

## A SKIN COLOURED PLAQUE OVER BACK - MIMESIS OF BENIGN TUMOURS

Paras Choudhary<sup>1</sup>, Bhushan A Darkase<sup>1</sup>, Atul M Dongre<sup>1</sup>, Uday S Khopkar<sup>1</sup>

<sup>1</sup>Department of Dermatology, Kem hospital, Parel, Mumbai 400012

**Corresponding Author:**

Paras Choudhary

Department of Dermatology

Kem hospital, Parel, Mumbai 400012 • Email: paras2704@gmail.com

**Abstract**

Fibroepithelioma of Pinkus (FEP) is an uncommon tumour in Indian population. FEP clinically resembles a variety of benign skin tumors which are not routinely excised or biopsied. Diagnostic confirmation is necessary because the nature of this tumor remains a subject of debate.

**Key words:** Fibroepithelioma of Pinkus (FEP)

**Introduction**

Fibroepithelioma of Pinkus (FEP) is rare and often misdiagnosed clinically as it imitates multiple benign skin tumours. Some authors argue that the relative rareness of this tumour is mainly because of its misdiagnosis. Differential diagnosis in case of FEP is dermal nevus, fibroma, acrochordon, and seborrheic keratosis, which are not routinely excised or biopsied. Dermoscopy and confocal microscopy have emerged as non-invasive tools but histopathology remains the gold standard for diagnosis.

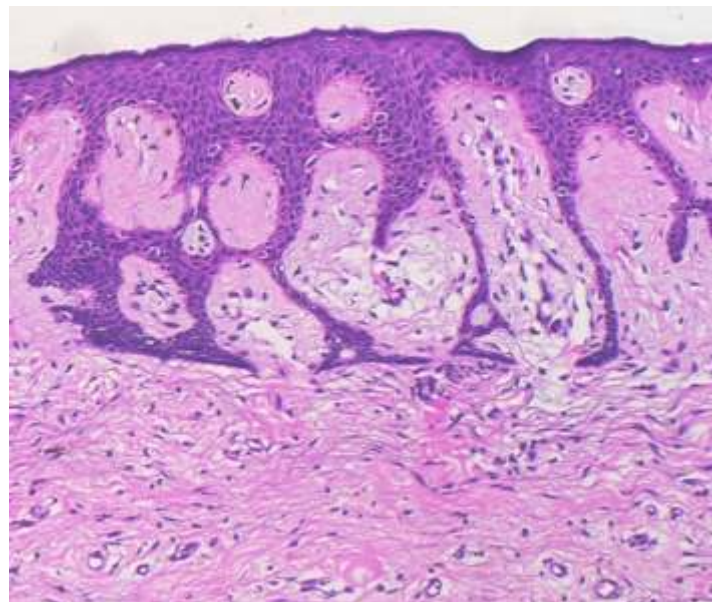
**Case report**

An 89-year-old male, presented with an asymptomatic skin colored to reddish lesion over back for 6 years. The Lesion had slowly grown to present size over a period of 6 years.

Examination revealed a solitary, non-tender skin colored plaque of size 4×3 cm with non-tender central erythematous nodule. Surrounding the plaque there was a rim of brown-black hyperpigmentation present. [Figure 1]



**Figure 1 :** A solitary, non-tender skin coloured plaque of size 4×3 cm with non-tender central erythematous nodule with a rim of hyperpigmentation.



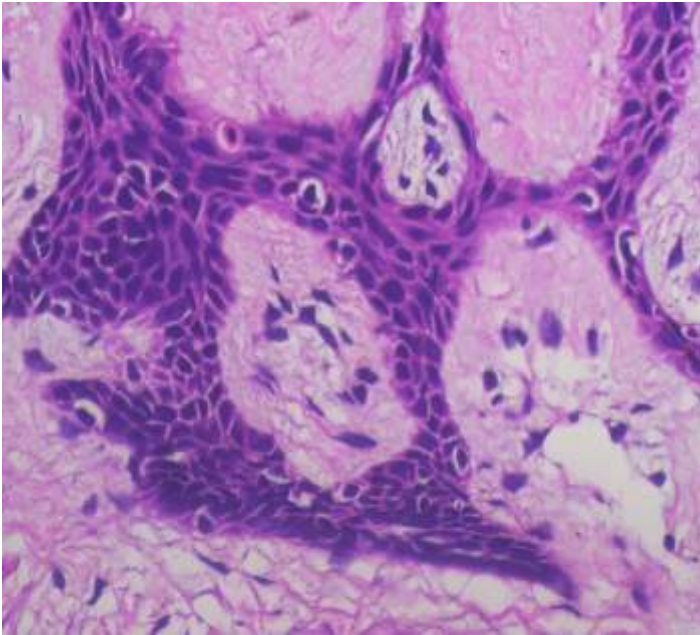
**Figure 2 :** Epithelial neoplasm that shows a connection with surface epidermis at several places.

A clinical differential of appendageal tumor, intradermal nevi was kept in mind and punch biopsy was taken for further confirmation.

Histopathological examination revealed epithelial neoplasm that shows a connection with surface epidermis at several places [Figure 2]. The tumour islands were made up of small round cells that show uniformly stained and dark nuclei no nucleoli. The neoplastic cells were arranged in a proliferation of thinned out rete ridges with small bulbous ends that show hair germ like appearance [Figure 3]. The surrounding stroma shows fibroplasia [Figure 4]. There were no clefts between the stroma and the epithelium.

**Discussion**

Fibroepithelioma of Pinkus was first described by Hermann Pinkus. It presents as flesh-colored to a pink solitary, sessile or pedunculated papule, plaque or nodule on the trunk often resembling a fibroma, intradermal nevus, seborrheic keratosis, achrochordon. But large pedunculated, polypoid or ulcerated

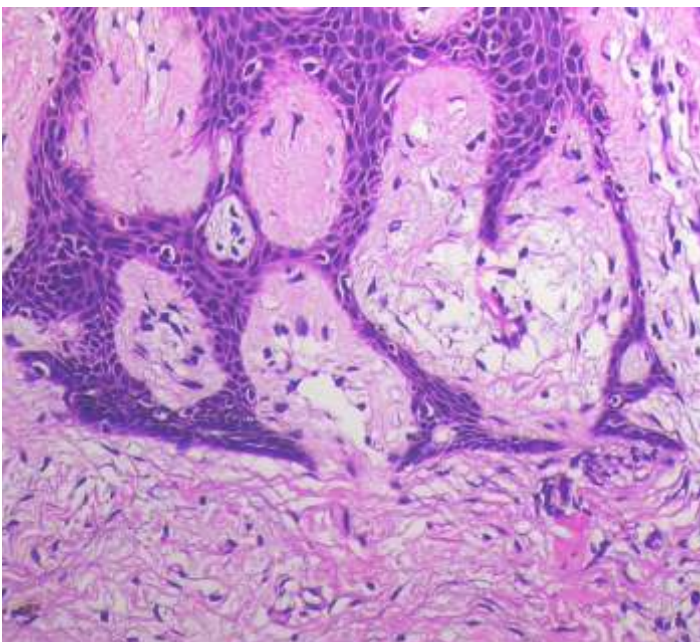


**Figure 3 :** The neoplastic cells are arranged in a proliferation of thinned out rete ridges with small bulbous ends that show hair germ like appearance.

cases have also been reported . It is commonly reported to occur in adults aged 40–60 years. However, a few cases in the pediatric population have been reported. The strong predilection for the lumbar region and for the female gender differentiates FEP from other BCC subtypes that usually arise on sun-exposed areas and predominantly in males .

Dermoscopy of FEP demonstrates white streaks and fine arborizing vessels with occasionally dotted vessels. When pigmented, features of FEP also include structure-less gray-brown areas and blue-gray dots. The hallmark of confocal microscopy is a fenestrated pattern demonstrating dark “holes” that correspond to the fibrous stroma surrounding tumour strands .

The gold standard diagnostic test for FEP is a skin biopsy for histopathologic examination. It consists of basaloid cells



**Figure 4 :** The surrounding stroma shows fibroplasia.

arranged in cords and columns, which anastomose with each other. Stroma surrounding these cords and columns is thick and rich with fibrocytes. These columns and cords may show palisading and follicular germ-like structures formation. Many of the cords and columns show connections with the surface epidermis .

Hermann Pinkus initially classified it as a premalignant fibroepithelial tumor . Later on, FEP was classified as a subtype of basal cell carcinoma, although some consider FEP as a variant of trichoblastoma . Some consider it as a benign and unusual counterpart of BCC, while others think it a malignant neoplasm. Finding such as expression of androgen receptor is shared by BCC and FEP, which is minimal in trichoblastomas; whereas FEP and trichoblastomas display Merkel cells, which are usually absent in BCC . In another study, authors found that tumour-specific type of epithelial hyperplasia in FEP that is positive for the stem cell marker PHLDA1 and present a unifying concept of FEP as a subtype of BCC.

Recent research highlights the fact that bcc and trichoepithelioma share common cell origin, which is the epithelial stem cells of the hair follicle. So it is proposed that FEP might be a trichoblastic tumor intermediate between trichoepithelioma and bcc .

There are case reports showing an association of nodular bcc with FEP supporting its malignant nature . So its classification still remains controversial.

Local excision of FEP is recommended treatment of choice and is almost universally curative without recurrence. Our patient 89-year old male also presented as an asymptomatic plaque with central nodule over back. Dermoscopy or confocal microscopy was not done in our case but histopathological examination did demonstrate classic histopathologic features for FEP (Figure 2,3,4). The morphological resemblance to benign skin tumours is one of the cause for its misdiagnosis and relative rareness. In the light of controversial malignant nature of FEP, early diagnosis and curative treatment with complete local excision are mandatory.

#### How to cite this article:

Choudhary P, Darkase BA, Dongre AM, Khopkar US. A skin coloured plaque over back - Mimesis of benign tumours. *JDA Indian Journal of Clinical Dermatology* 2020;3:

#### Reference

1. Pollard CWL, Usaf MC, Grenier MAJLS, Kobayashi CTT, Ret U. Novel Presentation of Fibroepithelioma of Pinkus on the Ear of a Patient Treated on a Panamanian Humanitarian Mission. 2018;00(March):8-10.
2. Mihai MM, Voicu C, Lupu M, et al. Fibroepithelioma of Pinkus (FeP) Located in the Left Lower Quadrant of the Abdomen - Case Report and Review of the Literature. 2017;5(4):439-444.
3. Reggiani C, Longo C. Case and Review Fibroepithelioma of Pinkus : Case Reports and. 2013: 207-211.
4. Dongre AM, Khopkar US, Kalyanpad YN, Gole P V. Fibroepithelioma of Pinkus in continuity with nodular basal cell carcinoma : A rare presentation. 2016:285-287.
5. Longo C, Pellacani G, Tomasi A, Mandel VD, Ponti G. Fibroepithelioma of Pinkus : Solitary tumor or sign of a complex gastrointestinal syndrome. 2016:797-800.
6. Letter N. Fibroepithelioma of Pinkus : A distinctive variant of trichoblastic carcinoma. 2013:2-3.