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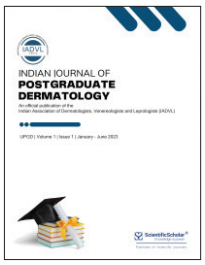

Clinicodermoscopic Challenge

Dermoscopy of Giant Juvenile Xanthogranuloma

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CASE DESCRIPTION

A 3-year-old girl presented with an asymptomatic raised lesion on nose since 2 years. On examination, a solitary dome-shaped, non-tender, 2 × 2.2 cm papulonodule was noted on the right ala of nose with overlying crusting [Figure 1]. Systemic and ophthalmological evaluations were normal.

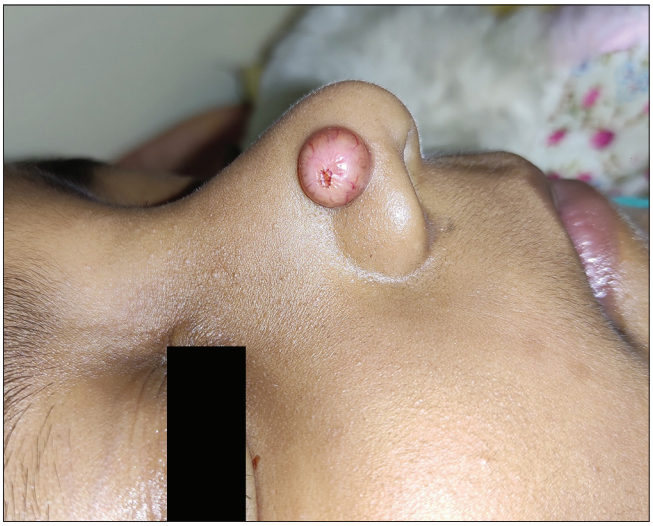

Figure 1: Juvenile Xanthogranuloma (giant type). Clinical image showing solitary dome-shaped nodule on right ala of nose.

DERMOSCOPIC FINDINGS

White structureless areas on a yellow-orange background with an erythematous border were observed. In addition, there were multiple well-focused linear and branching vessels running from periphery to centre [Figure 2]. Histopathology revealed a thinned-out epidermis with loss of rete-ridges, and a dense dermal infiltrate of foamy histiocytes, lymphocytes, fibroblasts and touton giant cells [Figure 3].

DIAGNOSIS

A diagnosis of giant juvenile xanthogranuloma was made, based on the clinical presentation along with the characteristic dermoscopic and histopathological findings.

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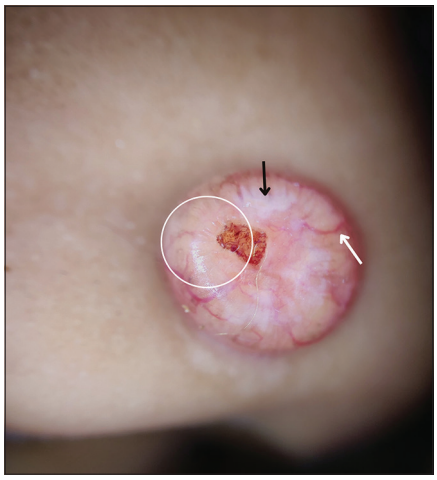

Figure 2: Dermoscopic examination showing white structureless areas (black arrow) on a yellow-orange background (white circle) with an erythematous border and multiple well-focused linear and branching vessels (white arrow) (DermLite DL3N, wet, contact, polarised, ×10).

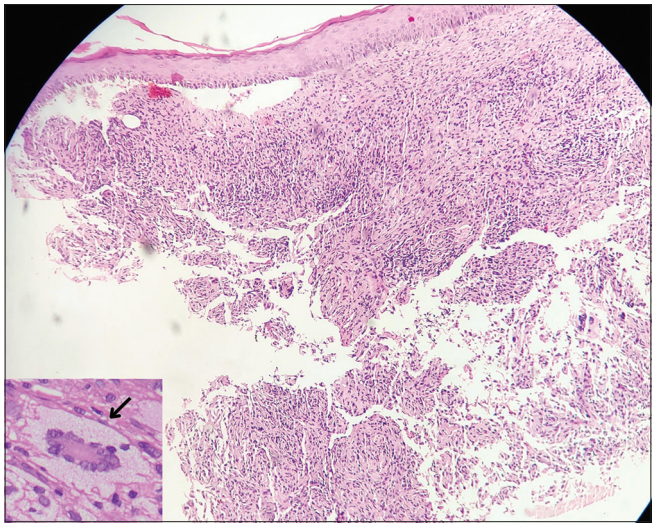

Figure 3: H&E showing thinned-out epidermis with loss of rete-ridges, and a dense dermal infiltrate of foamy histiocytes, lymphocytes, fibroblasts and touton giant cells. (H&E; 100×). Inset shows a high power view of a touton giant cell (black arrow). H&E: Haematoxylin and eosin.

DISCUSSION

JXG is a benign tumour originating from histiocytic cells and represents the most common type of non-Langerhans cell histiocytosis.[1] It presents as congenital or childhood-onset solitary or multiple pink to yellowish-orange papules or papulonodules, most commonly on the head and neck region. Typically, their size is <2 cm, but in rare cases, the lesions may be larger than 2 cm, leading to its classification as giant type. Rarely, JXG can be associated with ocular lesions, neurofibromatosis-1 or juvenile myelomonocytic leukaemia.[2] Dermoscopy has been well-described with the setting-sun pattern (yellow-orange background with erythematous border) as the most characteristic of JXG.[3] The yellow-orange background is correlated with the lipid laden histiocytes and the granulomatous inflammation in the dermis. White structure less areas correspond to dermal fibrosis seen in later stages. Various vascular patterns have also been described: dotted and linear, polymorphous, comma-like, coiled and hairpin-like vessels.[4] Well-focused vessels are a result of dense dermal infiltrate which pushes the dermal vessels upwards to the skin surface.[5] The precise diagnosis of JXG facilitated by dermoscopy and obviates the need for surgical interventions as the condition follows a self-limiting course.

Ethical approval

Institutional Review Board approval is not required.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent.

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Nil.

Conflicts of interest

Dr. Niti Khunger is on the Editorial Board of the Journal.

Use of artificial intelligence (AI)-assisted technology for manuscript preparation

The authors confirm that there was no use of artificial intelligence (AI)-assisted technology for assisting in the writing or editing of the manuscript and no images were manipulated using AI.

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