

Letter to Editor

## Epithelioma Cuniculatum

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Received: 18 May 2024  
Accepted: 25 June 2024  
Published: 23 August 2024

DOI  
10.25259/IJPGD\_86\_2024

**Quick Response Code:**



Dear Editor,

Verrucous carcinoma is a well-differentiated squamous cell carcinoma (SCC), usually affecting men in fifth and sixth decade of life. It grows slowly over decades, rarely metastasises, but often recurs and invades locally.<sup>[1]</sup> There are three main subtypes based on location: Oral florid papillomatosis/Ackerman's tumour (oral cavity), Buschke-Lowenstein tumour (anogenital region) and epithelioma cuniculatum (EC) on the feet. EC typically presents as a single, wart-like growth with keratin-filled channels and foul-smelling discharge on the plantar surface.<sup>[2]</sup> We report a case of a 63-year-old female with EC on the dorsum of her feet, including dermatoscopic findings.

A 63-year-old woman presented to outpatient department with a single cauliflower-like growth on the side of her left foot, which had been present for the past 1 year. Initially, the lesion appeared near the root of the 4<sup>th</sup> tarsal bone, resembling the size of a grain and subsequently grew over the year to its current dimensions. The patient was non-diabetic, normotensive and had no history of any chronic conditions. On examination, a well-demarcated, verrucous irregular plaque measuring 3 × 4 cm was observed over the 4<sup>th</sup> interdigital space extending proximally over the dorsum of the foot, associated with few foci of haemorrhagic crusting [Figure 1]. Dermoscopy of the plaque showed milky red structureless areas, blood spots on keratin scales and polymorphous vascular patterns (Coiled and looped) [Figure 2a]. Laboratory investigations including complete blood count, liver and renal function tests yielded normal results. Local site X-ray showed no evidence of bony involvement.

Considering the clinical differentials such as tuberculosis verrucosa cutis, giant verruca vulgaris, chromoblastomycosis and verrucous carcinoma, a skin punch biopsy was performed. The biopsy revealed epidermis showing hyperkeratosis, parakeratosis, papillomatosis and downward prolongation of rete ridges. Islands of squamous epithelium were noted, extending into the upper dermis amidst dense acute-on-chronic inflammation. The findings strongly suggested malignancy, prompting a wide local excision [Figure 2b-d]. Postoperatively, histopathological examination of the excised tissue confirmed moderately differentiated SCC with clear margins and no signs of lymphovascular or perineural invasion [Figure 1b]. Considering the morphology and the histopathological findings, a diagnosis of EC was confirmed.

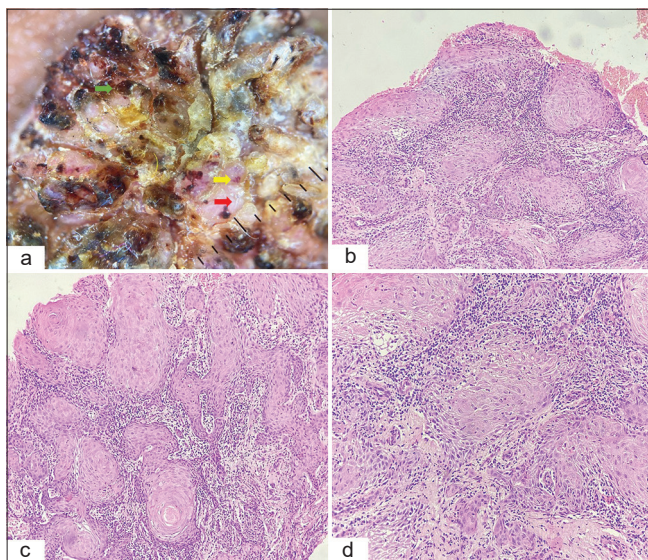
EC was first described by Aird *et al.* in 1954.<sup>[2]</sup> According to Kuncand Biernat, the diagnostic criteria includes (i) mounded surface with a thin keratin layer, (ii) sinuses and orifices lined with squamous epithelium, (iii) sinuses descending from a flat surface, (iv) deep crypts lined with flattened cell epithelium, (v) crypts filled with laminated keratin and parakeratosis, (vi) 'spidery' prolonged rete ridges and (vii) oedematous and myxoid stroma.<sup>[3]</sup> Our patient exhibited all these features along with surface verrucosity.

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**Figure 1:** Clinical images: (a) single well-demarcated, verrucous irregular plaque over the 4<sup>th</sup> interdigital space extending proximally over the dorsum of the foot. (b) Post-excision image.



**Figure 2:** (a) Dermoscopy. Milky red structureless areas (red arrow), blood spots on keratin scales (green arrow) and polymorphous vascular patterns (Coiled and looped) (yellow arrow). ( $\times 10$ , DL4 Dermlite, non-polarised). Histopathology. (b) Epidermis showing parakeratosis, downward elongation of rete ridges. Upper dermis showing invasion of islands of squamous epithelium surrounded by lymphocytic reaction and (c) keratin pearls. [Haematoxylin and eosin (H&E),  $\times 10$ ] (d) Islands of squamous epithelium and lymphocytic reaction. (H&E,  $\times 40$ ).

The dermoscopy of SCC reveals milky red structureless areas, blood spots on keratin scales, white fine scales and a vascular pattern with complex looped, dotted and coiled vessels.<sup>[4]</sup> We observed similar findings in our case.

With our literature search, a total of 117 cases of EC have been documented worldwide.<sup>[1]</sup> Nearly, all reported instances of EC have affected the plantar surface of the foot, with only three cases documented over the dorsum of foot.<sup>[5]</sup> Wide local surgical excision with meticulous margin control stands as the primary therapeutic modality for EC.

#### Ethical approval

Institutional Review Board approval is not required.

#### Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent.

#### Financial support and sponsorship

Nil.

#### Conflicts of interest

There are no conflicts of interest.

#### Use of artificial intelligence (AI)-assisted technology for manuscript preparation

The authors confirm that there was no use of artificial intelligence (AI)-assisted technology for assisting in the writing or editing of the manuscript and no images were manipulated using AI.

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**How to cite this article:** Agrawal I, Agarwal D, Barman KD, Khurana N. Epithelioma Cuniculatum. *Indian J Postgrad Dermatol*. 2024;2:169-70. doi: 10.25259/IJPGD\_86\_2024