Acanthoma Fissuratum: Lest we Forget

Sir,

A 45-year-old male presented with the complaint of dark colored, itchy lesion over the back of the right ear for past 3 months. The lesion was persistent and gradually increasing in size. Local examination showed a solitary, well-defined, hyperpigmented plaque with central depression, measuring 2 × 1 cm over the right posterior auricular area. The edges were slightly raised and well-demarcated [Figure 1]. History of wearing spectacles for the last 20 years for correction of myopia was present. The groove corresponded the site where the temple of the spectacle frame was touching. Clinically, the differentials of acanthoma fissuratum and basal cell carcinoma were considered and skin biopsy was performed to rule out malignancy.

Histopathological examination [Figure 2a and b] revealed epidermis with prominent acanthosis, mild orthohyperkeratosis, and hypergranulosis. The rete ridges were wide, blunt-ended, and showed central attenuation. Focal areas of spongiosis and parakeratosis were seen. The papillary dermis showed proliferation of small, slightly dilated vessels with variable patchy chronic inflammation in the background of fibrotic stroma. With this typical history and histopathological findings, final diagnosis of acanthoma fissuratum was rendered.

Acanthoma fissuratum is a rare entity which presents with the typical history of chronic persistent trauma of the affected site. It is synonymous with spectacle frame granuloma or granuloma fissuratum. It is one of the misnomers in dermatology because no granulomatous response is observed. The exact incidence is not available because many of the patients never approach for specific treatment. There is no age and sex predilection for its development.[1] Factors such as ill-fitting spectacle frames, weight of glasses, concomitant skin disease, and

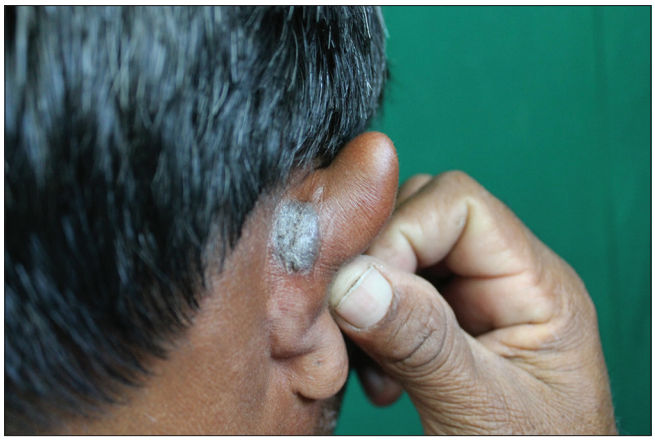

Figure 1: Plaque over the right posterior auricular area

abnormal anatomy contribute to the development of the lesions.

In 1932, Sutton first described two cases of acanthoma fissuratum with history of ill-fitting dentures at the superior labioalveolar sulcus. Subsequently Epstein described the cases of granuloma fissuratum of the ear.[2,3] Common locations for acanthoma fissuratum involving the ear include retroauricular sulcus, superior auricular sulcus, and lateral aspect of the bridge of the nose near the inner canthus in cases of ill-fitting spectacle frames. However, involvement of other sites such as posterior forchette of vulva,[4] penis,[5] and outer auditory canal[6] have also been described.

Classically, it presents as unilateral firm, folded coin-shaped lesion, flesh-coloured papule, nodule, or plaque with central groove dividing the lesion into two halves (Coffee bean appearance).[3] Thus, it commonly masquerades as basal cell carcinoma.[7] Adnexal carcinomas sometime masquerade as acanthoma fissuratum with similar presentation. Thus, microscopy forms the mainstay to solve the clinical dilemma as the management differs in both.

Histopathology shows acanthosis, hyperkeratosis with variable parakeratosis. Epidermis shows central attenuation corresponding to the longitudinal groove, which may be filled with inflammatory cells or keratinous material. Dermis shows variable perivascular nonspecific chronic inflammatory infiltrate. Histopathologically, chondrodermatitis nodularis helicis and lichen simplex chronicus may form differentials.[8]

The principle treatment of acanthoma fissuratum includes removal of the chronic irritating stimulus which usually leads to the reversal of the lesion. Other modalities such as surgical excision, intralesional corticosteroids as well as electrosurgery can be used in persistent cases.

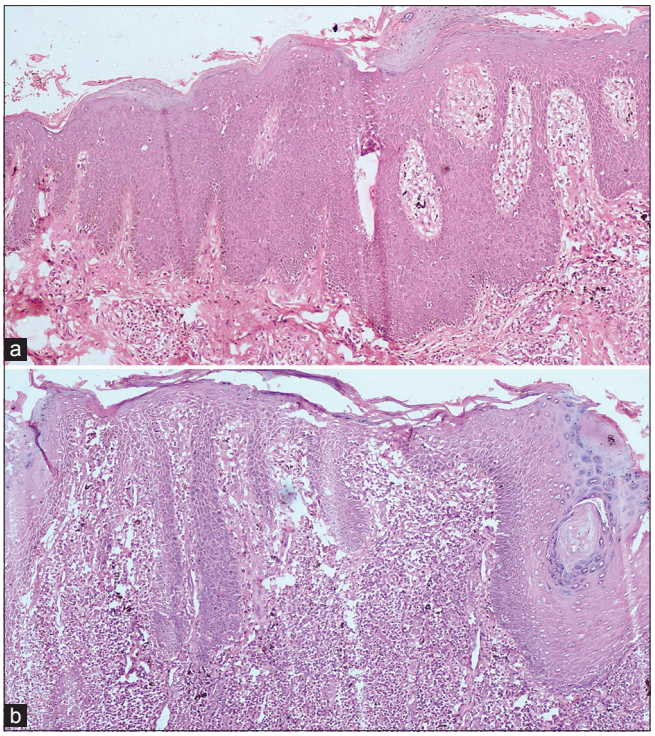

Figure 2: (a) Photomicrographs of the lesion showing epidermal acanthosis (H and E stain ×100). (b) Area of attenuation corresponding to the longitudinal groove with chronic inflammatory infiltrate (H and E stain ×100)

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest

Nikhil S. Deshpande, Arijit Sen, Biju Vasudevan[1], Shekhar Neema[1]

Departments of Pathology, and [1]Dermatology, Diamond Jubilee Block, Armed Forces Medical College, Pune, Maharashtra, India

Address for correspondence:
Dr. Nikhil S. Deshpande, Department of Pathology, Diamond Jubilee Block, Armed Forces Medical College, Pune - 411 040, Maharashtra, India.
E-mail: drnikhildeshpande@gmail.com

References

1. Orengo I, Robbins K, Marsch A. Pathology of the ear. Semin Plast Surg 2011;25:279-87.
2. Sutton RL Jr. A fissured granulomatous lesion of the upper labioalveolar fold. Arch Dermat Syph 1932;26:425.
3. Epstein E. Granuloma fissuratum of ear. Arch Dermatol 1965;91:621-2.
4. Kennedy CM, Dewdney S, Galask RP. Vulvar granuloma fissuratum: A description of fissuring of the posterior fourchette and the repair. Obstet Gynecol 2005;105:1018-23.

5. Lee JI, Lee YB, Cho BK, Park HJ. Acanthoma fissuratum on the penis. Int J Dermatol 2013;52:382-4.
6. Gonzalez SA, Moore AGN. Acanthoma fissuratum of the outer auditory canal from a hearing aid. J Cutan Pathol 1989;16:304.
7. Sand M, Sand D, Brors D, Altmeyer P, Mann B, Bechara FG. Cutaneous lesions of the external ear. Head Face Med 2008;4:2.
8. Jacqueline M. Disorders associated with physical agents: Heat, cold, radiation, and trauma. In: David EE. editor. Lever's Histopathology of the Skin. 10th ed. USA: Lippincott Williams and Wilkins; 2009. pp. 343.

Access this article online

Website: www.idoj.in

Quick Response Code

DOI: 10.4103/2229-5178.202267

How to cite this article: Deshpande NS, Sen A, Vasudevan B, Neema S. Acanthoma fissuratum: Lest we forget. Indian Dermatol Online J 2017;8:141-3.

Received: April, 2016. **Accepted:** May, 2016.