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DERMATOLOGY IMAGES

Lymphangioma circumscriptum in a 12-year-old child

Linfangioma circunscrito numa criança de 12 anos

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A healthy 12-year-old girl presented with asymptomatic skin lesions on the right cervical region, initially observed at 5 months of age. The lesions started on the neck and extended to the shoulder. Physical examination revealed multiple erythematous, shiny, 2-4 mm papulo-vesicles with occasional crust, converging into a large verrucous plaque (Fig. 1). Punch biopsy revealed dilated lymphatic vessels in the upper dermis (Fig. 2), confirming the diagnosis of lymphangioma circumscriptum (LC).

Cutaneous lymphangiomas are lymphatic malformations with an estimated incidence of 2:1000 live births[1,2]. They are classified based on vessel depth and size[3]. The superficial group includes LC or microcystic lymphatic malformation; the deeper group includes cavernous lymphangiomas and cystic hygromas[3].

LC is the most common type and may be congenital or secondary to lymphatic abnormalities[4]. Somatic PIK3CA mutations may be present[4]. LC appears as translucent vesicles or flesh-colored papules, sometimes with violaceous discoloration[3,5]. Verrucous and hyperkeratotic changes are common[3]. Lesions typically affect the cervicofacial region and proximal limbs[4].

Histopathology shows dilated lymphatic vessels in the upper dermis, acanthosis, and hyperkeratosis[3,5].

Differential diagnoses include lymphangiectasias, hemangioma, angiokeratoma, and epidermal nevi[2,3]. Surgical excision is the treatment of choice, but recurrence is common[3]. Alternatives include carbon dioxide CO_2 laser, cryotherapy, and intralesional bleomycin[3,4]. Mammalian target of rapamycin/phosphatidylinositol 3-kinase inhibitors (mTOR/PI3K) are emerging therapies. Despite de promising results of systemic sirolimus, the efficacy of topical rapamycin remains unclear due to limited observational data[4,5].

This case illustrates a typical presentation of LC confirmed by histopathological analysis. The patient underwent CO_2 laser therapy with mild improvement but was lost to follow-up after three sessions.

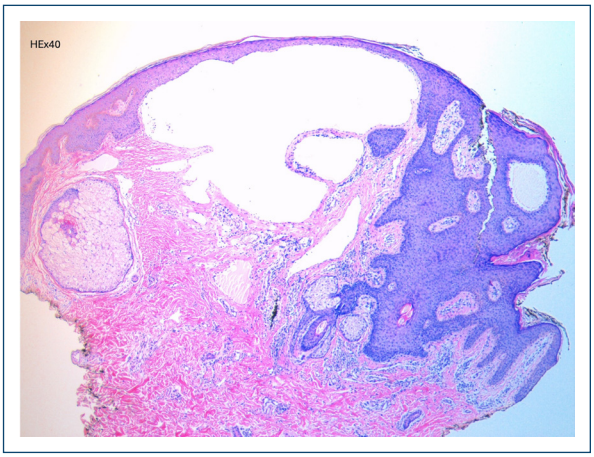

Figure 1. Lymphangioma circumscriptum (clinical image).

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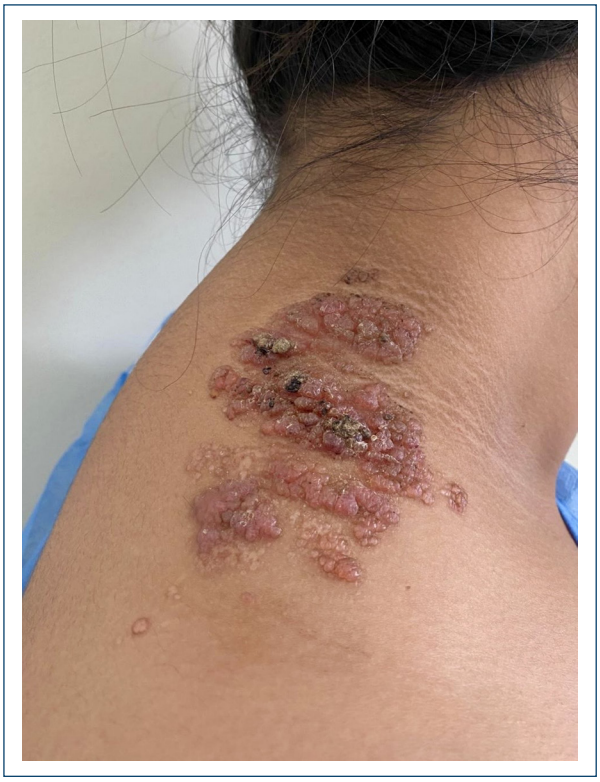

Figure 2. Histology based on hematoxylin-eosin staining (×40; ×100).

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Conflicts of interest

None.

Ethical considerations

Protection of humans and animals. The authors declare that no experiments involving humans or animals were conducted for this research.

Confidentiality, informed consent, and ethical approval. The authors have followed their institution's confidentiality protocols, obtained informed consent from patients, and received approval from the Ethics Committee. The SAGER guidelines were followed according to the nature of the study.

Declaration on the use of artificial intelligence. The authors declare that no generative artificial intelligence was used in the writing of this manuscript.

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