

Cutaneous mastocytosis: clinical, dermoscopic and pathological features

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Accepted 18 November 2020

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



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.

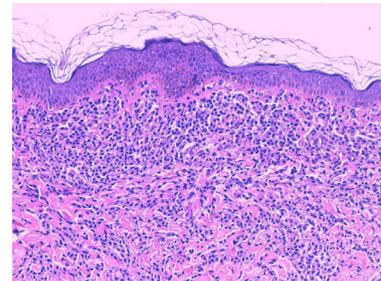


Figure 3 Pathology. Diffuse infiltration of the superficial epidermis by mastocytes (H&E stain, original magnification, ×40).

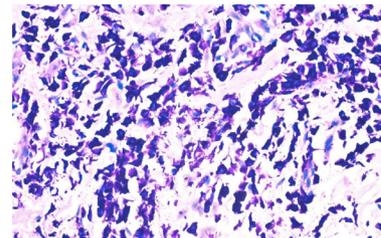


Figure 4 Giemsa stain demonstrates metachromatic mast cell granules (original magnification, ×100).

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} The patient was started on H₁

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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To cite: Kumar A, Kansal NK, Anuragi RP. *BMJ Case Rep* 2020;**13**:e240169. doi:10.1136/bcr-2020-240169

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.

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REFERENCES

- 1 Grattan CEH, Radia DH, *et al*. Mastocytosis. In: Griffiths C, Barker J, Bleiker T, *et al*, eds. *Rook's Textbook of Dermatology*. 9th edn. Oxford: John Wiley & Sons, 2016: 46.1–46.10.
- 2 Errichetti E, Stinco G. Dermoscopy in general dermatology: a practical overview. *Dermatol Ther (Heidelb)* 2016;6:471–507.

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