

PERFORATING FOLLICULITIS IN DIABETIC PATIENT WITH CHRONIC RENAL ALLOGRAFT DYSFUNCTION**Meenakshi Patial***

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ABSTRACT

Perforating dermatoses clinically present as a papulonodular rash with transepidermal elimination of dermal components. Four classic forms of primary perforating dermatosis have been described which includes: Kyrle disease, reactive perforating collagenosis, elastosis perforans serpiginosum, and perforating folliculitis. Its secondary form is known as acquired perforating dermatosis. The case discussed is a chronic kidney disease patient with diabetes mellitus that presented in the OPD with itchy hyperpigmented papules and nodules over limbs and back.

KEYWORDS: Perforating dermatoses, Transepidermal elimination.**INTRODUCTION**

Perforating dermatoses is a group of dermatoses that presents with a papulonodular rash with transepidermal elimination of dermal components. Four forms of primary perforating dermatosis include Kyrle disease, reactive perforating collagenosis, elastosis perforans serpiginosum, and perforating folliculitis, where the transepidermal elimination mechanism represents the hallmark of the disease.^[1] Its secondary form is known as acquired perforating dermatosis seen in adults with diabetes mellitus, chronic renal failure and rarely, other systemic diseases, regardless of the dermal material eliminated.^[2] Patients usually present with umbilicated papules and plaques with trunk and extremities being the most common sites involved.^[3] The pathogenesis of acquired perforating dermatosis remains unclarified, some suggests that trauma and microvasculopathy may be the triggers of transepidermal elimination and degeneration of the collagen fibers.^[4] Both sexes are equally affected and it usually occurs during the fifth decade of life.^[5] Acquired reactive perforating collagenosis is found to be the most common form while Kyrle disease and perforating folliculitis were the least frequent types. The histopathology classically shows epidermal invagination often involving a dilated hair follicle with a keratotic plug consisting of collagen, keratin or elastic fibers. The diagnostic feature is the presence of a central keratotic core which is overlying a focus of epidermal perforation.^[6] There are no guidelines for the treatment of acquired perforating dermatosis.

Case

The patient was a 38-year-old male presented with a multiple pruritic hyperpigmented umbilicated papules with central keratotic adherent plug, over the lower limbs and trunk for 2-3 months [Figure 1-2]. He was a known case of diabetes mellitus for the past 11 years who had undergone renal transplant 8 years back and also presented with chronic renal allograft dysfunction. Skin biopsy showed hyperkeratosis, hyper granulosis, acanthosis and melanin incontinence and dilated hair follicle with a keratotic plug.

DISCUSSION

Acquired perforating dermatosis may present with polymorphous skin lesions, such as hyperkeratotic, often umbilicated, papules or nodules. New skin lesions can emerge due to koebnerization. Diagnosis of acquired perforating dermatosis relies on the patient's history, the clinical presentation of the lesions, and histopathology. To identify the underlying disease, estimation of blood glucose level, hepatic and renal function are advised. The goal of treatment includes the management of underlying disease and to relieve the pruritus. First-line treatment options include systemic or topical corticosteroids, retinoids, keratolytic agents and emollients and oral antihistamines.^[7] Acquired perforating dermatosis often demonstrates severe pruritus and can have a significant impact on the patient's quality of life. Therefore, physicians should be aware of this characteristic dermatosis in patients with diabetes or chronic kidney disease receiving hemodialysis given that early diagnosis and treatment can prevent the progression of the disease which results in an improvement of prognosis.



Figure 1, 2: Hyperpigmented umbilicated papules with central keratotic plug.

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