JK SCIENCE pISSN: 0972-1177

CASE REPORT

Epidermal Cysts Masquerading as Steatocystoma Multiplex in the Vulva - A Rare Case Report

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Abstract

Epidermal cysts are the most common benign cutaneous cysts derived from the follicular epithelium and most commonly occur over the face, trunk, extremities, and scalp. We report a 34-year-old female who presented to our outpatient department with multiple yellowish raised lesions over the genital region for 3 years associated with itching. On examination, multiple yellowish papules were noted over the vulva. On puncturing one of the cysts, yellowish cheesy material was seen. A provisional diagnosis of steatocystoma multiplex was considered based on the morphology of the lesions. Histopathological examination showed findings leaning towards the diagnosis of an epidermal cyst.

Keywords

Steatocystoma Multiplex, Vulva, Epidermal Cysts

Introduction

Epidermal cysts are encapsulated intradermal or subcutaneous cysts filled with keratin.[1] They present as well-demarcated, skin-coloured to yellowish nodules, and may have a visible punctum. The size of these cysts can vary from a few millimeters to several centimeters in diameter. Epidermal cysts can occur anywhere on the body but are most common over the face, torso, extremities, scalp, and rarely over the vulva.[2]

Steatocystoma multiplex is a hamartomatous malformation of the pilosebaceous duct with autosomal dominant inheritance.[3,4] They generally appear in adolescence or early adulthood. They present as asymptomatic cysts in the dermis. They can occur as isolated, singular lesions termed steatocystoma simplex or as multiple lesions termed as steatocystoma multiplex. Steatocystoma multiplex most commonly occurs over the trunk, upper arms, and thighs and rarely over the face, vulva, and groin regions. They can be associated with keratin 17 gene mutation, pachyonychia congenita.[5]

Case report

A 34-year-old female patient presented to the OPD with complaints of multiple yellowish raised lesions over the genital region for 3 years *(Fig 1)*. The onset was insidious and they gradually increased in size and number and were associated with itching. There was no history of trauma or pain. There was no significant family history. On dermatological examination, multiple non-tender yellow to white cystic papules of size varying from 2 to 4 mm, were noted over the labia majora. On opening the cyst, yellowish cheesy material was seen *(Fig 2)*. Oral mucosa

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Manuscript Received: 03.07.2022; **Revision Accepted**: 13.09.2022;

Published Online First: 10 April, 2023

Open Access at: https://journal.jkscience.org

Cite this article as: Gayathri M, Sharada RG, Sathyanarayanan R, Narasimhalu CRV, Vimal Chander R. Epidermal cysts masquerading as steatocystoma multiplex in the vulva - a rare case report. JK Science 2023;25(2):113-115

was normal. Hair and nails were normal. Based on the clinical presentation, a provisional diagnosis of steatocystoma multiplex was considered and one of the lesions was excised and sent for histopathological examination (HPE) revealed the presence of cysts lined by stratified squamous epithelium enclosing flakes of lamellated keratinous material in the dermis, consistent with the diagnosis of an epidermal cyst *(Fig3).*

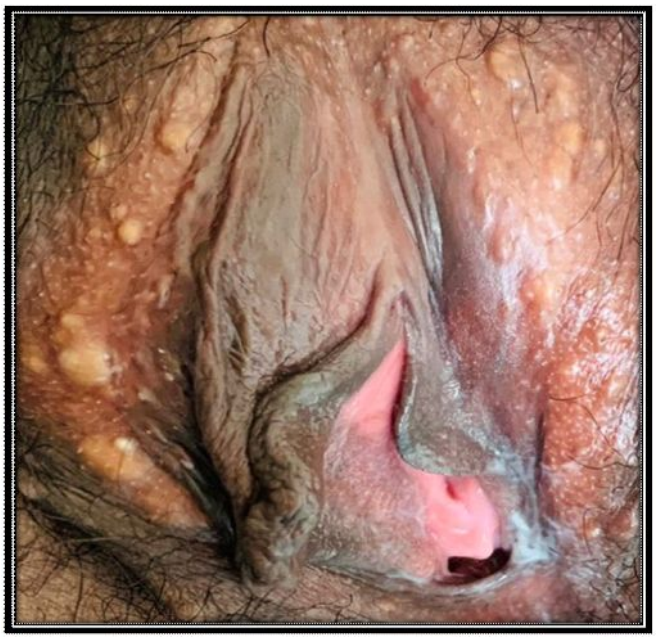

Fig 1. Yellow-coloured papules over the vulva

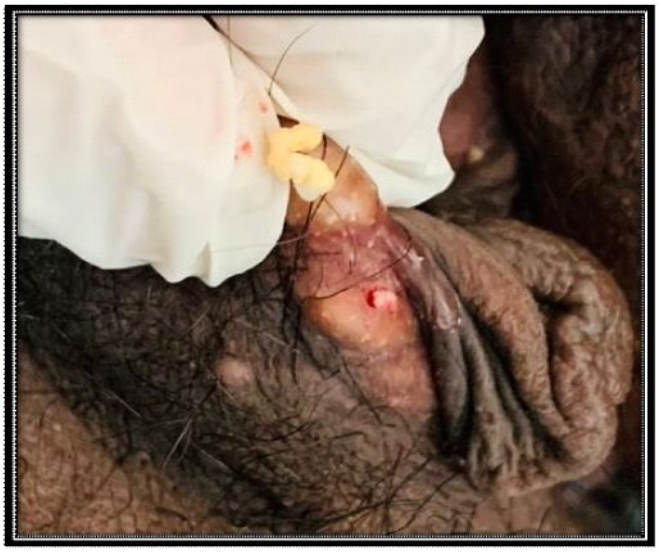

Fig 2 Yellowish cheesy material on opening the cyst

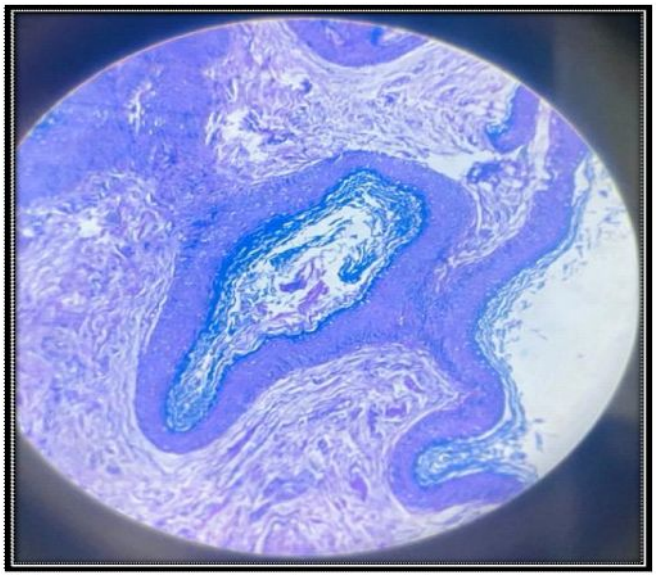

Fig 3. Cysts lined by stratified squamous epithelium enclosing lamellated keratinous material in the dermis

Discussion

Epidermal cysts (Syn: Infundibular cysts, Epidermoid cysts, Epidermal inclusion cysts, Keratin cysts) are the most common benign cysts derived from the follicular infundibulum.[6] The cysts typically occur in the third and fourth decades of life. They are more common in males than females. They can be primary or can arise from a disrupted follicle or traumatically implanted epithelium into the dermis or subcutaneous tissue. They grow slowly and their growth process stops when they reach 5cm in size. Tiny superficial epidermal cysts (<1cm) are called milia. They are mostly sporadic in origin, but they can be found in association with autosomal dominant disorders such as Gardner syndrome and Gorlin syndome .

They are usually, asymptomatic but can become secondarily infected and be painful at presentation. Epidermal cysts are differentiated from steatocystoma multiplex by the presence of punctum and yellowish cheesy material on opening the cyst.[7] The most effective treatment involves complete surgical excision of the cyst with the cyst wall intact. Infected cases should be treated with antibiotics prior to excision. Alternative surgical approaches include incision and expression of cyst contents, punch biopsy, and expulsion of the intact cyst through the small defect or standard excision. If there is surrounding inflammation, intralesional triamcinolone to

decrease inflammation can be given. The entire cystic lining should be removed to prevent a recurrence.

Conclusion

This case is being reported due to its rare site of occurrence. Histopathological examination is essential for differentiating from other cysts in such cases.

Financial Support and Sponsorship

Nil.

Conflicts of Interest

There are no conflicts of interest.

References

1. Pehlivan M, Özbay PÖ, Temur M, Yýlmaz Ö, Gümüþ Z, Güzel A. Epidermal cyst in an unusual site: a case report. Int J Surg Case Rep 2015;8C:114-6.
2. Stone MS, Bolognia JL, Jorizzo JL, Schaffer JV. Cysts. In: Callen JP, Cerroni L, Heymann WR, Hruza GJ, Mancini AJ, Patterson JW, *et al*., editors. Dermatology. 3rd Ed. Philadelphia: Elsevier Saunders; 2012. pp. 1817-1822.
3. Park J, Hwang SR, Kim DW, Kim JI, Yun SK. Late onset localized steatocystoma multiplex of the vulva. Indian J Dermatol Venereol Leprol 2014;80(1):89-90.
4. Kartal SP, Sezer E, Alper M, Gonul M. Steatocystoma multiplex limited to the vulva: report of a very rare case successfully treated by a simple surgical method. Brit J Med Med Res (BJMMR) 2016;16(11):1-5.
5. Rongioletti F, Cattarini G, Romanelli P. Late onset vulvar steatocystoma multiplex. Clin Exp Dermatol 2002;27(6):445-47.
6. Weir CB, St. Hilaire NJ. Epidermal inclusion cyst. In: StatPearls [Internet]. 2022 Jan [cited 2022 Aug 18]. Available from: https://www.ncbi.nlm.nih.gov/books/NBK532310.
7. Sharma A, Agrawal S, Dhurat R, Shukla D, Vishwanath T. An unusual case of facial steatocystoma multiplex: a clinicopathologic and dermoscopic report. Dermatopathology (Basel) 2018;5(2):58-63.