Primary Cutaneous Histoplasmosis in an Immunocompetent Individual: A Rare Disease from a Dermoscopic Perspective

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A 43-year-old man presented with multiple, progressive, painless, nonitchy red-coloured skin lesions on face for 2 years. There was a gradual increase in size and number of lesions. Systemic examination was normal. On examination, multiple (15) well-defined shiny, erythematous-to-skin–coloured papules and nodules of size 3 × 3 cm^2 were present over forehead, glabella, root of nose, bilateral cheeks, and lobule of left ear [Figure 1]. Some of the lesions had yellowish-brownish crusting and oozing. On palpation, lesions were having normal temperature, nontender, soft to firm in consistency, mobile, and not fixed to underlying structures. Mucosal involvement was absent. Lymphadenopathy and hepatosplenomegaly were not present. His routine blood investigations were unremarkable. His blood sugar level was 98 mg/mL. Enzyme-linked immunosorbent assay for human immunodeficiency virus, hepatitis B surface antigen, anti- hepatitis C virus and Venereal disease research laboratory test were also found negative.

Dermoscopy revealed yellowish-orange structureless area, linear vessels, arborizing telangiectasia over a background of diffuse erythema, and yellow dots with yellowish-white scaling along with perifollicular cast [Figure 2]. Biopsy was performed and was in favour of histoplamosis [Figure 3]. Periodic acid-Schiff stain was also positive.

In deep fungal infection, yellowish structureless area, generalized erythema, presence of vessels, and white scar-like area are common dermoscopic features.[1] On dermoscopy of histoplamosis, yellowish orange area represents underlying granuloma, generalized erythema and vessels reflect dermal inflammation and neo-angiogenesis, and yellow dots represent dilated follicular infundibulum. This yellowish orange area can be seen in any granulomatous pathology either infective or noninfective.[1] Perifollicular cast correspond to perifollicular inflammation. Histoplasmosis dermoscopy has previously been reported in only one case report.[2] In this report, dermoscopy showed arborizing telangiectasias and superficial scaling. In our case, we report additional distinctive dermoscopic

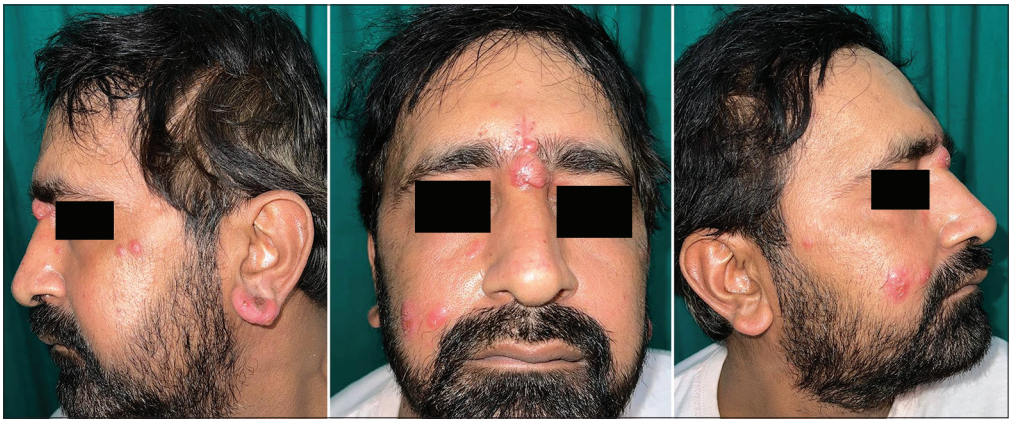

Figure 1: Multiple papules and nodules over root of nose, left and right cheek, forehead, and left ear lobule

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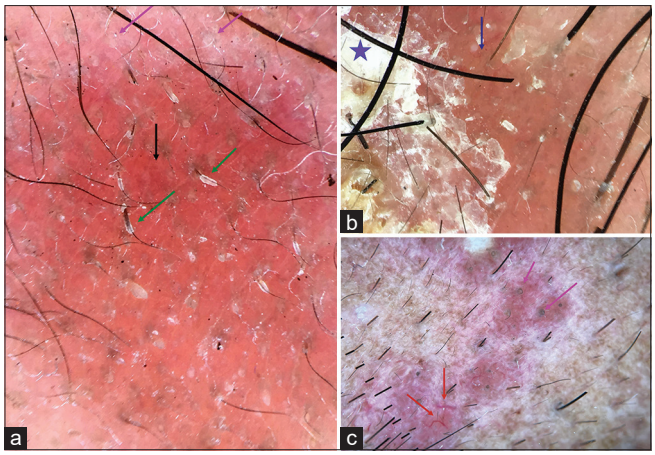

Figure 2: Dermoscopy of the lesion showing (a) yellowish orange area (black arrow), perifollicular cast (green arrow) and yellow dots (pink arrow); (b) Superficial yellowish-white scaling (blue star) and arborizing telangiectasia (blue arrow); (c) Linear and arborizing vessels (red arrow), and yellow dots (pink arrow) (polarised mode; DL4)

features other than findings reported earlier, that is, yellowish orange area, yellow dots, perifollicular cast, and linear vessels and we have correlated them with histopathological findings.

The limitation of dermoscopy in diagnosing histoplamosis is the resemblance of its dermoscopic findings with other deep fungal infections in the form of presence of yellowish structureless area with erythema. Thus, our case emphasizes that dermoscopy of histoplamosis is similar to other deep fungal infection.

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.

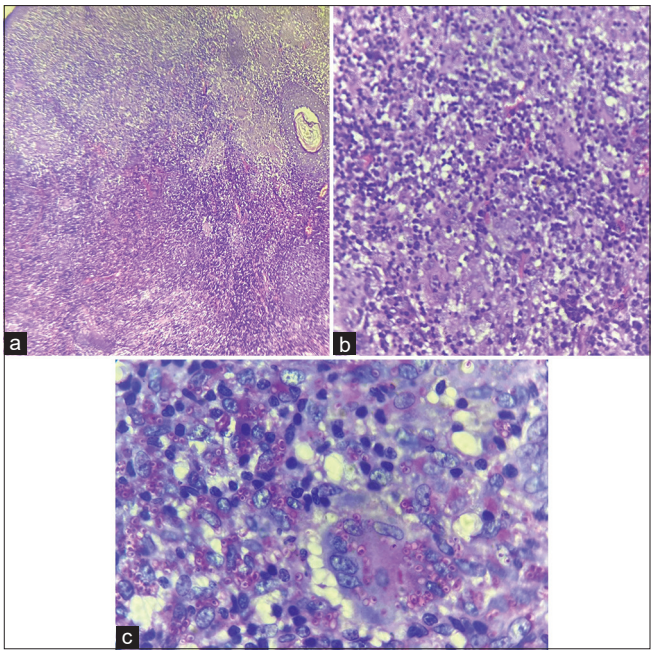

Figure 3: (a) Dermis showing dense mononuclear infiltrate including aggregates of histiocytes (H and E, 100X). (b) Dermis showing epithelioid cell granuloma, Langerhans giant cells, lymphocytes and aggregates of histiocytes containing oval 2- to 4-μm budding yeast with a clear halo confirming the morphology of histoplasmosis (H and E, ×400) (c) Dermis showing aggregates of histiocytes containing oval magenta-coloured budding yeast with a clear halo confirming morphology of histoplasmosis (PAS staining)

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Nil.

Conflicts of interest

There are no conflicts of interest.

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