urethra, and vulva.[1-3] The mammary milk line that extends from breast to the genitals explains the tendency for some breast tumors including FEP to occur over genitalia.[4] FEPs are also known to be associated with components of metabolic syndrome including obesity. Human papillomaviruses 6 and 11 have also been incriminated in their development.[1] Pedunculated lesions may become twisted, infarcted, and fall off spontaneously.[1] Though their clinical characteristics are usually unmistakable, the unusual shapes, size, and locations may cause confusion. Histologically such lesions are typically polypoid with a prominent fibrovascular core. The stroma is distinctive in its appearance and may vary in cellularity of bland spindle-shaped cells. Stellate and multinucleated stromal cells are typically seen at the epithelial-stromal interface. Conversely, some lesions are distinctly cellular showing confusing nuclear pleomorphism and increased mitotic activity including atypical mitoses, which may confuse the pathologist. Since conditions ranging from pedunculated seborrheic keratosis to nodular exophytic (polypoid) melanoma can occasionally mimic FEPs, it is prudent to biopsy such FEPs.[1] A giant FEP over an unusual location like the nipple is rare with very few cases reported in the literature.[3,5] The associated dermatitis neglecta due to accumulation of dirt, sebum, and keratin in the grooves of the FEP is particularly striking.[6] Finally, the psychological impact of such large unwieldy lesions on the breast and genitalia of women should not be underestimated. In this patient, the embarrassment was significant enough to keep the gradually growing lesion a secret till she got married. In addition, the patient's long-standing anxiety about damaging it by handling and cleaning it resulted in dermatitis neglecta, which could have been a potential source of infection. The beneficial effect of a simple, cost-effective ablative procedure like radiofrequency surgery is highlighted.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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.

Shyam Bhanushankar Verma

Consultant Dermatologist, Nirvan Bungalow, Makarpura Road, Vadodara 390009, Gujarat, India.

Address for correspondence: Dr. Shyam Bhanushankar Verma, Nirvan Bungalow, Makarpura Road, Vadodara 390009, Gujarat, India.
E-mail: skindiaverma@gmail.com

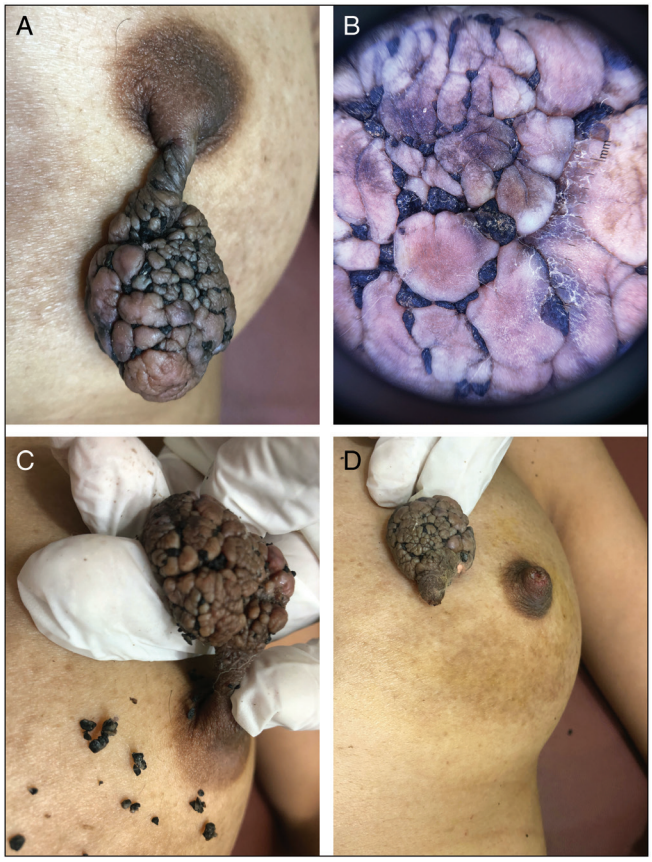

Figure 1: (A) Giant fibroepithelial polyp with a cauliflower like surface hanging from the nipple by a long pedicle. (B) Dermoscopy shows black colored deposits of debris diffusely wedged between the grooves of the tumor (15× magnification Heinz DL3N). (C) Black debris after rubbing the lesion firmly with cotton wool dipped in isopropyl alcohol. (D) FEP excised by radiofrequency ablation

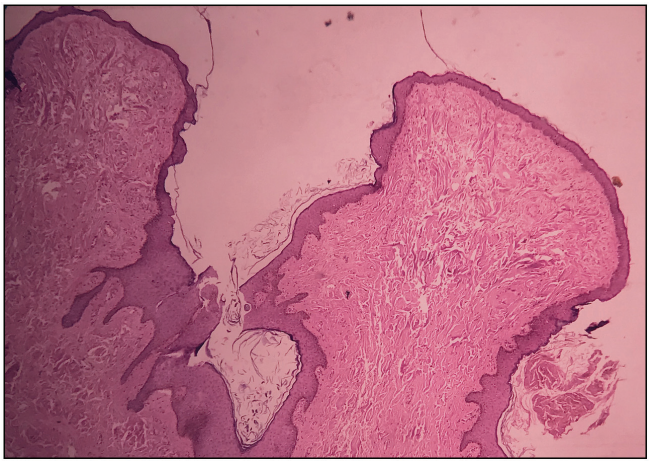

Figure 2: Polypoid growth with areas of atrophic epidermis and accompanying attenuated rete ridges and focal acanthosis. Keratin whorls, strands, and other debris in the interlobular grooves were seen. Core of the polyp is filled with longitudinally oriented collagen bundles and elongated blood vessels in the center (H&E 400×)

References

1. Acrochordon: Background, pathophysiology, etiology [Internet]. Emedicine.medscape.com; 2021. Available from: https://emedicine.medscape.com/article/1060373-overview. [Last accessed on 2021 Apr 15].
2. You HS, Park SM, Cho HH, Kim WJ, Mun JH, Song M, *et al*. A case of soft fibroma of the nipple with a cauliflower-like appearance. Ann Dermatol 2015;27:102-3.
3. Arora BK. A clinical case of large fibroepithelial polyp of breast nipple. Int J Case Rep Images 2019;10:100997Z01BA2019.
4. Shaaban AM, Turton EP, Merchant W. An unusual case of a large fibroepithelial stromal polyp presenting as a nipple mass. BMC Res Notes 2013;6:345.
5. Colak E, Ikinci A, Kucuk GO, Kesmer S, Yildirim K. Giant fibroepithelial polyp of the perineum: Giant fibroepithelial polyp. Int J Surg Case Rep 2015;17:126-7.
6. Saha A, Seth J, Sharma A, Biswas D. Dermatitis neglecta—a dirty dermatosis: Report of three cases. Indian J Dermatol 2015;60:185-7.

Access this article online

Quick Response Code:

Website:
www.jcasonline.com

DOI:
10.4103/JCAS.JCAS_131_21

How to cite this article: Verma SB. Giant fibroepithelial polyp of the nipple with dermatitis neglecta. J Cutan Aesthet Surg 2022;15:204-6.