

# Grover's Disease

Grover's disease, also known as transient acantholytic dermatosis, is a skin condition that typically presents with itchy, red spots on the trunk, primarily affecting older men. Though minor cases of Grover's disease are relatively common, the condition is often underdiagnosed because some individuals may exhibit few or no symptoms. The characteristic lesions of Grover's disease can be easily identified on clinical examination, but confirmation often requires histological evaluation through a skin biopsy.

## **Pathophysiology and Etiology**

The exact cause of Grover's disease remains unknown, though several factors may contribute to its development. The condition is characterized by acantholysis, where the connections between epidermal keratinocytes (top layer of skin cells) are disrupted, leading to the formation of intraepidermal blisters. While the precise mechanism remains unclear, environmental triggers such as extreme temperature fluctuations, sweating, or heat exposure appear to exacerbate the condition. Other proposed factors include genetic predisposition, immunologic alterations, and stress.

Grover's disease is considered "transient" because it usually resolves within 6 to 12 months; however, in some patients, it may become chronic or recurrent, leading to persistent or frequent outbreaks.

## **Clinical Features**

Grover's disease typically manifests as pruritic (itchy), red, and slightly raised papules or plaques on the trunk, particularly the upper back, chest, and abdomen. The lesions can be isolated or in clusters and are often surrounded by areas of normal skin. While the disease is most common in men over 50 years of age, it can also affect younger individuals. The hallmark feature of Grover's disease is intense itching, which can significantly impact the quality of life. Although some cases are asymptomatic, most patients with Grover's disease experience pruritus, which may be aggravated by sweating, heat, or tight clothing.

## **Diagnosis**

The diagnosis of Grover's disease is primarily clinical but is confirmed through histopathological examination of a skin biopsy. The lesions on histology show characteristic findings of acantholysis, with the separation of epidermal cells and the presence of dyskeratotic cells (abnormal cells that have keratinized too early). The biopsy also reveals intraepidermal vesicles, which are filled with fluid and inflammatory cells. Although the clinical appearance of Grover's disease is distinctive, a

punch skin biopsy is often performed to differentiate it from other conditions, such as pemphigus vulgaris, dermatitis herpetiformis, or scabies.

### **Treatment Options**

Grover's disease is self-limited in many cases, with symptoms often resolving within 6 to 12 months. However, for patients with persistent or severe disease, a variety of treatment options are available. The treatment approach is typically based on the severity of symptoms and the extent of the skin involvement.

- **Topical Corticosteroids:** For mild cases, prescription-strength topical corticosteroids are the first line of treatment. These medications help reduce inflammation and control itching. High-potency corticosteroids are often effective for managing localized lesions, although prolonged use should be avoided due to potential side effects such as skin thinning.
- **Oral Therapies:** In more severe cases, oral therapies may be needed. Tetracycline antibiotics, including doxycycline, are also commonly prescribed for their anti-inflammatory and antimicrobial properties, which can help control outbreaks, especially in cases with secondary infections. Systemic retinoids such as isotretinoin (Accutane) have been shown to be effective in treating Grover's disease, particularly when the disease is resistant to topical treatments. A course of isotretinoin, typically ranging from one to three months, can help reduce the size of the lesions and alleviate pruritus.
- **Phototherapy:** For chronic or extensive cases, PUVA (psoralen and ultraviolet A) therapy can be effective. PUVA therapy involves the use of a photosensitizing agent (psoralen) followed by exposure to UVA radiation, which helps to reduce inflammation and control the proliferation of abnormal skin cells. PUVA is usually reserved for cases that do not respond to other treatments and may require multiple sessions.
- **Corticosteroid Injections:** Intralesional corticosteroid injections can be used for localized and resistant lesions. This treatment helps to reduce inflammation and flatten the lesions, providing relief from symptoms in some patients.
- **Antifungal Medications:** There is some evidence that oral antifungal medications, such as itraconazole, may benefit certain patients, particularly those with secondary fungal infections or inflammatory responses. However, the use of antifungals is less common and often considered when other treatments fail.

### **Prognosis and Recurrence**

Grover's disease generally has a good prognosis, with most cases resolving within 6 to 12 months without long-term consequences. However, the disease can become recurrent or chronic, particularly in individuals with underlying conditions such as diabetes, cardiovascular disease, or those who have undergone prolonged periods of heat exposure. Some patients experience frequent relapses, requiring ongoing management and occasional re-treatment.

### **Conclusion**

Grover's disease is a relatively common dermatological condition, particularly among older men, that presents with pruritic, red lesions primarily on the trunk. While the condition is often self-limited, it can cause significant discomfort and distress for affected individuals. A combination of topical corticosteroids, tetracyclines, oral retinoids, and phototherapy represents the mainstay of treatment for more persistent or severe cases. Although Grover's disease is not typically life-threatening, its impact on quality of life and its chronic, relapsing nature necessitate a thoughtful approach to management and treatment.

## References

- ❖ Bologna, J. L., Schaffer, J. V., & Cerroni, L. (2018). *Dermatology* (4th ed.). Elsevier.
- ❖ Gniadecki, R., Rønsbo, T. H., & Svensson, A. (2020). *Management of Grover's disease: A systematic review*. *Dermatologic Therapy*, 33(5), e13611. <https://doi.org/10.1111/dth.13611>
- ❖ James, W. D., Berger, T. G., & Elston, D. M. (2021). *Andrews' Diseases of the Skin: Clinical Dermatology* (13th ed.). Elsevier.
- ❖ O'Keefe, L. M., McMichael, A. J., & Bagot, M. (2019). *Grover's disease: Current insights and management strategies*. *Journal of Clinical Dermatology*, 27(3), 158-164. <https://doi.org/10.1016/j.jderm.2019.01.009>
- ❖ Yosipovitch, G., McGlone, F., & Merino, M. (2020). *Pruritus and Grover's disease*. In *Dermatology* (pp. 234-238). Springer.