

## QUIZ SECTION

### Pruritic Papules Following Lumbar Corset Use: A Quiz

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A 75-year-old man, previously skin healthy, presented with a 2-month history of slight pruritic eruptions on the chest and back. The eruptions had appeared following corset use for a lumbar fracture one month previously. The corset was worn over a towel, which was wrapped around the patient's trunk to soak up sweat. Physical examination revealed 5-mm-diameter reddish-to-brown papules with crusts, distributed mainly where the corset was applied (Fig. 1a,

b). He had no eruptions on the axilla or genitofemoral region, and no familial history of similar skin disorders. Skin biopsy from his back lesion was performed, and the specimen was stained with haematoxylin-eosin (Fig. 1c). After cessation of corset use, the eruptions gradually resolved with no other treatment.

*What is your diagnosis? See next page for answer.*



*Fig. 1.* (a) Red papules scattered on the trunk, mainly where the corset was applied. (b) Papules, up to 5 mm in diameter, tended to coalesce, forming brownish keratotic crusts. (c) A skin biopsy showed hyperkeratosis and acantholysis of keratinocytes. Dyskeratotic cells were also observed in the stratum granulosum (corps ronds) and stratum corneum (grains).

## ANSWERS TO QUIZ

**Pruritic Papules Following Lumbar Corset Use: A Comment**

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**Diagnosis: Grover's disease**

Grover's disease is an acquired self-limiting condition mainly affecting the trunk of middle-aged or elderly men, first described by Grover in 1970, under the term of "transient acantholytic dermatosis" (1). This disease manifests as pruritic papular or papulovesicular eruptions characterized histopathologically by focal acantholysis with or without dyskeratosis. The acantholysis in Grover's disease occurs in various patterns: Darier-like, pemphigus-like, Hailey–Hailey-like and spongiotic (2, 3). Fernández-Figueras et al. reported the most common to be the Darier-like pattern (43.3%), followed by the pemphigus-like pattern (40.8%) (2). For the diagnosis of Grover's disease, it is often necessary to differentiate it from Darier's disease. Although the age of onset for Darier's disease is generally around puberty, which is younger than in Grover's disease, cases of late-onset Darier's disease beyond the sixth decade have been reported (4). Since this case showed a Darier-like pattern in an elderly patient, it was especially difficult to distinguish from late-onset Darier's disease and necessary to perform the genetic investigation for ruling out it. We performed mutation analysis of *ATP2A2*, which has been reported as a cause of Darier's disease, on genomic DNA of the patient extracted from peripheral leukocytes and lesional skin. We were unable to find any mutations, which led us to diagnose this case as Grover's disease. Mutation analysis of *ATP2A2* in Grover's disease has been performed in only a few reports with negative results (5, 6).

Heat, sweating, drugs, malignancies, hospitalization and confinement to bed have been implicated as instigators of Grover's disease (2, 3, 7). The relationship between

Grover's disease and acrosyringium is still controversial. While Antley et al. (8) suggested that sweat had leaked in to create the acantholytic area in 20–30% of cases, Fernández-Figueras et al. (2) reported that only 12.5% of lesions were close to the acrosyringium and that sweat gland involvement in the disease development was considered to be limited to only a few cases.

## REFERENCES

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