

Answer to Dermacase continued from page 711

2. Cutaneous lymphoid hyperplasia

First described in 1894, cutaneous lymphoid hyperplasia (CLH) is a benign, reactive, lymphocytic process that occurs most often in adults and less commonly in children.^{1,2} Cutaneous lymphoid hyperplasia represents an exaggerated local immunologic reaction to an often unrecognized trigger, such as vaccinations, arthropod bites, tattoos, medications, and *Borrelia burgdorferi* infection, the latter most commonly seen in Europe.^{1,2}

Typically, CLH presents as a solitary, firm, slightly tender, erythematous to violaceous papule or nodule on the head, neck, or upper extremities, with no surface changes.^{1,2} Histology usually reveals a superficial and deep nodular or diffuse polymorphic infiltrate comprising lymphocytes, histiocytes, and occasional plasma cells and eosinophilic leukocytes.^{1,3,4} Lymphoid follicles with germinal centres surrounded by a mantle might be noted. Immunoperoxidase studies might be used to confirm the polymorphic nature of the infiltrate, including the presence of CD4-positive and CD8-positive T lymphocytes, CD20-positive B lymphocytes, and CD68-positive histiocytes. Clonality has been reported in CLH, but it currently remains unclear if this is related to the rare occasions when CLH progresses to lymphoma.²

Diagnosis of this case was made after biopsy confirmed clinical findings.


Differential diagnosis

Differential diagnosis of CLH includes pyogenic granuloma, epidermal inclusion cyst, and Spitz nevus. Pyogenic granuloma usually presents as a solitary, rapidly growing, red, vascular lesion on the face or fingers. Differentiation from CLH is clinically possible, based on the lesion's soft consistency, rapid growth, and recurrent bleeding.⁵ An epidermal inclusion cyst is a benign, cutaneous cyst that commonly presents as a skin-coloured or red inflamed papule or nodule on the face or trunk. Differentiation from CLH is based on its soft consistency.⁶ Spitz nevus is a melanocytic nevus that usually presents as an asymptomatic, small (less than 1 cm), pink to red papule on the faces or extremities of children and adolescents.⁷ Clinical differentiation might be difficult, although the small size and smooth surface of Spitz nevus can be helpful. If in doubt, Spitz nevus as

well as pyogenic granuloma and epidermal inclusion cyst can be differentiated easily from CLH histologically.^{1,2} Another important (and histologic) differential diagnosis of CLH is lymphoma cutis.^{1,2} Differentiation is important because lymphoma cutis is a manifestation of lymphoma whereas CLH is not. Histologic features that are helpful in differentiating CLH from lymphoma cutis include the presence of reactive germinal centres and the polymorphic nature of the infiltrate, including the mixed population of B and T lymphocytes.

Management

Although uncommon in the pediatric age group, family practitioners and dermatologists should always keep CLH in mind when evaluating a firm, solitary, red bump in a child. Early on and even when a diagnosis of CLH is suspected on clinical grounds, a conservative approach should be entertained, as most cases spontaneously resolve within a few weeks to months. If the lesion persists, then a punch biopsy is indicated to confirm the diagnosis and to rule out other conditions; it might also be curative. If a histologic diagnosis of CLH is confirmed, persistent cases with localized lesions might benefit from corticosteroids (topical or intralesional), cryosurgery, or simple excision. If these treatments are not effective, then radiation therapy is also an option.¹

In this case, no treatment was necessary as the lesion resolved spontaneously 2 weeks after biopsy. 

Dr Abbas is a resident in the Department of Dermatology at the American University of Beirut Medical Center in Lebanon. **Dr Salman** is an Associate Professor in the Department of Dermatology at the American University of Beirut Medical Center.

Competing interests

None declared

References

- Gilliam AC, Wood GS. Cutaneous lymphoid hyperplasias. *Semin Cutan Med Surg* 2000;19(2):133-41.
- Nihal M, Mikkola D, Horvath N, Gilliam AC, Stevens SR, Spiro TP, et al. Cutaneous lymphoid hyperplasia: a lymphoproliferative continuum with lymphomatous potential. *Hum Pathol* 2003;34(6):617-22.
- Baldassano MF, Bailey EM, Ferry JA, Harris NL, Duncan LM. Cutaneous lymphoid hyperplasia and cutaneous marginal zone lymphoma: comparison of morphologic and immunophenotypic features. *Am J Surg Pathol* 1999;23(1):88-96.
- Arai E, Shimizu M, Hirose T. A review of 55 cases of cutaneous lymphoid hyperplasia: reassessment of the histopathologic findings leading to reclassification of 4 lesions as cutaneous marginal zone lymphoma and 19 as pseudolymphomatous folliculitis. *Hum Pathol* 2005;36(5):505-11.
- Garzon MC, Enjolras O, Frieden IJ. Vascular tumors and vascular malformations: evidence for an association. *J Am Acad Dermatol* 2000;42(2 Pt 1):275-9.
- Taira N, Aogi K, Ohsumi S, Takashima S, Kawamura S, Nishimura R. Epidermal inclusion cyst of the breast. *Breast Cancer* 2007;14(4):434-7.
- Sulit DJ, Guardiano RA, Krivda S. Classic and atypical Spitz nevi: review of the literature. *Cutis* 2007;79(2):141-6.

