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What is your Diagnosis?

Tanınız nedir?

Case Report

A 28-year-old female patient admitted for pruritic bleeding papules and plaques that appeared on the scalp and spread to the face and bilateral upper extremities since two years. Medical history revealed that she was treated with systemic clomiphene citrate (CC) (50 mg/day) for the last 3 years on the 3-7 days of her menstruel period. Intermitant oral medroxyprogesterone (5 mg/day) for 3-5 days was also given to the patient for 2-3 times per year. A previous skin biopsy performed from scalp lesions was reported as capillary proliferation. On dermatological examination, hemorhagic crusted papules and nodules which were peripherally hyperpigmented were noticed. There were red to purple smaller numerous lesions on the face and dorsal aspects of upper extremities Dermatoscopy of the lesions revealed bright red vascular clods and lagoons within structureless white and brown areas (Figure 1 and 2).

What is your diagnosis regarding this case?

Diagnosis

The consultation of the pathologic specimen revealed proliferation of endothelial vessels with few inflammatory cells containing lymphocytes and eosinophils which was interpreted as angiolymphoid hyperplasia and eosinophilia (ALHE) on clinicopathological council of dermatology and pathology departments. There was no eosinophilia on peripheral blood smear and total immunoglobulin E (IgE) level was normal (34.4 UI/mL, range: 1.31-165). Because of the disseminated distribution

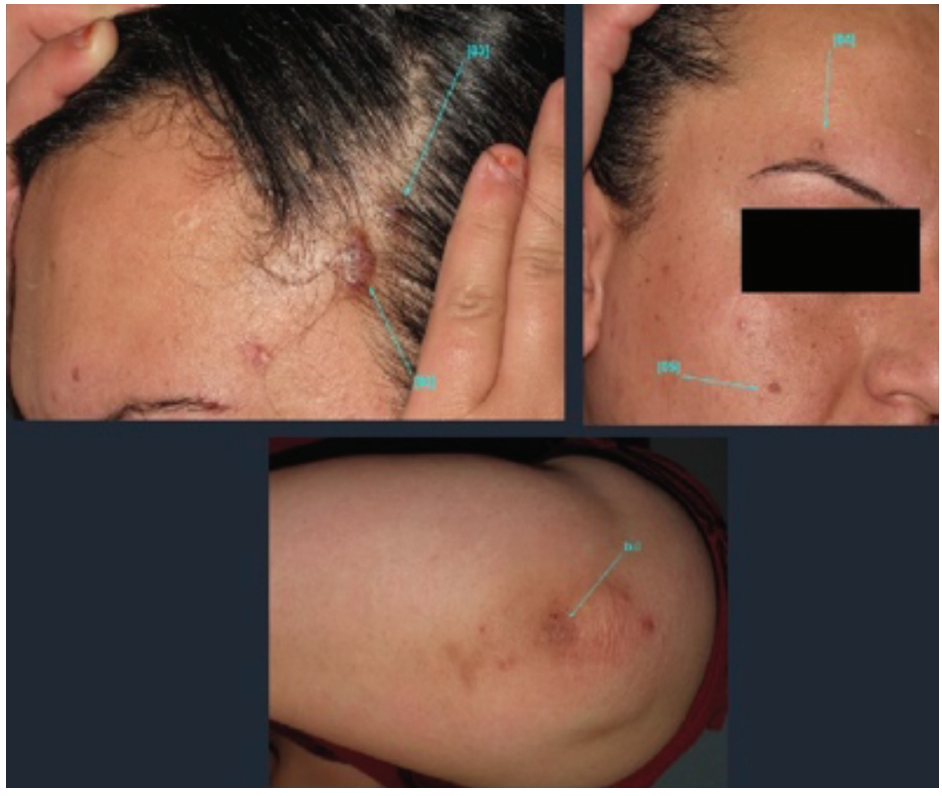

Figure 1. Hemorhagic crusted papules and nodules on the scalp, red to purple smaller numerous lesions on the face and elbow

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and presence of numerous lesions, topical imiquimod was started twice a day for 15 days on the lesions. On the control visit, the patient had significant relief from pruritus and marked improvement of the lesions was observed with total regression of lesions on the extremities. Dermatoscopic examination revealed that vascular component of the lesions were completely cleared by imiquimod therapy (Figure 3 and 4).

ALHE is a rare benign reactive disease with unknown origin. Trauma, infections, vaccinization and hormonal triggers including pregnancy and oral contraceptive usage are identified as inducing agents (1-5). To our knowledge, this is the first case of disseminated ALHE induced after *in vitro* fertilization (IVF) therapy performed by CC. CC is a non-steroidal selective estrogen receptor modulator used for inducing gonadotropin releasing hormone peaks and ovulation in patients with unovulatory states. CC has both estrogenic and antiestrogenic properties. Headache, flushing and abnormal uterine bleeding have been reported as its side effects however data is lacking about its potential side effect on the skin (6). Through literature review, there

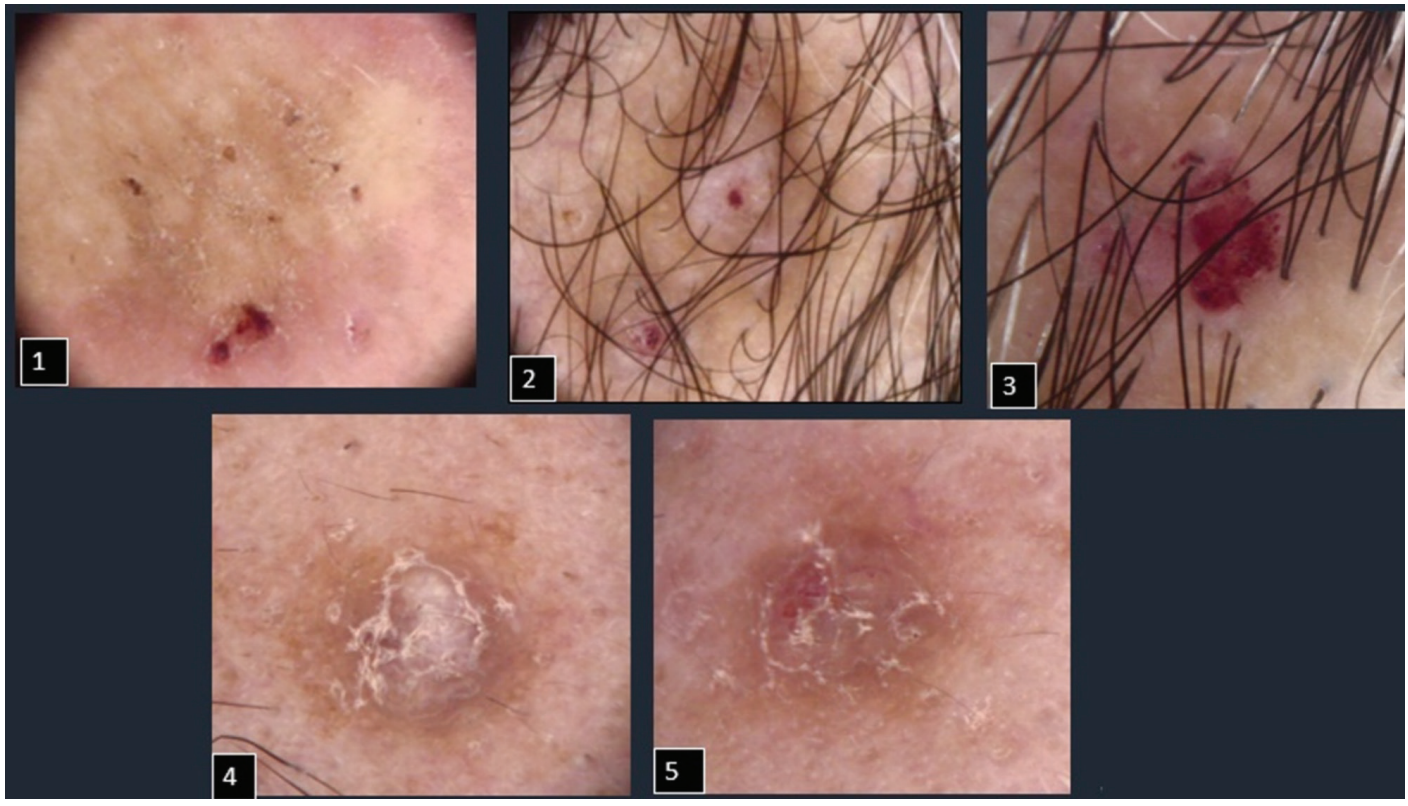

Figure 2. Hemorhagic crusts, red vascular lagoons and scales surrounded by hyperpigmented rim are observed dermatoscopically on the angiolymphoid hyperplasia and eosinophilia papules/nodules

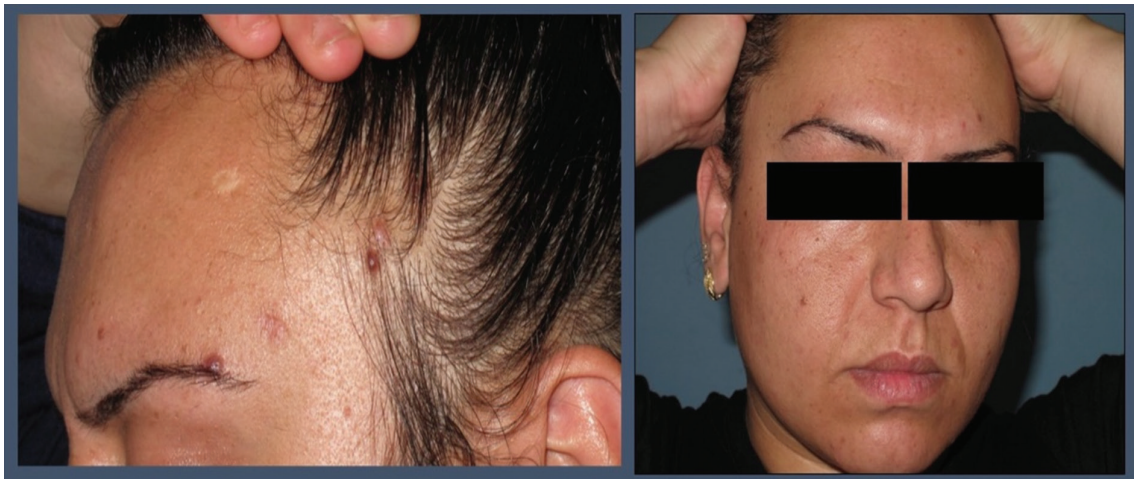

Figure 3. Marked improvement of angiolymphoid hyperplasia and eosinophilia lesions on the face and scalp

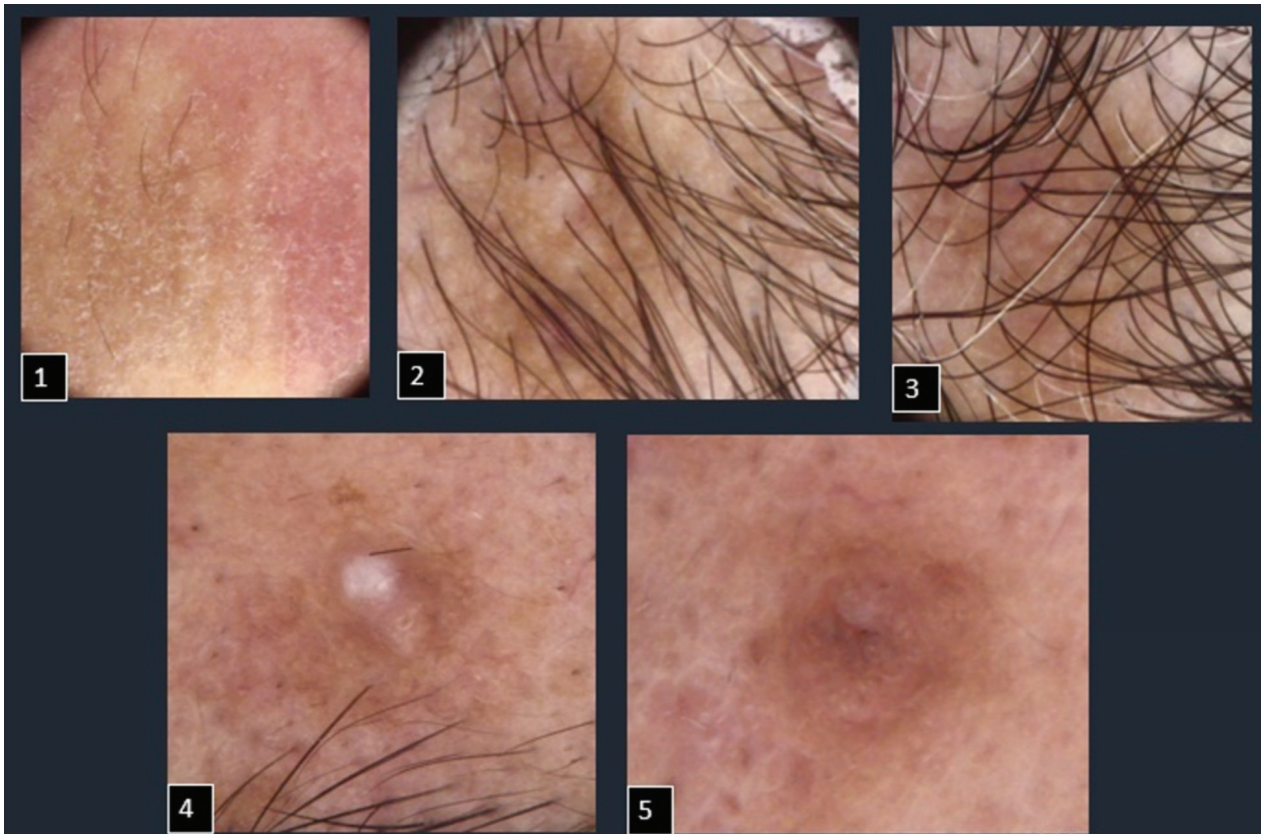

Figure 4. Total regression of vascular lagoons, scaling and crusting after topical imiquimod therapy

is only one report regarding CC's side effect on the skin, a 35-year old woman developed six primary cutaneous melanomas during her third pregnancy who had received CC treatment for nearly 2 years previously (7). Because bad prognosis of melanoma is associated with pregnancy, claims about CC to activate or progress precursor dysplastic lesions into malignant melanoma through its hormonal effects were found important. Occurrence of the disease in association with sex hormones is noteworthy. In fact, its shown that there is high number of estrogen and progesterone receptors in the tumor cells of some patients (8). Although taken intermitently, progesteron can also be an inciting or facilitating factor for ALHE's development. But due to the continous usage of CC and appearance of new lesions despite progesterone lacking periods during 3 years of IVF treatment, this was accepted as a low possibility. However it should be kept in mind that ALHE can be associated with pregnancy or with use of oral contraceptive pills and regressing after their withdrawal.

Treatment of ALHE depends on the extent of the disease and consists of different modalities such as intralesional and systemic corticosteroids, cryotherapy, curettage, electrodesiccation, radiation, surgical excision and laser therapies (1,3). Although accepted as a reactive process, ALHE is resistant to most of treatment modalities and tends to reoccur. The most common suggested treatment modality is surgical excision (1). However excision and ablative methods are not suitable in young patients, patients with facial lesions and/or disseminated neumerous lesions. Topical treatments seem to be a better choice in these instances. Succesful treatment of refractory ALHE with topical imiquimod was achieved previously (9,10). Topical tacrolimus and intralesional interferon α-2 injections are also used with success (11,12). Because of the extent and distrubution of numerous lesions with pruritus and bleeding, we chose to give topical imiquimod as a first line therapy in our case. The rapid cessation of pruritus and associated bleeding was remarkable together with the improvement of skin lesions after 15 days of topical application of imiquimod.

Conclusion

In conclusion, IVF treatment consisting of CC can induce disseminated ALHE. Short-term topical imiquimod is an efficient agent to be used in ALHE with rapid relief of symptoms and improvement of lesions.

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