Cutaneous mastocytosis: clinical, dermoscopic and pathological features

Arvind Kumar,1 Naveen Kumar Kansal,2 Ramesh Pratap Anuragi2

DESCRIPTION

A 1-and-a-half-year-old boy was brought by his parents with intermittently itchy, round to oval, yellowish to skin-coloured maculopapules on the trunk for the last 1 year. The lesions were about 0.5×1 cm in size and were present on the chest, abdomen and back (figure 1). Stroking a lesion with a blunt object produced faint perilesional erythema with urtication (Darier’s sign). There were no systemic reports. Clinical differential diagnoses of cutaneous mastocytosis (multiple mastocytomas) and juvenile xanthogranuloma were considered. Dermoscopy of a lesion revealed a central whitish area surrounded by a reticulate light brown rim on a yellowish background (figure 2). A biopsy was taken for pathological examination, which revealed orthokeratotic epidermis with basal layer melanisation and diffuse infiltration by mastocytes in the superficial epidermis (figure 3). A Giemsa stain demonstrated metachromatic mast cell granules (figure 4). Therefore, based on clinical and dermoscopic features and pathological findings, a diagnosis of cutaneous mastocytosis (multiple mastocytomas) was made.1 2

Figure 1 Round to oval, yellowish to skin-coloured lesions on the chest and abdomen.

Figure 2 Dermoscopy. Central whitish area surrounded by a reticulate light brown rim on a yellowish background.

Figure 3 Pathology. Diffuse infiltration of the superficial epidermis by mastocytes (H&E stain, original magnification, ×40).

Figure 4 Giemsa stain demonstrates metachromatic mast cell granules (original magnification, ×100).

Learning points

► Cutaneous mastocytosis typically presents within the first few months of birth but a later onset is not uncommon. The lesions may urticate on stroking (Darier’s sign).
► Dermoscopic features in cutaneous lesions of mastocytosis include a light brown rim, pigment network and yellow–orange blot.
► Pathological examination shows diffuse infiltration by mastocytes in the upper epidermis, which demonstrates metachromatic granules.
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antihistamines (syrup cetirizine 5 mg/5 mL, half teaspoonful at bedtime) which led to symptomatic improvement. The patient is on regular follow-up.

Contributors AK: concept, design, literature search, manuscript preparation and review. NKK: concept, design, literature search, manuscript preparation, review and guarantor. RPA: concept, design, manuscript preparation, review and guarantor.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests None declared.

Patient consent for publication Parental/guardian consent obtained.

Provenance and peer review Not commissioned; externally peer reviewed.

ORCID iD
Naveen Kumar Kansal http://orcid.org/0000-0001-9214-3137

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