

Linear Verrucous Haemangioma on the Abdomen

Hiromiki Hayashi, Tadamichi Shimizu, Hiroyuki Nakamura and Hiroshi Shimizu

Department of Dermatology, Hokkaido University Graduate School of Medicine, Kita-ku, Sapporo 060-8638, Japan.

E-mail: hiromiki@med.hokudai.ac.jp

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Sir,

Verrucous haemangioma (VH) is a rare, congenital and localized vascular malformation that appears at birth or in early childhood with a predilection for the lower extremities (1). It later becomes verruciform and tends to enlarge and spread peripherally. The linear form of VH is extremely rare and only a few case reports have been presented in the literature (2–4). We describe a linear VH localized in a dermatomal distribution on the abdomen that has not previously been reported.

CASE REPORT

A 4-year-old boy presented with asymptomatic papules and macules on the right abdomen. Physical examination revealed several approximately 5 cm in diameter, dark red-coloured, slightly verruciform-surfaced plaques with nodules and macules in a dermatomal distribution (Fig. 1). The lesions were distributed in a reticular pattern. The eruption had gradually increased in size since birth. The histopathological findings revealed parakeratosis, papillomatosis and an irregular acanthosis of the epidermis. The elongated rete ridges were surrounded by dilated vascular spaces in papillary dermis (Fig. 2a). Cavernous vascular spaces were also seen in the subcutis (Fig. 2b). The diagnosis of VH was made. We carried out a computed tomography (CT) scan in order to exclude cutaneomeningospinal angiomatosis and the differential diagnosis of Cobb syndrome.

DISCUSSION

Typically, VH starts as a bluish-red lesion with small satellites. After a variable number of years, VH lesions take on a characteristic bluish-black colour and develop a verrucous surface. Differential diagnosis includes angiokeratoma circumscriptum, angioma serpiginosum and Cobb syndrome. Angiokeratoma circumscriptum is usually 1–5 mm sized eruptions, whereas VH consists of 1–7 cm sized papular plaques with smaller

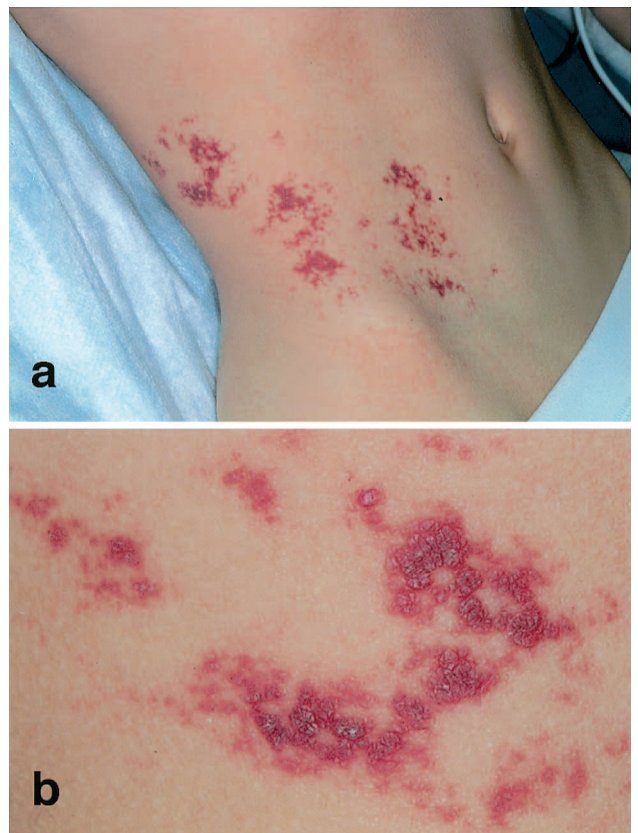


Fig. 1. (a) On the patient's right side of the abdomen there were several approximately 5 cm diameter, dark red-coloured plaques in a dermatomal linear distribution. (b) Higher magnification revealed a verrucous and hyperkeratotic surface.

satellite lesions (5). Histopathologically, the superficial component in VH resembles angiokeratoma but differs with respect to the deeper dermal components. There is thus a need for a very deep knife biopsy. Angioma serpiginosum is a rare vascular lesion that, similar to VH, is often present on the lower extremities, but lacks the hyperkeratotic surface. Cobb syndrome is a congenital vascular naevus associated with an underlying meningospinal angioma. The vascular lesion in the skin has a

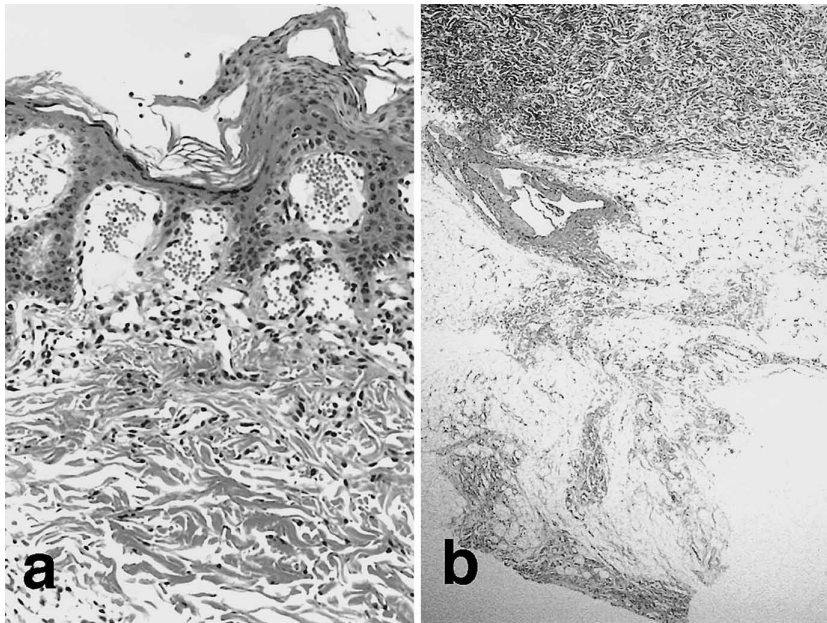


Fig. 2. (a) The histopathological findings revealed parakeratosis, papillomatosis and elongated rete ridges that surround dilated vascular spaces in the papillary dermis. (b) Cavernous vascular spaces were recognized in the subcutis.

tendency to form a dermatomal pattern on the trunk and this naevus flammeus-like lesion can develop a hyperkeratotic surface (6).

Linear VH has previously been reported on the arm and leg. This is the first case of linear VH localized on the abdomen. Linear VH with a dermatomal distribution should be carefully diagnosed, as the vascular skin lesions in Cobb syndrome share a similar distribution. In most patients with Cobb syndrome, the neurologic problems occur already during childhood or adolescence and the meningospinal angioma results in serious neurological disabilities (6). Despite the negative findings on the CT scan, the reported case has to be carefully followed for a possible future development of meningospinal angioma.

REFERENCES

1. Calduch LOrtega C, Navarro V, Martinez E, Molina I, Jorda E. Verrucous hemangioma: report of two cases and review of the literature. *Pediatr Dermatol* 2000; 17: 213–217.
2. Utta W, Rudolf H. Linear verrucous hemangioma. *J Am Acad Dermatol* 2000; 42: 516–518.
3. Imperial R, Helwig EB. Verrucous hemangioma. A clinicopathologic study of 21 cases. *Arch Dermatol* 1967; 96: 247–253.
4. Klein JA, Barr RJ. Verrucous hemangioma. *Pediatr Dermatol* 1985; 2: 191–193.
5. Antonio R, Mario B, Enrica B. Verrucous hemangioma and angiokeratoma circumscriptum: clinical and histologic differential characteristics. *J Dermatol Surg Oncol* 1989; 15: 88–91.
6. Jessen RT, Thompson S, Smith EB. Cobb syndrome. *Arch Dermatol* 1977; 113: 1587–1590.