

Dermoscopy of Melasma

A 35-year-old lady presented with brown macules of centrofacial melasma within 6 months of child birth. [Figure 1]. She was euthyroid and had never used sunscreens, depigmenting creams (topical steroids/triple combination), or hormonal pills. Polarized videodermoscopy (EScope; Nakoda, $\times 20$) of the cheek lesion revealed a pseudoreticular pigment network, diffuse light-to-dark brown background with sparing of the periappendageal region (follicular and sweat gland openings), brown granules, and globules, including arcuate and annular structures [Figure 2]. In few fields, increased vascularity and telangiectasias were well visualized [Figure 3].

Despite being clinically distinct, melasma may be confused with other facial melanoses, including lichen planus pigmentosus, Riehl melanosis, nevus of Ota, nevus spilus, exogenous ochronosis (EO), and pigmentary demarcation lines. Facial biopsy is often refused by patients. Thus, dermoscopy, being noninvasive, is very useful in differentiating melasma from its clinical differentials, especially EO, and may also aid in choosing the appropriate biopsy site in suspected cases [Table 1].^[1,2]

The common perception that dermoscopy of melasma has been extensively described in indexed literature seems to be presumptive. Except for the description in the study by Yalamanchili *et al.*,^[3] other dermoscopic

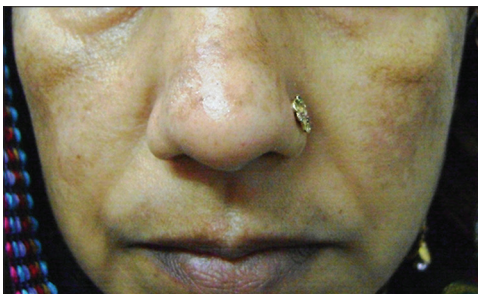


Figure 1: Light-to-dark brown macules of centrofacial melasma over the cheeks, nose, and upper lip area

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features of melasma have mostly been mentioned as a comparison against other facial melanosis (to rule out melasma).^[1,2] A light-to-dark brown background and brown granules and globules with perifollicular sparing have been uniformly described.^[1-5] The basic pattern may be reticular or pseudoreticular (more common in deeper melasma).^[3] The pigment color may suggest the depth of melasma,^[4] although this has been contested.^[5] Dermoscope is also a valuable tool in the follow-up of melasma treatment.^[6] We have further experienced that, on seeing the dermoscopic pictures, the patients become more treatment compliant.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

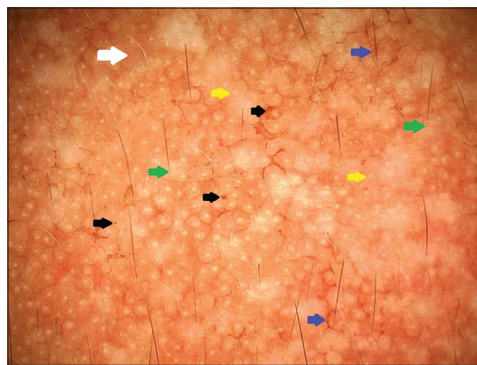


Figure 2: Dermoscopy of the melasma lesion revealing diffuse light-to-dark brown (white arrow) pseudoreticular network, multiple brown dots, granules and globules (black arrows), arcuate and annular structures (blue arrows), with sparing of the perifollicular region (green arrows), and around the openings of sweat glands (yellow arrows) (polarizing mode, $\times 20$)

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Table 1: Dermoscopic features seen in various pigmentary disorders

	Lichen planus pigmentosus	Riehl's melanosis	Melasma	Exogenous ochronosis
Background	Faint hyperpigmentation. Sometimes mildly erythematous (active LPP)	Erythematous	Dark hyperpigmentation	Dark hyperpigmentation
Reticular network	Accentuated – uniform/nonuniform	Pseudonetwork	Brown-black	Dark brown-black
Pigment deposition – gray to brown dots and globules	By and large evenly spaced out (lesser compared to ashy dermatosis)	Uneven with clustering of pigment dots	Dark brown colored globules/dots/blotches additionally seen	Blue-gray dots and globules with a caviar-like appearance
Specific Pattern	Hem-like pattern in a typical case, especially in nonfacial lesions	None Highly variable; often subject to modification by topical therapies	The pigmentation pattern becomes pseudoreticular with diffuse dark brown to grayish pigmentation with involvement of follicular openings	Obliteration of follicular opening. Elongated and curvilinear worm-like structures conjoined together in a reticulate pattern of ochronosis

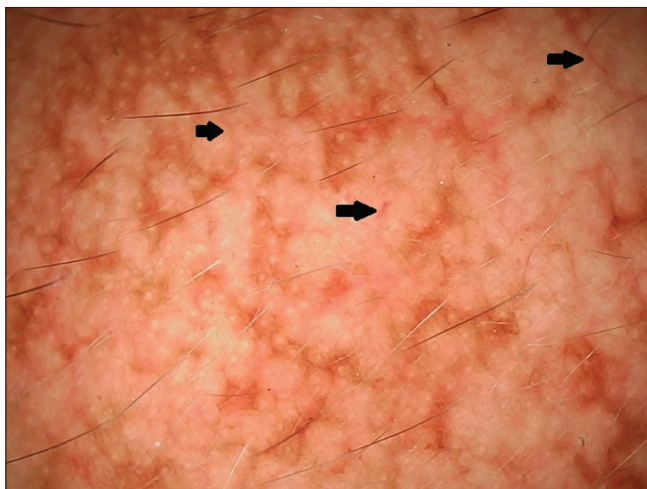


Figure 3: Dermoscopy of another melasma lesion revealing, in addition to the features seen in Figure 2, increased vascularity and telangiectasias (black arrows) (polarizing mode, ×20)

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Nil.

Conflicts of interest

There are no conflicts of interest.

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