A premonitory mark of segmental infantile hemangioma

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■ Cite as: *CMAJ* 2022 July 11;194:E910. doi: 10.1503/cmaj.220336

A female infant, born by uncomplicated cesarean delivery at 39 weeks' gestation, presented to our outpatient clinic with a large (15 × 14 cm), hypopigmented patch with telangiectasias on the left chest and upper abdomen 1 week after birth; it faded within 2 days (Figure 1A). Antenatal and newborn examinations had noted no abnormalities. Within 1 month, multiple erythematous papules and lobulated plaques developed in the patch (Figure 1B), and we diagnosed segmental infantile hemangioma. The pale patch had been a premonitory mark of infantile hemangioma, which should be differentiated from nevus anemicus, congenital hemangioma, infantile hemangioma with minimal or arrested growth (an unusual subset of infantile hemangiomas) and other vascular tumours. We ordered an echocardiogram because of concern for cardiac abnormalities associated with PHACE (posterior fossa malformations, hemangioma, arterial anomalies, cardiac defects or aortic coarctation, and eye anomalies) syndrome and potential high-output heart failure owing to shunting of large volumes of blood in multiple or large hemangiomas. Results of the echocardiogram were normal. After treatment with oral propranolol (1 mg/kg/d) and topical timolol, the lesions gradually regressed (Appendix 1, available at www.cmaj.ca/lookup/doi/10.1503/cmaj.220336/tab-related-content).

Infantile hemangiomas have a rapid proliferative phase, followed by a slow involution phase.[1,2] They seldom present as a fully formed tumour at birth, but a premonitory mark (such as a pale, vasoconstricted patch, a bruise-like area or telangiectasia) may be seen before the proliferative phase.[2,3] Infantile hemangiomas are classified according to pattern of involvement (i.e., focal, multifocal, segmental and indeterminate). Segmental hemangiomas, defined as geographic or linear localizations larger than 5 cm in diameter over a certain cutaneous territory, are the second most common type (20%) after focal hemangiomas, which manifest as nodules or plaques that are distributed entirely within a focal anatomic area.[1,2]

Although the prognosis is generally favourable, large facial (> 5 cm) and lumbosacral (> 2 cm) hemangiomas should be investigated further with echocardiography or magnetic resonance imaging.[2] Segmental infantile hemangiomas have a higher risk of ulceration, extracutaneous developmental defects, disfigurement and functional impairment than focal hemangiomas.[1,2] Clinicians should exclude PHACE syndrome for patients with large segmental hemangiomas on the face and extrafacial locations, including the scalp, neck, upper trunk and upper arm.[1,2] Recognizing premonitory marks enables early diagnosis and management to reduce the risk of ulceration and sequelae, including fibrofatty tissue and redundant skin.[1,2]

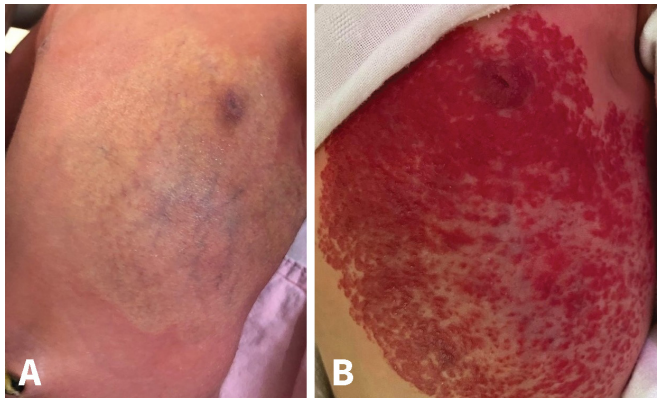

Figure 1: Photographs of a full-term infant with a premonitory mark of segmental infantile hemangioma. (A) At 1 week after birth, the mark was a solitary, pale, translucent patch with telangiectasia on the left chest and left upper abdomen. (B) Within 1 month, multiple, bright red papules and lobulated plaques had developed on the patch.

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Competing interests: None declared.

This article has been peer reviewed.

The authors have obtained parental consent.

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