Split Plaque over Postauricular Area

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A middle-aged man presented to our outpatient department for a gradually progressive hyperpigmented fissured plaque over the right postauricular area of 6 months duration. The patient denied using spectacles and had no history of trauma. Examination showed a single, 3 × 1.5-cm-sized, well-defined, hyperpigmented plaque with central fissuring, irregular surface, and raised brownish edges with perilesional erythema over the right post auricular area [Figure 1a]. The rest of the skin, scalp, mucosae, and nails were normal. Systemic examination revealed no abnormality. Hematological and biochemical investigations were unremarkable. Dermoscopic evaluation was carried out using a hand-held DermLiteII Hybrid M Dermoscope at ×10 magnification in polarized mode [Figure 1b], and a skin biopsy was performed [Figure 2].

Dermoscopy showed brownish crust at the center of the lesion and erythematous periphery containing follicular plugs, perifollicular white halo, and superficial telangiectasia [Figure 1b]. Histopathological examination revealed epidermal hyperkeratosis, mild acanthosis, follicular plugging, apoptotic keratinocytes, basal cell vacuolization, and cell poor interface dermatitis.The dermis showed moderately dense lymphomononuclear infiltrate admixed with histiocytes arranged predominantly in perifollicular and perivascular area [Figure 2]. Further evaluations revealed speckled antinuclear antibody positivity and 24-hour urine protein of 286 mg/L (normal <300 mg/L).

Chronic cutaneous lupus erythematosus (CCLE) classically presents as an erythematous discoid plaque with scaly surface on photoexposed areas that heal with atrophic scar and pigmentary changes. On histopathology, CCLE is characterized by epidermal hyperkeratosis, basal cell vacuolization, thickening of the basement membrane, periadnexal infiltrates, dermal mucin, and prominent follicular plugging.[1] Dermoscopy of CCLE is characterized by the "inverse strawberry pattern" that denotes reddish-to-yellowish follicular openings surrounded by whitish haloes. The confluence of perifollicular whitish haloes results in an overall whitish background color. In contrast, actinic keratosis displays a "strawberry pattern" typified by the reddish background interrupted by white-to-yellowish follicular openings. Treatment of cutaneous lupus erythematosus (CLE) includes avoidance of sun exposure and smoking, along with local therapy using potent corticosteroids and calcineurin inhibitors.[2] Antimalarial is the first choice of systemic treatment.[3] Other treatment options include retinoids, metothrexate, thalidomide, mycophenolate, azathioprine, and dapsone.[2] In our case, the patient was started on hydroxychloroquine 300 mg once daily, 0.05% clobetasol propionate cream along with strict avoidance of sun exposure; marked improvement was noted after 6 months of treatment with no adverse effects.

Clinical differential diagnoses of localized CCLE in the index case were acanthoma fissuratum, psoriasis, and basal cell carcinoma (BCC). Acanthoma fissuratum is usually caused by constant pressure from an ill-fitting spectacle frame resulting in unilateral, skin colored to light red, tender mass of granulation tissue in the superior surface of the postauricle with macroscopic appearance like a coffeebean. Acanthoma fissuratum is also known as granuloma fissuratum of the ear, which is a misnomer as no granuloma is seen on histology.[4] Presence of parakeratosis, epidermal attenuation filled with inflammatory cells, or keratinized material in acathoma fissuratum differentiates it from CLE. BCC over the external ear is mostly of noduloulcerative variety with lesion

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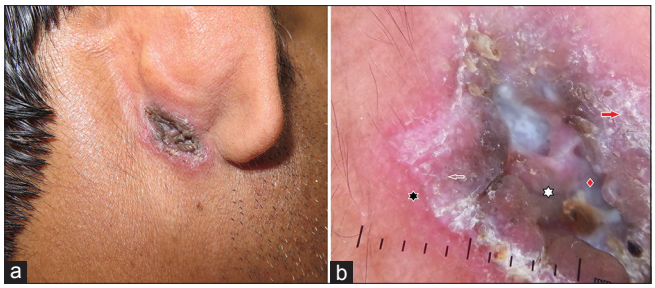

Figure 1: (a) Split plaque on the right postauricular area. A single plaque with central fissuring and hyperpigmentation surrounded by erythema. Brownish scales and comedonal plugs can be seen. (b) Dermatoscopy (DermLite II Hybrid M Dermoscope at ×10magnification in polarized mode) showing central hyperpigmented area (white asterisk) surrounded by diffuse erythematous border (black asterisk). Grey towhite scales (red arrow), follicular plugs (white arrow), and unfocused white structureless area denoting central fissuring (red diamond) canbe seen

being erythematous to pink scaly papule showing a central ulcer and a pearly border. Sometimes the lesion can be pigmented.[5] Focused bright-red arborizing vessels coursing over pinkish tumor, sometimes associated with ulceration, is the dermoscopic feature of BCC. Pigmentation in BCC appears as blue-gray globules or ovoid nests, spoke wheel-like and leaf-like areas. Absence of proliferation of basaloid cells parallel to epidermal surface and slit-like retraction of the basal cells differentiate CLE from BCC on histology.[6] Psoriasis sometimes presents with fissured plaques on the postauricular area, often associated with plaques elsewhere in the body, especially the scalp. Regular red dots with white lustrous scales without any follicular plugs or pigmentation help in dermoscopic differentiation of this entity. Absence ofparakeratosis with neutrophils, spongiform pustules of Kogoj, and elongated rete ridges differentiate CLE from psoriasis on histology.[7] Other common differentials of plaque over the postauricular area include lupus vulgaris, seborrheic keratosis, and angiolymphoid hyperplasia with eosinophilia.

To conclude, CLE is commonly seen over the external ear with helix and preauricular area being the common site; photoprotected area is involved in only 10%–30% of the patients.[8] Absence of lesions affecting these common sites and atypical presentation as split fissured plaque on an unusual site like photoprotected postauricular area made this case a clinicopathologic challenge for us.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form the patient(s) has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

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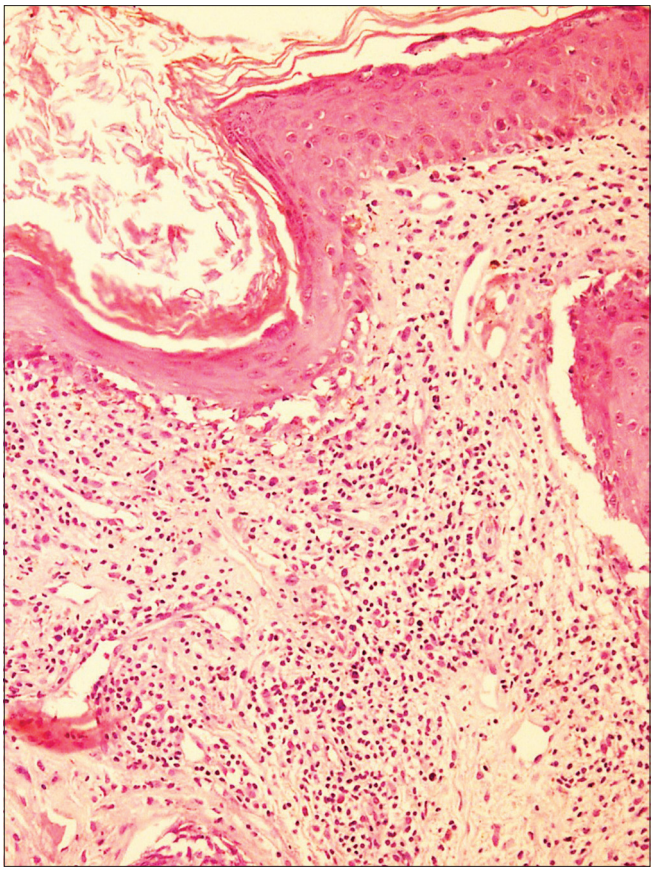

Figure 2: Histopathology (H and E stain, ×200) showed follicular plugging, cell poor inflammatory infiltrate, basal cell vacuolization, apoptotic keratinocytes, perifollicular and perivascular infiltrates

Conflicts of interest

There are no conflicts of interest.

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