Benign Lichenoid Keratosis – "A Placid Affair"

Dear Editor,

Differentiating benign from malignant skin conditions is a decision which has a lot of psychological impact on the patients and it changes the treatment protocol completely. Clinical expertise, dermoscopy, and histopathology aid in our decision to differentiate a malignant skin condition from its mimickers. Lichenoid keratosis is a benign condition which closely mimics squamous cell carcinoma and premalignant conditions like Bowen's disease. We report a rare case of benign lichenoid keratosis (BLK) and its successful management highlighting its differentiating features from its malignant counterparts.

A 45-year-old male patient presented with complaints of an asymptomatic dark raised lesion on the left forearm for last 2 years. On examination, a solitary well-defined erythematous to hyperpigmented plaque of size 7 × 5 cm was present over the volar aspect of the left forearm with an irregular surface and adherent black crust along the periphery [Figure 1]. Dermoscopy revealed multiple dotted vessels and fine scaling along with few areas of crusting [Figure 2]. Skin biopsy was done keeping in mind the differentials of Bowens disease, squamous cell carcinoma, granuloma annulare, and BLK. Histopathology of the lesion revealed epidermis showing acanthosis and hyperkeratosis. Squamous epithelial cells showed reactive atypia. A dense lymphoplasmacytoid lichenoid inflammatory infiltrate was seen in the subepidermal region [Figure 3]. No signs of dysplasia/atypia were seen. HMB45, CK7, CK20, CK5/6, CEA, and Melan A were negative. The diagnosis of benign lichenoid keratosis was made. Patient was started on topical 5% 5-fluorouracil (5-FU) applied once a day.

BLK is a typical benign cutaneous lesion with an uncertain cause which is frequently mistaken for a benign cutaneous tumor. BLK may be a lymphocyte-mediated regression of lentigo or reticulated seborrheic keratosis that was previously present.[1] It frequently affects fair-skinned females between the fifth and seventh decade. BLK typically appears as a single lesion on sun-exposed areas such as the face, upper extremities, and trunk.[2] Three morphologic subtypes of BLK—the erythematous type, the papulokeratotic type, and the plaque type—have been described in the literature.[3,4] Most of the cases resolve spontaneously. Treatment modalities include topical steroids, topical 5% 5-FU, and 5% imiquimod. Surgical excision is also beneficial.

The aim of this communication is to highlight the importance of clinical, dermoscopic, and histopathological correlation in clinching the diagnosis. In our case, although the clinical features were suggestive of a malignant change, the dermoscopic findings helped in thinking of varied differentials due to the benign features. Very few cases of BLK have been reported from India. Therefore, it is essential to be sensitized about this benign entity before thinking of a malignant condition because it may be just a "false alarm" !

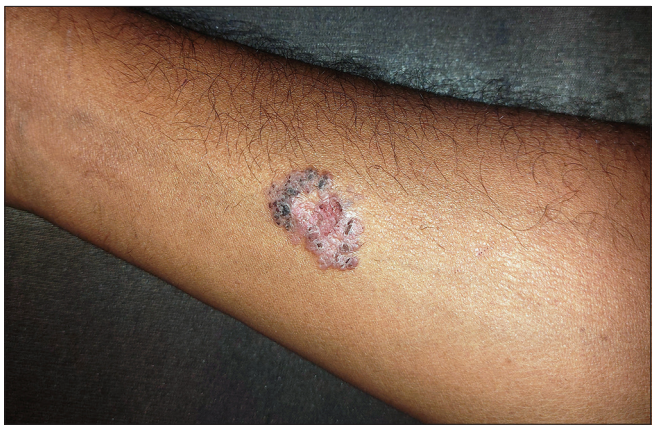

Figure 1: A solitary well-defined erythematous to hyperpigmented plaque of size 7 × 5 cm was present over the volar aspect of left forearm with an irregular surface and adherent black crust along the periphery

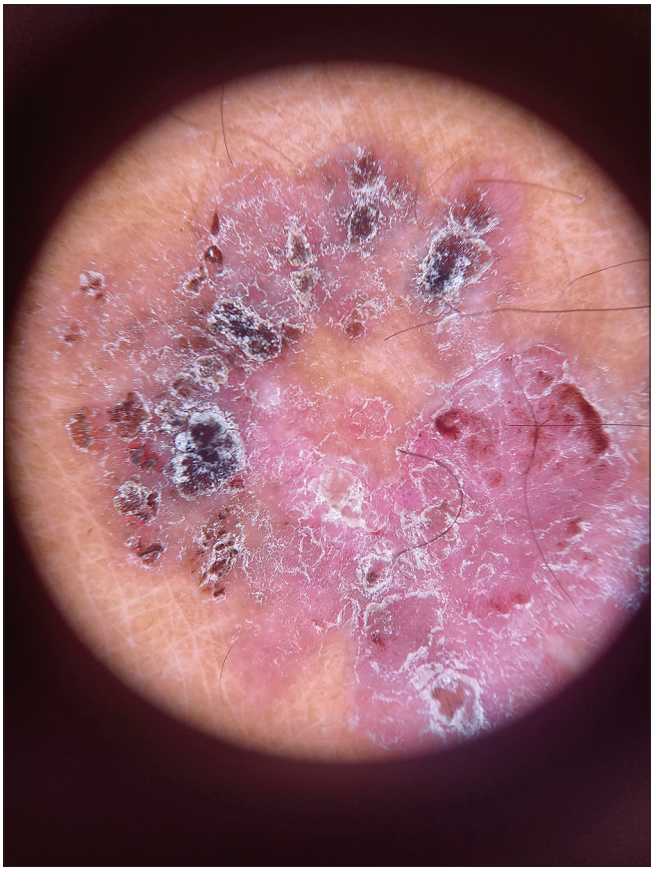

Figure 2: Dermoscopy showing multiple dotted vessels, fine scaling along with few areas of crusting (Dermalite DL 4, nonpolarised,10X)

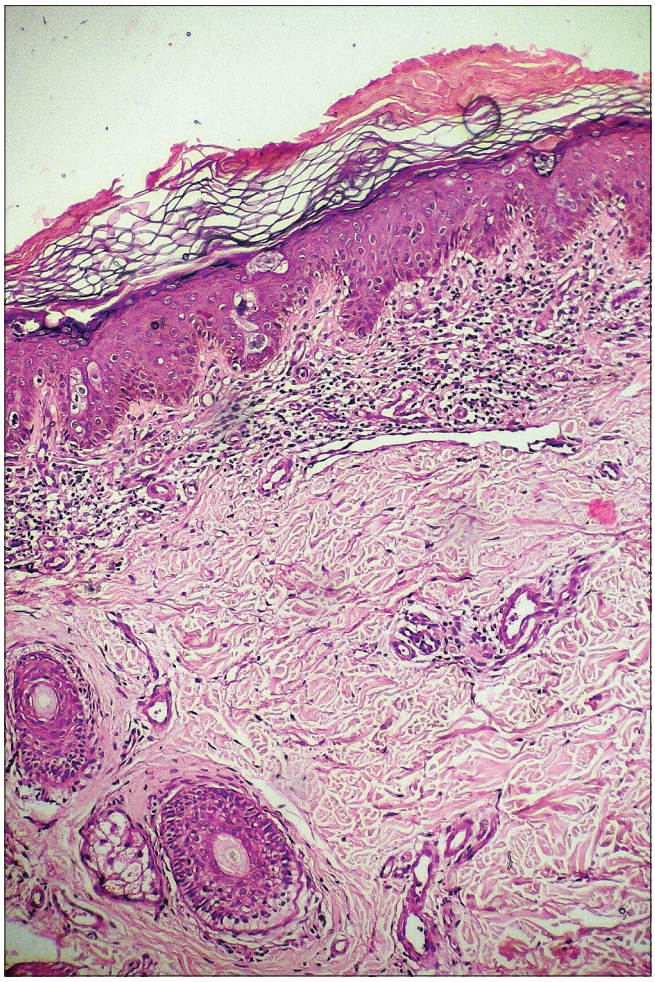

Figure 3: Epidermal acanthosis and hyperkeratosis with squamous epithelial cells showing reactive atypia. A dense lymphoplasmacytoid lichenoid inflammatory infiltrate is seen in the subepidermal region (H &E,100x)

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.

Financial support and sponsorship

Nil.

Conflicts of interest

There are no conflicts of interest.

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References

1. Shapiro L, Ackerman AB. Solitary lichen planus-like keratosis. Dermatologica 1966;132:386-92.
2. Panizzon R, Skaria A. Solitary lichenoid benign keratosis: A clinicopathological investigation and comparison to lichen planus. Dermatologica 1990;181:284-8.
3. Lumpkin LR, Helwig EB. Solitary lichen planus. Arch Dermatol 1966;93:54-5.
4. Sonathalia S, Khetan P, Sarkar R, Sharma S, Arora R. Solitary violaceous plaque over the abdomen. Indian J Dermatol 2015;60:108.

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Website: https://journals.lww.com/idoj

Quick Response Code

DOI: 10.4103/idoj.idoj_605_22

How to cite this article: Bhatnagar A, Kothari R, Kishore K, Mitra D. Benign lichenoid keratosis – "A placid affair". Indian Dermatol Online J 2023;14:893-4.

Received: 08-Nov-2022. **Revised:** 10-Jan-2023.
Accepted: 23-Mar-2023. **Published:** 10-Jul-2023.