

Dermoscopy—An Aid in the Diagnosis of Mycetoma

A 45-year-old farmer consulted for a gradually increasing swelling over right leg. Examination revealed hard swelling with multiple discharging sinuses over right foot. Many pin-point hypopigmented macules were seen, corresponding to the site of administration of indigenous medication [Figure 1]. Dermoscopic examination using DermLite™ DL3-3Gen under contact polarized mode from one of the active sinus revealed small black grains, surrounded by bluish white veil suggestive of deeper fungal colonies [Figure 2a]. White structureless area around the openings corresponding to dermal fibrosis was seen [Figure 2b]. Skin punch biopsy from the lesion demonstrated periodic-acid-schiff positive, pigmented fungal colonies over a background of granulation tissue [Figure 3].

Mycetoma is a granulomatous infection that can be caused by bacteria (actinomycotic mycetoma) or fungi (eumycotic mycetoma). Grains represent the hallmark of mycetoma and color of grains is often suggestive of the probable causative agent. However, diagnostic facilities are often limited and inaccessible to many patients affected by this neglected tropical disease.^[1] Dermoscopy is an easy, quick, and noninvasive tool, which can be helpful in visualizing minute grains and ascertain the type of mycetoma.^[1] Black colored granules are highly suggestive of eumycotic mycetoma and its visualization by dermoscopy can help in early institution of definitive treatment. The dermoscopic images can also be stored and transferred electronically and an expert opinion sought through teledermoscopy.^[2]

Dermoscopy has been explored in the diagnosis of many pigmentary disorders, granulomatous infective diseases like leprosy and sporotrichosis.^[3,4] The current report reinstates the importance of dermoscopy

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Figure 1: Diffuse woody hard swelling over dorsum of right foot with multiple discharging sinuses

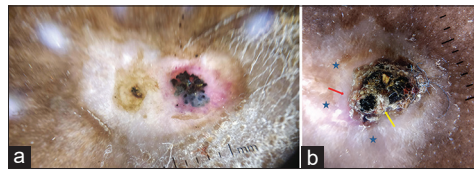


Figure 2: a. Dermoscopy of the sinus opening shows multiple small black grains. b. The sinuses are surrounded by bluish white veil (Red arrow). Crust surrounding the sinus opening can be seen (Yellow arrow) Structureless pink-white areas related to the underlying fibrosis was seen surrounding to the lesion (Star). (DL3 dermoscope, polarized mode 10x)

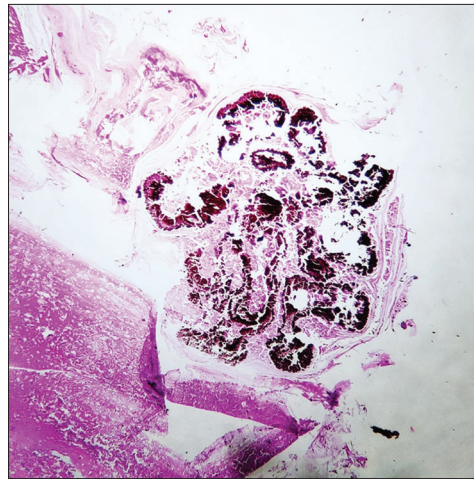


Figure 3: Histopathology shows pigmented fungal colony comprising of radiating hyphae of eumycetoma, showing splendor hoespli phenomenon and surrounded by dense neutrophilic infiltrate. (PAS stain, 10x)

in diagnosis of dermatological disorders with clinico-dermoscopic-pathological correlation.^[2]

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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.

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Conflicts of interest

There are no conflicts of interest.

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