Original Article

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Actinic Reticuloid – A Case Report

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Abstract:

Actinic reticuloid (AR) is a persistent, immune-mediated photo dermatosis induced by ultraviolet (UV) radiation, either by UVA, UVB or visible light and is considered an entity of Chronic actinic dermatitis (CAD). CAD consists of a spectrum of diseases including Actinic reticuloid (AR), photosensitive eczema, and persistent light reactivity. In addition to photosensitivity, most patients also show contact sensitivity to several allergens. It is characterised by pruritic, eczematous and lichenified plaques over the photo-exposed sites.[1] [4]

Keywords: *Chronic actinic dermatitis, Actinic reticuloid, Photosensitive eczema, Photosensitivity dermatitis.*

Introduction:

Chronic Actinic Dermatitis (CAD) is an immune-mediated photodermatosis, first described by Ive et al. in 1969.[2] About 75% of patients have contact sensitivity to several allergens in addition to severe sensitivity to UVB, UVA, and/or visible light, which may be a factor in the etiopathogenesis of CAD. Mild cases of AR are eczematous whereas the most severe ones resemble cutaneous T-cell lymphoma.[2][5] ACD or allergic contact dermatitis, frequently coexists with CAD and often precedes photosensitivity.[4] Diagnosis is made based on clinical, histopathologic, and photobiologic findings. Photo testing and patch testing also become essential in making a diagnosis and the treatment includes detailed advice on sunlight and allergen avoidance, topical corticosteroids, and emollients. Systemic immunosuppressives such as azathioprine or systemic prednisolone for acute exacerbations may be explored when these therapies alone prove ineffective. Systemic treatment may be necessary for more than a few weeks.[3]

Case Report:

A 62-year-old male patient, who is a farmer by occupation presented to our Dermatology OPD with an eczematous, pruritic eruption on the face (Figure 1), back, chest and both hands (Figure 2). The patient gives a history that the rash first appeared on the face 3 years back. The rash appeared during summer only during the initial stages but the seasonal variation disappeared with the progression of the rash to a more severe form. The rash later spread to other exposed areas like the hands, upper back and chest. The patient has no known allergies. A clinical diagnosis of Actinic reticuloid was made. The patient was advised of the following treatment:

- Clobetasol ointment once a daily external application for the lesions on the body.
- Tretinoin 0.025% cream for external application on the face at night.
- Liquid paraffin for external application all over the body.
- Tablet levocetirizine 5mg HS.

Figure 1: *Pigmented, thickened, plaques with accentuated skin markings seen on the face.*

Figure 2: *Multiple pigmented, scaly papules and plaques are seen over the nape of the neck, back, and dorsal surface of both the hands and the chest.*

- Photoprotection and allergen avoidance are advised.

Improvement was noted in the lesions at 1-month follow-up (Figure 3).

Figure 3: *Improvement in the lesions was noted after 1 month of treatment*

Discussion:

Chronic Actinic Dermatitis (CAD) is a chronic or recurring dermatitis mainly affecting the photo-exposed sites. It is considered to be the second most common immunological photodermatosis after Polymorphous light eruptions.

It includes four previously documented conditions:

i. Actinic reticuloid (AR): Pseudolymphomatous changes in patients with broad-band photosensitivity.
ii. Photosensitive eczema: Dermatitis in sun-exposed sites

iii. Photosensitivity dermatitis / actinic reticuloid: Features of both photo-exposed site dermatitis and actinic reticuloid are seen.

iv. Persistent light reactors: Patients having photo contact allergy.[1]

It is predominantly noted in elderly males usually associated with atopy, particularly in patients with skin phototypes IV-VI.

Dermatitis of different types acts as a predisposing factor for CAD. It is a sporadic disease with no genetic factors involved.[1][2][3]

CAD is characterized by lichenified, pruritic, eczematous plaques that are primarily found on sun-exposed sites like the head, neck and limbs. There may have been pre-existing dermatitis in some patients, which makes them unaware of the association with sunlight.

In Actinic reticuloid there are pseudo-lymphatous and prurigo nodularis-like changes. CAD can also present as an unexplained erythroderma.

Close differential diagnoses for this condition include:

- Airborne contact dermatitis
- Photo-aggravated atopic or seborrheic eczema
- Drug-induced photosensitivity
- Cutaneous T-cell lymphoma [1]

The diagnosis is usually made based on history and clinical findings. Phototesting, patch and photopatch testing can be used to further substantiate the diagnosis. On Histopathological examination, there is epidermal spongiosis with acanthosis and dermal perivascular inflammatory cell infiltrate is noted. In the chronic phase, pseudolymphomatous changes with epidermotrophism are seen which makes it difficult to differentiate from mycosis fungoides.[5]

Management of this condition involves:

- Avoidance of UV rays and visible light, when necessary, by using hats, broad-spectrum sunscreens.
- Potent or very potent topical corticosteroids.
- Topical tacrolimus or pimecrolimus.
- Topical retinoids.
- Systemic glucocorticoids or Azathioprine 150mg used in cases of acute flares.
- Other systemic immunosuppressives can be tried.[3][6]

Conclusion:

This condition is not commonly reported in the literature. This case has been presented here for its rarity and it is important to do further research to be done in this direction to improve the quality of lives of the affected patients.

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