

Grover's disease: A case report.

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ABSTRACT:

CHAVANICH C, SAJJACHAREONPONG P. GROVER'S DISEASE: A CASE REPORT. THAI J DERMATOL 2011; 27: 320-324.

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Grover's disease (Transient acantholytic dermatosis) is a rare skin disease that manifests as a pruritic, discrete, edematous papulovesicle rash predominated on upper trunk. Five different acantholytic histologic patterns have been described in histopathology. Dermatologic and non-dermatologic malignant conditions had been reported to be concurrent with *Grover's disease*. Prognosis and treatment are often difficult to evaluated. Avoidance of exacerbating factors may improved the clinical signs and symptoms. We report a case of *Grover's disease* in a 47-year-old-Thai male.

Key words: *Grover's disease*, Transient acantholytic dermatosis

บทคัดย่อ :

สุพิชา ชวนิชย์ ประณีต สัจจเจริญพงษ์ รายงานผู้ป่วยโรค GROVER'S DISEASE วารสารโรคผิวหนัง 2554; 27: 320-324.

สถาบันโรคผิวหนัง กรมการแพทย์ กระทรวงสาธารณสุข

Grover's disease เป็นโรคที่มีผื่นเป็นตุ่มแดงหรือตุ่มน้ำใส บางตุ่มคล้ายสิ่วรูปร่างเหมือนกัน ผื่นมักปรากฏอยู่บริเวณด้านบนของลำตัวโดยเฉพาะบริเวณ หน้าอก แผ่นหลังส่วนบน ไหล่ลาบ่า ผื่นมักเป็นเรื้อรัง และยังไม่ทราบสาเหตุที่แน่ชัด ผื่นไม่เกี่ยวข้องกับการกระตุ้นทางระบบภูมิคุ้มกันและยังไม่พบแบบแผนการถ่ายทอดทางพันธุกรรมที่ชัดเจน ผู้ที่ให้นิยามโรคนี้เป็นคนแรกในปี ค.ศ.1970 คือ Ralph W. Grover ลักษณะทางจุลพยาธิมีห้าแบบที่แตกต่างกัน ซึ่งจะพบร่วมกันอย่างน้อยสองแบบในรอยโรค มีรายงานพบโรคอื่นๆทางผิวหนังและโรคมะเร็งของอวัยวะอื่นร่วมด้วย การทำนายอาการของโรคและผลการรักษามักคาดเดาได้ยาก แต่การหลีกเลี่ยงสิ่งกระตุ้น จะทำให้การดำเนินโรคดีขึ้น ในรายงานนี้ได้นำเสนอผู้ป่วยเพศชายอายุสี่สิบเจ็ดปี ที่มีผื่นคันเรื้อรังและมีลักษณะทางจุลพยาธิที่เข้าได้กับ *Grover's disease*

คำสำคัญ: โรคโกรเวอร์

Case report

A 47-year-old Thai man from Bangkok came to the institute of Dermatology with multiple pruritic erythematous papules and vesicles on his chest and back area, which spare palms, soles and oral mucosal for 6 months. The lesions were aggravated by friction, heat, sweat, and sunlight. He denied of atopic history. None of his family members have the same lesion as the patient.

Physical examination:

The skin examination revealed multiple well defined erythematous discrete, non-follicular crusted papules and some papulovesicles on the trunk, back (figure 1), no oral mucosa or nail involvement.



Figure 1 Upper chest area

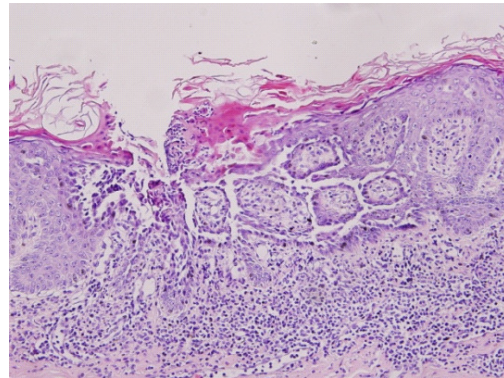


Figure 2 Histopathological examination (x40)

Investigation:

Histopathology of the lesion on chest area showed multiple suprabasal acantholysis of keratinocyte with scattered cytoplasmic clearing and pyknotic nuclei in areas of acantholysis, and finding prominent dermal papillae, with acantholytic basal cell, perivascular infiltration of lymphocytes, eosinophils, neutrophils, which consists of Darier -like and pemphigus-like pattern (figure 2)

Complete blood count and Urine analysis are normal.

Discussion

Transient acantholytic dermatosis (*Grover's disease*) is a non-familial, non-immune-mediated rare skin disease that manifests as a self-limited pruritic, discrete, edematous papules and/or a vesiculopapular rash predominated on the upper trunk. *Grover's disease* was first reported and discovered in 1970 by Grover.¹ However, the exact prevalence is still underdiagnosed because of the clinical similarity with others and variety of histology. It believes that *Grover's disease* affects

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mainly white adults in the fifth decade or later, and two times more common in men than in women. *Grover's disease* appears less common in darker-skinned.²⁻⁵ At the Institute of Dermatology, Bangkok, five patients were diagnosed as *Grover's disease* in the past five years. Of four male patients, one was Caucasian.

The etiology and pathogenesis of *Grover's disease* remain unclear, however, heat and sweating are believed to be the trigger factors. The obstruction of the sweat gland has been proposed to be response to this trigger by finding immunohistochemistry, which showed an association of the acantholysis and eccrine duct outflow tracts in three patients.⁶

The manifestations of disorder can be recognized as three variants⁷

1. Transient eruption: the itch may severe and settle in a weeks.

2. Persistent pruritic: less itch than the former but persist for months

3. Chronic asymptomatic: this type has been report in oncology patient which, persisted typically on submammary region.

Five distinct histologic patterns have been described: pemphigus vulgaris-like, followed by (in decreasing order by frequency) Darier-like, spongiotic dermatitis-like, pemphigus foliaceus-like and Hailey-Hailey-like. Two or more patterns were detected in a single biopsy specimen. However, there is no clinical significance associated in these varieties of histopathology.^{3,8}

In *Grover's disease*, direct and indirect immune - fluorescence has reported negative or non specific.^{2,3} However, to date, no one has described the association between unique direct immune fluorescence finding and clinical of *Grover's disease*.⁹

Dermatologic diseases such as asteotic eczema, allergic dermatitis, atopic dermatitis, psoriasis vulgaris and non-dermatologic malignant conditions including solid tumor, carcinoma of the genitourinary organ, and hematologic malignancy (myelogenous leukemia and lymphoma) had been reported to be concurrent with *Grover's disease*.^{10,11} Other conditions such as expose to the sunlight, ionizing irradiation, irritation or prolonged hospitalized and end-stage renal disease/hemodialysis, have been bound associated with *Grover's disease*. *Grover's disease* in patients with chronic renal failure would improved after renal transplant.¹² Therefore, it is important to find associated condition, especially hematologic malignancies.⁸

Prognosis and course of the disease are variable and difficult to be evaluated. It can be chronic, fluctuated, or spontaneous remittance. There is one report case of *Grover's disease* (along Blaschko lines), which abrupt onset in patient with rectal carcinoma. It appeared at the diagnosis of the cancer, improved after treatment of the cancer and finally relapsed parallel to it.¹³

Avoidance of exacerbating factors such as heat, sweating, and sunlight, results in the improvement of the clinical signs and symptoms. Mild topical corticosteroid, keratolytic agent, and topical calcipotriol

are useful for controlling symptoms. In severe cases oral isotretinoin or acitretin may help. Phototherapy is also effective in some cases, but too much light exposure can aggravate the disease.^{11,14}

Our patient presented with multiple pruritic erythematous papules and vesicles on his chest and back for six months, histopathology consists of Darrier-like and pemphigus-like pattern. These findings suggested the diagnosis of Grover's disease. We gave him 5% lactic acid and 10% urea in 0.02% triamcinolone acetate cream apply twice daily on lesions for two months, and advice him to avoid all aggravating factors. His skin condition improved after one month of treatment.

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