Dear editor,

Amyloidosis of the auricular concha is a rare type of primary cutaneous amyloidosis that affects the outer ear, generally not associated with other types of cutaneous amyloidosis or systemic diseases. Hereby, we report the first Indian case of pigmented papules over pinna due to cutaneous amyloidosis with no systemic disease. A 38-year-old female complained of pigmented papules on bilateral ear pinna for 6 months. Lesions were asymptomatic and she denied history of any topical application, photosensitivity, oral ulcers, or hair loss. Examination revealed multiple pigmented papules of 1–2 mm in diameter in the bilateral auricular concha [Figure 1]. The differential diagnosis of plane warts, seborrheic keratosis, comedones and discoid lupus erythematosus was considered.

Dermoscopy showed a white central hub pattern surrounded by brown pigmentation and white scar-like morphology [Figure 2a and b]. A punch biopsy from the papule showed a deposit of amorphous, homogeneous eosinophilic, PAS-positive material in the papillary dermis, widening of dermal papillae with hyperkeratosis and acanthosis of epidermis corroborating with diagnosis of cutaneous amyloidosis of the auricular concha. A Congo red stain showed an orange-red deposit [Figure 3a and b]. Complete hemogram, renal function test and liver function test were normal. Urine examination for Bence Jones proteins, immunoglobulin profile for multiple myeloma and antinuclear antibody test were negative. Lesions resolved in 5 months with topical tretinoin 0.1%.

In 1988, Hicks et al., first reported amyloidosis of ear pinna in four adult patients that were not associated with other cutaneous amyloidosis lesions and proposed that the disorder was a new type of primary cutaneous amyloidosis. Bakos et al., considered it to be a topographic variant of lichen amyloidosis. It mainly affects women between 40-70 years of age, appears asymptomatic to pruritic small papules that can be normochromic, yellowish, erythematous, or pigmented and located anywhere on the outer ear, mainly in the auricular concha. Kelmens et al., reported a case of multiple myeloma with heaped lesions in the external auditory meatus. In our case, there were no abnormal laboratory findings suggestive of systemic disease. According to the filamentous degeneration theory, degenerated keratinocytes are discharged into the dermis, and cytokeratins are converted into amyloid-K. Few similar reported cases suggest the collagenous nature of the material, as they were stained with Verhoeff-van Gieson and Periodic acid-Schiff and not with Congo red, and the lesions were called collagen papules of the auricular concha. The most characteristic dermoscopic finding of primary cutaneous amyloidosis is a central hub, which could be either white or brown, surrounded by various configurations of pigmentation, including fine radiating streaks, leaf-like projections, and bulbous projections. Dermoscopic and histological correlation of amyloidosis is tabulated in Table 1. Dermoscopy helped us to rule out our clinical differentials such as discoid lupus erythematosus, milia, seborrheic keratosis, and plane warts.

Figure 1: Multiple pigmented papules of 1–2 mm in diameter over left ear pinna

Figure 2 (a) Dermoscopy (Dinolite Dermoscope polarized mode, ×50 magnification) showing white central hub pattern surrounded by brown pigmentation (black arrow). (b) Dermoscopy (Dinolite Dermoscope polarized mode, ×50 magnification) showing white scar-like morphology (black circle)
Primary cutaneous amyloidosis of ear pinna is a rare entity but should be considered in the differential diagnosis of pigmented papules of the pinna.

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**Conflicts of interest**

There are no conflicts of interest.

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