Successful Management of Angiolymphoid Hyperplasia with Eosinophilia by Radiofrequency

Dear Editor,

Angiolymphoid hyperplasia with eosinophilia (ALHE) is a rare idiopathic condition, usually seen in adults and characterised by the presence of isolated or grouped papules, plaques or nodules in the skin of the head and neck region. Commonly, affected areas include periauricular region, forehead and scalp.[1] Various medical and surgical modalities are used for the treatment of this condition with variable success.

A 52-year-old male presented with complaints of extremely itchy dark-colored lesions over the left retro-auricular area and concha for 8 years. The lesions started on the left retro-auricular area and then, affected left ear over a period of 1 year. The patient gave a history of severe pruritus present throughout the day and sometimes also interfering with sleep and daily work. There was a history of profuse bleeding on manipulation. The patient did not give a history of preceding trauma or inflammatory dermatosis. He received treatment with topical steroids, antihistamines and intralesional steroids without improvement.

Cutaneous examination revealed multiple-grouped erythematous to hyperpigmented soft to firm papules and nodules coalescing to form plaques present over the left retro-auricular area, concha and external auditory canal [Figure 1a and b].

Laboratory investigations of the patient did not reveal any abnormality except for mild peripheral eosinophilia.

Skin biopsy taken from a hyperpigmented nodule on the left post-auricular region revealed proliferation of small blood vessels, lined by enlarged endothelial cells with predominantly perivascular and interstitial infiltrate composed of lymphocytes and eosinophils [Figure 2a]. These distinctive endothelial cells had cobblestone appearance with uniform ovoid nuclei and intracytoplasmic vacuoles [Figure 2b and c]. Hence, a final diagnosis of ALHE was made.

The patient was treated with radiofrequency (RF) ablation under local anaesthesia. After a single session of RF, there was significant improvement with almost complete resolution of pruritus. Lesions healed completely in 3 weeks [Figure 3a and 3b] without any recurrence even at 2 years of follow-up.

Associated skin findings in ALHE include pain, pruritus and spontaneous bleeding after minor trauma. Patients usually present single lesions, but multiple nodules are seen in 20% of patients. Other features include regional lymphadenopathy and peripheral eosinophilia which is an inconstant feature. Histologically, it is characterised by proliferation of vascular channels with inflammatory infiltrate composed of lymphocytes and eosinophils.

It can have a spontaneous remission, but symptomatic and disfiguring lesions may require treatment. Commonly used medical modalities include topical and intralesional corticosteroids. Other reported modalities include intralesional

Figure 1: (a) Multiple-grouped erythematous to hyperpigmented soft to firm papules and nodules coalescing to form plaques present over the left retro-auricular area. (b) Discrete soft papules and nodules in the superior sapect of external auditary canal and concha of left ear

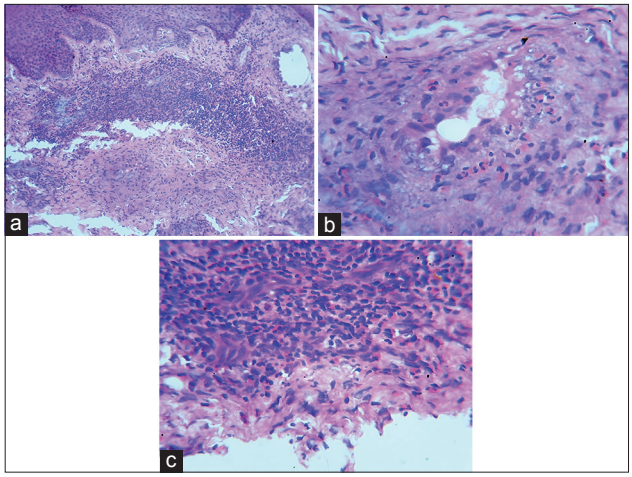

Figure 2: (a) Histopathology: Proliferation of small blood vessels in the dermis, surrounded by a mixed inflammatory infiltrate of lymphocytes and eosinophils (H and E, ×100). (b) Distinctive endothelial cells had cobblestone appearance with uniform ovoid nuclei and intracytoplasmic vacuoles (H and E, ×400). (c) Predominantly perivascular infiltrate of lymphocytes and eosinophils (H and E, ×400)

Figure 3: (a) Complete resolution of lesions over retro-auricular area. (b) Complete resolution of lesions in the concha and external auditory meatus

interferon alpha-2a, indomethacin, pentoxifylline and chemotherapeutic agents such as vinblastine, mepolizumab (antiinterleukine-5), oral isotretinoin, propranolol and topical imiquimod.

Surgical excision is the treatment of choice but as the lesions are often multilobulated and poorly delineated, local recurrences may be seen in 33%–50% of cases. In addition, surgery can be disfiguring and difficult, especially in the periauricular region. Mohs micrographic surgery with complete margin examination has also been considered.[2] Thus, other treatment options such as radiotherapy, curettage, shave excision with electrodessication and cryotherapy may be helpful.[3]

Continuous wave carbon dioxide, argon lasers and pulsed dye laser, have been successfully used, but there is a risk of scarring after treatment.[4,5] RF has also be used as a treatment modality but lesions with deeper component might not be completely ablated leading to recurrences; hence, it has been used in combination with sclerotherapy. Intralesional RF using probes where the noninsulated part stays inside the area to be treated, also ablates lesions effectively. Post-inflammatory depigmentation may be a side effect. As it is a blind procedure, it cannot be done in areas where important structures such as major nerves and vessels lie in the vicinity of the lesion.

Sclerotherapy with polidocanol and bleomycin has been reported in the treatment of ALHE.[6] Sclerosants can treat the deeper vascular component while RF ablates the lesions; thus, the combination technique is synergistic.

In view of the availability of different treatment modalities, proper selection of these methods should be decided on parameters such as number, size and site of the lesions, previous treatment used, evaluation to look for the deeper component and side effects of the treatment modality.

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Conflicts of interest

There are no conflicts of interest.

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References

1. Hamilton TK, Baughman RD, Perry AE. Persistent pruritic plaque of the ear. Arch Dermatol 1999;135:464-5, 467-8.
2. Miller CJ, Ioffreda MD, Ammirati CT. Mohs micrographic surgery for angiolymphoid hyperplasia with eosinophilia. Dermatol Surg 2004;30:1169-73.
3. Wozniacka A, Omulecki A, Torzecka JD. Cryotherapy in the treatment of angiolymphoid hyperplasia with eosinophilia. Med Sci Monit

2003;9:CS1-4.
4. Abrahamson TG, Davis DA. Angiolymphoid hyperplasia with eosinophilia responsive to pulsed dye laser. J Am Acad Dermatol 2003;49:S195-6.
5. Kaur T, Sandhu K, Gupta S, Kanwar AJ, Kumar B. Treatment of angiolymphoid hyperplasia with eosinophilia with the carbon dioxide laser. J Dermatolog Treat 2004;15:328-30.
6. Akdeniz N, Kösem M, Calka O, Bilgili SG, Metin A, Gelincik I. Intralesional bleomycin for angiolymphoid hyperplasia. Arch Dermatol 2007;143:841-4.

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