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Grover's Disease in a Liver Transplant Patient

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Dear Editor:

Grover's disease (GD) is a dermatosis of unknown aetiology that mostly affects men over 40 years-of-age. It is visually characterized by erythematous excoriated papules, which are usually located on the trunk, and is histologically characterized by acantholysis and dyskeratosis. GD has been reported in patients with chronic renal failure, malignancies, and in those with renal and bone marrow transplants[1].

A 56-year-old man complained of pruritic skin eruptions on his back and on both of his shins, which lasted for 3 months (Fig. 1). He had received a liver transplant 5 months previously for alcoholic liver cirrhosis. He had been taking mycophenolatemofetil, tacrolimus, and methylprednisolone for immunosuppression.

His skin lesions comprised numerous brownish papules, about 2～5 mm in size, which were predominantly located on the backand on both shins. The patient showed no other abnormalities of the skin appendages or mucosa. There was no family history of skin disease.

A biopsy of a brownish papule on the back showed epidermal hyperplasia with parakeratotic hyperkeratosis (Fig. 2). The epidermis showed suprabasalacantholysis and dyskeratotic keratinocytes. Corps ronds and grains were

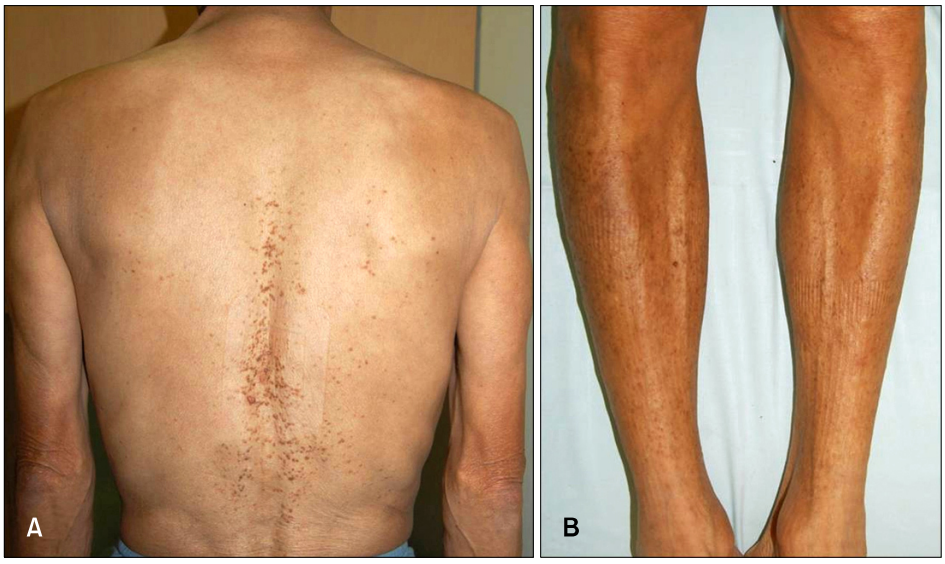

Fig. 1. Brownish hyperkeratosis papules on the back (A) and both shins (B).

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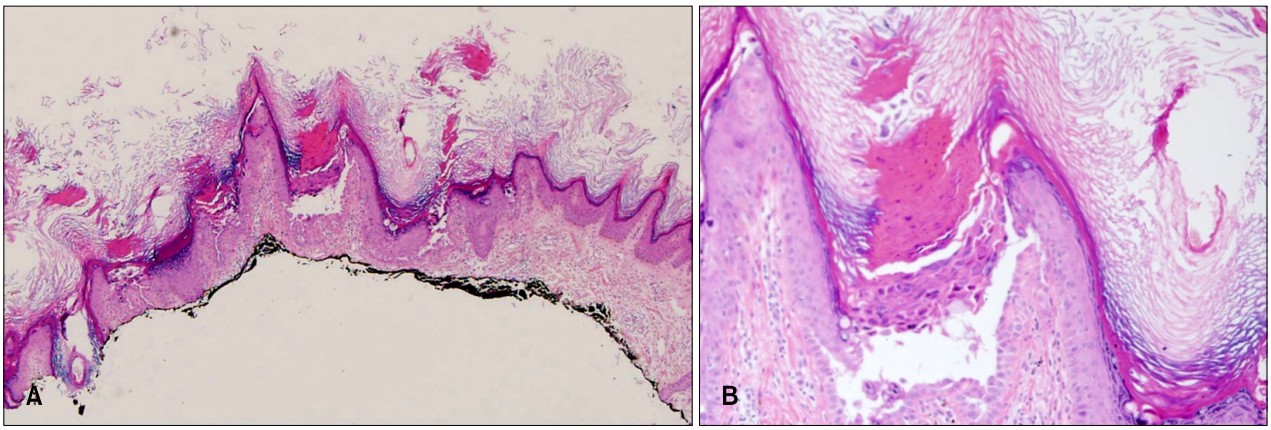

Fig. 2. Histopathology of popular lesions (H&E). (A) Multifocal area of suprabasalclefting and acantholysis (×40). (B) Suprabasalclefting with corps ronds and grain (×200).

also evident along with a slight perivascular lymphohistiocytic infiltration of the dermis. The clinical and histological evidence was compatible with a diagnosis of GD, Darier's disease or Hailey-Hailey disease. The late onset, and the lack of family history and other characteristics consistent with Darier's disease, led to a final diagnosis of GD. The patient was treated with topical calcipotriol, although no clinical improvement was observed.

The aetiology of GD is unknown. This disease is clinically and histologically indistinguishable from Darier's disease and Hailey-Hailey disease, although no mutations in the SERCA2 or SPCA1 genes have been detected in GD[2]. GD is frequently associated with exposure to heat and sunlight, sweating, and fever. Drugs, ionizing radiation, infection (Malassezia furfur or Demodexfolliculorum) and severe dermatosis (atopic dermatitis, allergic contact dermatitis, and asteatotic eczema) are also associated with GD[3].

GD has been reported in patients infected with human immunodeficiency virus, and in those with renal failure, haematologic malignancies, and solid carcinomas[1]. Also, the onset of GD after bone marrow transplantation (eight cases)[4,5] and kidney transplantation (one case)[1] has been described. To our knowledge, this is the first report of GD developing in a patient after liver transplantation followed by immunosuppressive treatment. Although it is unclear whether the aetiological mechanism underlying GD is immunologic, the immunosuppression may act as a trigger.

Our case suggests that GD should be considered as a differential diagnosis in patients presenting with skin eruptions after liver transplantation with immunosuppression. The onset of GD after liver transplantation suggests an immunological mechanism. Further studies will be helpful to identify the relationship between GD and immunological mechanism.

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