

# Antibiotic Ointment in the Treatment of Grover Disease

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*Grover disease, or transient acantholytic dermatosis, chiefly affects the upper part of the trunk in men older than 40 years. Lesions may last for weeks, months, or years, and often are accompanied by intense pruritus. Some patients respond to topical steroid treatment but many do not. This article reports major or total resolution of Grover disease in 6 of 9 patients following topical application of a triple antibiotic ointment. It also proposes using a case registry as a way of further investigating the efficacy of this treatment so that dermatologists may participate.*

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Grover disease, or transient acantholytic dermatosis, chiefly affects the upper part of the trunk in men older than 40 years and is characterized by the progressive onset of small, sometimes crusted, discrete erythematous papules and papulovesicles.<sup>1-6</sup> Lesions may persist for weeks, months, or years, and often are accompanied by intense pruritus. Response to current treatments, including topical corticosteroids, antihistamines, synthetic retinoids, acitretin, calcipotriol, and phototherapy, is unpredictable.<sup>1,4,5,7</sup> The etiology and pathogenesis of this condition are unknown, with several mechanisms being theoretically possible.<sup>2,3,6</sup> No reports of Grover disease as an infectious process were located in a search of the MEDLINE database and standard dermatology texts nor were there

reports of using topical antibiotic ointment to treat Grover disease.

This article reports major or total resolution of 6 of 9 cases of Grover disease following topical application of a triple antibiotic ointment. It also proposes a case registry as a way of further investigating the efficacy of this treatment.

## Case Report

A 53-year-old white man presented with Grover disease that had been verified histologically with 2 punch biopsies. Itching lesions had increased in number 6 months prior and covered much of his back. The patient began daily application of a thin coating of a triple antibiotic ointment to the affected areas and continued for 1 month. He received no other treatment but applied the ointment to the lesions when he noticed itching. One month later, almost all of the lesions had resolved, except for those lesions the patient had difficulty reaching. After applying ointment, however, the remaining lesions resolved within days.

This treatment was suggested to 8 other patients with Grover disease; some only were diagnosed clinically and some required histologic verification (Table). Resolution was major or total in 6 patients treated with a triple antibiotic ointment. Of the 4 patients with Grover disease confirmed histologically, 3 patients had major or total resolution with the triple antibiotic ointment and 1 patient had no resolution. Of the 5 patients with suspected Grover disease, 3 patients had major or total resolution with the triple antibiotic ointment and 2 patients had little or no resolution.

## Comment

The treatment reported here for Grover disease is safe, inexpensive, easily available, and, in this small series, significantly effective in more than half of patients ( $P < .04$ , Wilcoxon rank sum test). Grover disease can be persistent; however, it appeared to resolve relatively quickly after the

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## Results of Treatment in Patients With Grover Disease\*

Patient No.	Gender	Age, y	Extent of Involvement	Area	Biopsy	Length of Follow-up, mo	Response†	
							Steroid	Triple Antibiotic Ointment
1	M	83	Mild	Chest	Y	72	3	3
2	M	53	Mild	Back	Y	24	NA	4
3	M	66	Severe	Chest	Y	30	3	3
4	M	79	Severe	Back, chest	N	24	NA	3
5	M	69	Moderate	Chest	N	3	NA	4
6	M	59	Mild	Abdomen	N	18	NA	3
7	M	56	Moderate	Back, chest	N	18	1	2
8	F	72	Moderate	Upper back	Y	24	3	1
9	M	61	Moderate	Chest	N	12	2	1

\*M indicates male; Y, yes; NA, not applicable (did not undergo treatment); N, no; F, female.

†1=no resolution; 2=little resolution; 3=major resolution; 4=total resolution.

triple antibiotic ointment was applied to lesions in the majority of these patients.

The research methodology ordinarily considered the gold standard for demonstrating the effectiveness of a treatment is the randomized controlled trial (RCT). Even so, RCTs have their disadvantages, including high cost, difficulty of implementation for relatively rare problems, and delay in providing new treatments.<sup>8,9</sup> Although evidence in case reports often is regarded as anecdotal, it can identify new and sometimes surprising treatments, adding to the clinical knowledge base.<sup>9,10</sup> The n-of-1<sup>11,12</sup> and single-system research designs,<sup>8,13,14</sup> types of case reports, are considered valuable for rare conditions, interventions that must be customized to treat complex conditions, and practice evaluation.

Thus, the time and expense of an RCT to further investigate the use of a triple antibiotic ointment in treating Grover disease might not be necessary. Nonetheless, corroboration of our findings would be valuable and welcome. Additional data might offer explanations regarding the selective effectiveness of a triple antibiotic ointment in these patients.

We propose using a case registry as a way of researching the issue so that any licensed dermatologist could report outcomes associated with the use of a triple antibiotic ointment for treating Grover disease.

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