5 Adult cases of granular parakeratosis associated with enzalkonium chloride exposure through laundry rinse aid

Granular parakeratosis (GP) is a benign, acquired disorder keratinisation with a predilection for middle aged women. This condition typically presents as hyperkeratotic papules or plaques affecting intertriginous sites. Histologically, it is characterised by parakeratosis and the retention of keratohyaline granules within a thickened stratum corneum

It has been proposed that benzalkonium chloride (BAK) could induce the pathological cascade of GP through disruption the epidermal lipids.1 This is supported by a case series of six children who developed GP after exposure to BAK in laundry rinse aid.1 However, there is limited information about this association in the adult population.

We report 5 cases of adult patients with biopsy-proven GP associated with exposure to BAK. Our patients developed GP after exposure to BAK in laundry rinse aids, and their eruption resolved with cessation of exposure.

Dermatologists should be aware of the association between GP and BAK exposure. Patients presenting with GP should have their products screened to identify a possible association.

Robinson AJ, Foster RS, Halbert AR et al. Granular parakeratosis induced by benzalkonium chloride exposure from laundry rinse aids. Australas J Dermatol. 2017. 58(3): e138-140.