ENT PATHOLOGY CLINIC

Angiolymphoid hyperplasia with eosinophilia

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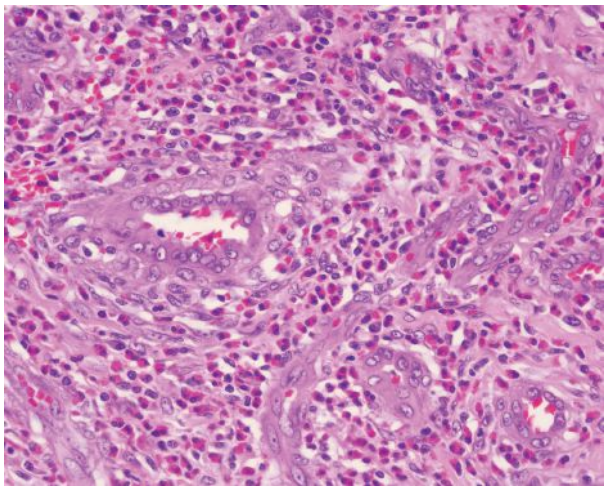

Figure 1. Multiple lobules composed of immature capillaries show enlarged, epithelioid endothelial cells. Note the remarkable number of eosinophils

Angiolymphoid hyperplasia with eosinophilia (ALHE), sometimes called *epithelioid hemangioma,* is a benign vascular tumor. It features immature blood vessels lined by epithelioid endothelial cells with a prominent inflammatory infiltrate, frequently showing a conspicuous eosinophil component. There is controversy about whether this lesion is a reactive or benign neoplastic condition.

Patients present over a wide range of ages, with a peak in the third to fifth decades, and with females affected more often than males. The head is most commonly affected (scalp and ears), with the digits involved second most frequently. There is usually a subcutaneous nodule/mass that may be painful and/or pruritic, with pink to red-brown, dome-shaped papules or nodules, which may coalesce. This lesion *does not* involve lymph nodes (i.e., not Kimura disease). While peripheral serum eosinophilia may be seen, IgE levels are not elevated.

There is an excellent prognosis with excision, but recurrences or persistence after surgery is common, requiring close clinical follow-up.

In general, the lesions are small and may resemble lymph nodes because of circumscription and peripheral inflammation. The surface epithelium is usually intact, although excoriation may be seen. There are multiple lobules composed of immature capillary to medium-sized vessels, usually without well-developed lumina (figure 1). Larger vessels may be seen. Occasionally, the lesions are solid. The endothelial cells are enlarged and appear epithelioid or histiocytic (figure 2). Cytoplasmic vacuolization may be present. The vascular proliferation is invested by a rich inflammatory infiltrate, including lymphocytes, mast cells,

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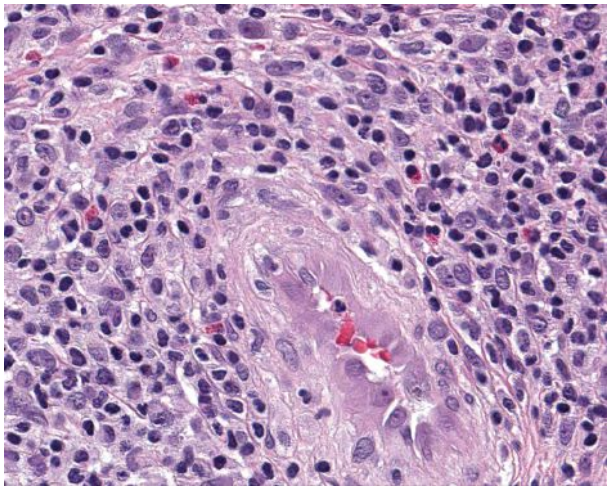

Figure 2. This high-power image shows a central vessel with very high epithelioid endothelial cells lining the space. The surrounding lymphoid infiltrate shows scattered eosinophils

and eosinophils, the latter varying in density within and between lesions (figures 1 and 2). Uncommonly, germinal centers may be sparse and poorly formed.

The differential diagnosis includes Masson vegetant or papillary endothelial hyperplasia (a reactive endothelial proliferation associated with organizing thrombus/clot); Kimura disease (lymph node disorder, most often in Asian men, who have peripheral serum eosinophilia, reactive lymphoid follicles, follicular lysis, eosinophilic microabscesses, polykaryocytes, and IgE deposition); and angiosarcoma (freely anastomosing vessels, atypical endothelial cells, increased mitoses, necrosis).

Suggested reading

Chen H, Thompson LD, Aguilera NS, Abbondanzo SL. Kimura disease: A clinicopathologic study of 21 cases. Am J Surg Pathol 2004;28(4):505-13.

Sun ZJ, Zhang L, Zhang WF, et al. Epithelioid hemangioma in the oral mucosa: A clinicopathological study of seven cases and review of the literature. Oral Oncol 2006;42(5):441-7.

Tosios K, Koutlas IG, Papanicolaou SI. Intravascular papillary endothelial hyperplasia of the oral soft tissues: Report of 18 cases and review of the literature. J Oral Maxillofac Surg 1994;52(12):1263-8.

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