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Kyrle's Disease: A Rare Skin Manifestation of Systemic Diseases

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Abstract

A 39-year-old man of diabetic nephropathy presented with pruritic papulo-nodular brown lesions in both arms and legs on extensor surface characterized by central keratin plugs. Lesions were non-tender and numerous, crusted lesions which histologically were perforating disorders, showing features of Kyrle disease. The blood sugar of the patient was kept under control & hemodialysis was started. Dermatological lesions were treated by Isotretinoin, vitamin A, Tretinoin cream and oral antihistamines.

Key-word: *CKD, Diabetes Mellitus, Keratin, Kyrle's Disease.*

Case-report

A-39-years old Hindu male was admitted into Medicine dept. with oliguria. On physical examination he was anemic & B.P was 180/110 mm Hg, He was found to have multiple brown papulo-nodular lesions with central keratin plug and silvery scales distributed over the anterior aspect of both thighs and legs (Fig.-1). There were also numerous papules of varying size on the extensor aspect of both elbows (Fig.-2). The lesions were non-tender and associated with severe pruritus. He was a known diabetic for the past 10 years & on irregular treatment. Necessary investigations (FBS, PPBS, Blood urea, serum creatinine, serum sodium and potassium, USG abdomen) were done & he was found to have developed diabetic nephropathy (CKD-stage 5). Insulin & antihypertensive was started to control his blood sugar & hypertension, subsequently dialysis was done for CKD. The

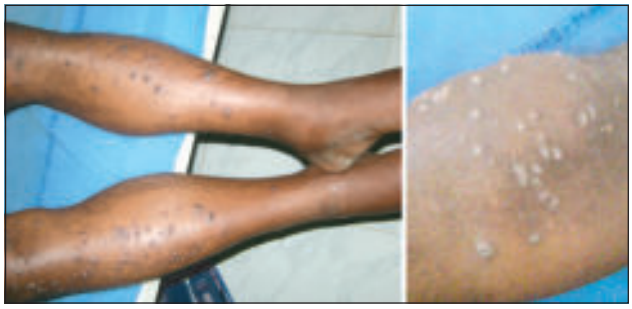

Fig 1: *Skin lesion on both lower limbs.*

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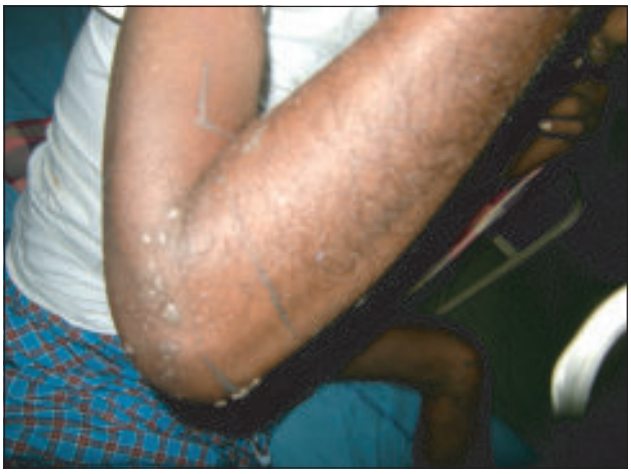

Fig.-2: *Skin lesions on elbow.*

dermatological lesions were diagnosed to be Kyrle's disease & treated with Isotretinoin, High dose vitamin A, Tretinoin cream, emollients and oral antihistamines are useful in relieving pruritus.

Discussion

Kyrle disease was first described in 1916 by Kyrle and is characterized by the formation of large papules with central keratin plugs.[1] It may be due to metabolic conditions such as uremia[1,7] especially in patients on dialysis, diabetes mellitus,[2,6,7] hepatic failure[5] or as paraneoplastic syndrome in multiple myeloma.[3] KD has been also reported with other conditions including tuberculosis, pulmonary aspergillosis, scabies, atopic dermatitis, AIDS, neurodermatitis and malignant and endocrinological disorders.[4] It can affect both men and women commonly seen in 3rd to 5th decade. Rarely it may be idiopathic or hereditary with autosomal inheritance. Lesions begin as small papules with silvery scales that eventually grow to about 1.5 cm in diameter to form reddish-brown nodules with a central keratin (horny) plug. Multiple lesions may coalesce to form large keratotic plaques. Lesions occur mostly on the legs but also develop on the arms and in

the head and neck region. The palms and soles are rarely affected. Without treatment lesions heal spontaneously but new lesions may appear. Lesions are not painful but patients may experience intense pruritus

Conflict of Interest : None

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