Pigmented squamous cell carcinoma in situ with amyloid deposition mimicking melanoma

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Key words: amyloid; Bowen's disease; dermoscopy; melanoma; squamous cell carcinoma in situ.

CLINICAL PRESENTATION

A 68-year-old female presented with an 18-months history of an incidentally noticed asymptomatic lesion on the right buttock. There was no personal or family history of skin cancer, no tanning booth use, and minimal sun exposure. On examination, there was a 12 × 5 mm brown-black plaque with irregular borders (Fig 1).

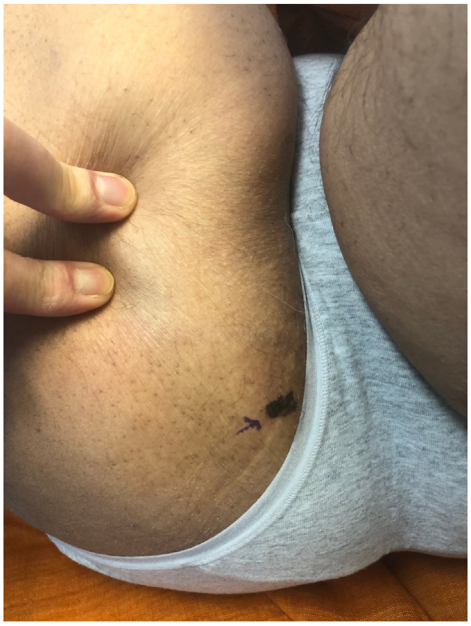

Fig 1. *Brown-black* plaque with irregular borders on the right medial buttock.

DERMATOSCOPIC APPEARANCE

Contact polarized dermatoscopic examination revealed a multicomponent pattern composed of gray and brown dots and structureless zones (Fig 2).

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Funding sources: None.

IRB approval status: Not applicable.

Patient consent: Written consent was obtained for this case report.

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JAAD Case Reports 2022;27:137-9.

2352-5126

https://doi.org/10.1016/j.jdcr.2022.07.028

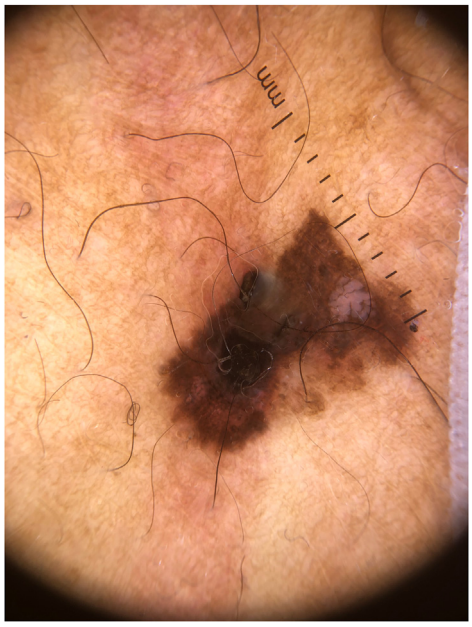

Fig 2. Contact polarized dermatoscopic image showing a multicomponent pattern composed of *gray* and *brown dots* and structureless zones.

HISTOLOGIC DIAGNOSIS

Histology demonstrated full-thickness epidermal atypia and presence of eosinophilic globules in the papillary dermis (Fig 3). A crystal violet stain was positive in some globules compatible with amyloid (Fig 4).

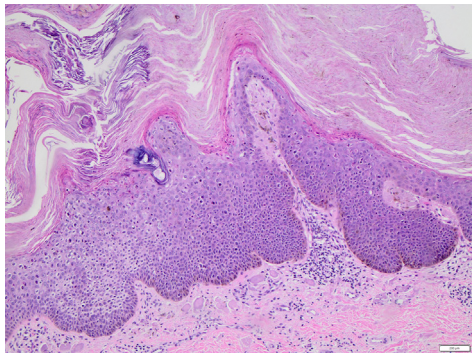

Fig 3. Routine histology demonstrating full-thickness epidermal atypia and eosinophilic globules in the papillary dermis (hematoxylin and eosin stain; 10× magnification).

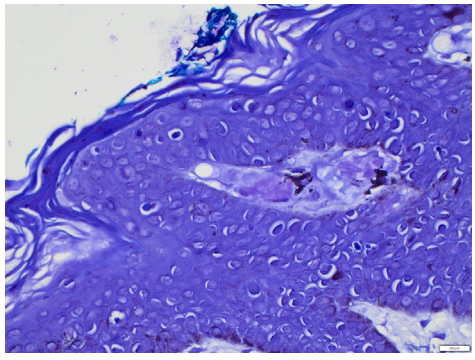

Fig 4. Crystal violet stain showing amyloid deposits in the papillary dermis (20× magnification).

KEY MESSAGE

Pigmented squamous cell carcinoma in situ (SCCis) is an uncommon variant of SCCis. It most commonly presents as progressively enlarging papules/plaques, typically in photoexposed areas. Pigmented SCCis is often seen in dark skin phototypes and may clinically mimic melanoma, pigmented basal cell carcinoma, and seborrheic keratosis. Dermatoscopy may aid in diagnosis and can reveal multicomponent pattern, atypical glomerular vascular structures, absence of a pigment network or pseudonetwork, diffuse pigmentation or blotches, hypopigmented structureless areas, or brown or gray dots in a linear fashion.[1] Histologically, pigmented SCCis shows full-thickness epidermal keratinocyte atypia, dyskeratosis, nuclear pleomorphism, and apoptosis. Amyloid has been observed in these cutaneous neoplasms.[2] Treatment involves surgical excision, electrodessication and curettage, photodynamic therapy, and topical chemotherapeutic agents. In our case, the lesion was treated with surgical excision.

Conflicts of interest

None disclosed.

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