Pruritic Erythematous and Hyperkeratotic Patches of Groins
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CASE REPORT

A 83-year-old male patient presented with pruritic red to brownish eruptions over bilateral groins and scrotum for many years. He was otherwise healthy.

Physical examination revealed erythematous, hyperpigmented and hyperkeratotic patches on the bilateral groins and scrotum (Fig. 1). Potassium hydroxide preparations from the inguinal eruption scrapings were negative. A skin biopsy from a scaly patch on the left groin was performed. The histological findings showed hyperkeratosis with parakeratosis and retention of keratohyaline granules in the stratum corneum (Fig. 2).

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DIAGNOSIS
Granular Parakeratosis

DISCUSSION
Granular parakeratosis (GP) is an acquired abnormality of keratinization first described by Northcutt et al. in 1991 as axillary granular parakeratosis. Most commonly noted in the axillae but several reports have subsequently noted the existence of GP occurring on the groin, vulva, intermammary and submammary skin, and abdomen folds.1-3 For this reason, Metze and Rutten proposed the general term "granular parakeratosis".2 Until now, for a total of 50 cases, mainly women aged over 40 years have appeared in the literature.1-4 It presented as erythematous hyperpigmented and hyperkeratotic papules and plaques of the cutaneous folds that are often pruritic.

Histopathologically, GP typically consists of hyperkeratosis with parakeratosis associated with persistence of keratohyalin granules in the stratum corneum. The stratum granulosum is also preserved. The underlying epidermis may show mild acanthosis or some degree of thinning. The differential diagnoses included Hailey-Hailey disease, Darier’s disease, fungal infection, acanthosis nigricans, inverse psoriasis, contact dermatitis and pemphigus vegetans. However, a thickened stratum corneum with retention of keratohyalin granules was considered diagnostic of granular parakeratosis.3

The etiology of GP remains obscure. Probably the basic defect occurs in the processing of profilaggrin to filaggrin that results in a failure to degrade keratohyalin granules.2 Excessive washing followed by application of many topical products was found in 4 children manifesting with GP.4 Chemical irritant mediators, such as an antiperspirant and deodorants associated with humid and friction in intertriginous areas may result in this condition. Due to the unclear pathogenesis and limited cases, the pathological change of GP may represent a reaction pattern rather than a distinct disease entity.

The treatment of GP have variable efficacy. The condition has been documented to respond to retinoids and to calcipotriene and ammonium lactate.5 We present this rather uncommon case to remind that GP should be considered as one of the differential diagnoses of intertriginous skin eruptions to prevent the inappropriate use of therapies.

REFERENCES