Grover’s disease treated with isotretinoin

Report of four cases

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Grover’s disease (transient acantholytic dermatosis; TAD), a disorder of unknown etiology, may resemble Darier’s disease and frequently resists conventional therapies. The lesions can be extensive and pruritus can be a prominent feature. Four patients with Grover’s disease were treated with isotretinoin. Three patients with relatively acute disease responded with remissions of up to 10 months after treatment. One patient with disease of 8 months’ duration obtained partial relief but experienced a relapse when medication was stopped. (J Am Acad Dermatol 12:981-984, 1985.)

Transient acantholytic dermatosis (TAD), first described by Grover,1 may spontaneously remit within weeks or months or may persist and recur over a period of years.2-4 A variety of treatments for this mysterious cutaneous disorder of unknown etiology have been reported, including topical and systemic corticosteroids, oral vitamin A,5-7 dapsone,3,4 and psoralens and ultraviolet A (PUVA).6 The histologic similarity of some cases of Grover’s disease to Darier’s disease2 and the latter’s reported favorable response to topical and systemic retinoids7-11 prompted me to treat four recalcitrant Grover’s disease patients with oral isotretinoin (13-cis-retinoic acid).

CASE REPORTS

Case 1

A 54-year-old white man was first seen because of a diffuse, erythematous, papular and crusted eruption over the chest, upper part of the abdomen, and axillae. The eruption developed after sun exposure and sweating and had persisted for 6 weeks prior to his initial examination (Fig. 1). Itching was intense and resistant to cool compresses and topical steroids. A biopsy was diagnostic of transient acantholytic dermatosis (Fig. 3). Laboratory studies, including a lipid profile, were within normal limits.

Therapy. Treatment was begun with intramuscular triamcinolone, 40 mg/ml, and topical triamcinolone cream, 0.1%. The patient was advised to avoid sun exposure and sweating, but after 1 week (7 weeks after onset) of treatment there was no improvement. It was decided to begin treatment empirically with 40 mg of isotretinoin a day. After 2 weeks there was noticeable improvement in itching and in the clinical appearance of the lesions. The lipid profile remained normal and the patient was continued on the same dosage. At 3 weeks all the lesions had undergone dramatic remission (Fig. 2). To guard against relapse, which is commonplace in TAD, we reduced isotretinoin to 10 mg daily and continued it for an additional 8 weeks. During this period the patient remained asymptomatic with normal laboratory studies. All medication was discontinued after 3 months, and 10 months after stopping treatment there had been no recurrence.

Case 2

A 53-year-old white woman developed an acute dermatosis involving the inframammary area and upper part of the abdomen after a fishing trip to the Florida Keys. The dermatosis was intensely pruritic and had persisted for 2 months before she consulted me. On physical examination the lesions were discrete, conical, crusted papules on an erythematous base. They extended over the chest and abdomen, with a few scattered papules on the scalp (Figs. 4 and 6). Physical exami-
Figs. 1-7. For legends, see opposite page.
nation of all other systems was normal. Complete blood
count, urinalysis, electrolytes, blood sugar, liver, and
lipid profile were within normal range. A biopsy was
diagnostic of focal acantholytic dyskeratosis as seen in
Grover’s disease.

**Therapy.** Isotretinoin, 40 mg daily, was begun and
the patient was followed clinically with blood studies
every 2 weeks. No ancillary treatment was employed.
After 2 weeks there was noticeable improvement in the
pruritus and appearance of the lesions. After 1 month
most lesions had cleared (Figs. 5 and 7). The dose of
isotretinoin was reduced to 10 mg daily and continued
for 12 weeks. During this time the patient was asympto-
tomatic, except for occasional scalp pruritus, and lab-
oratory studies remained stable. All medication was
discontinued after 4 months and there had been no re-
currence 5 months after stopping treatment.

**Case 3**

A 59-year-old white man was referred to me by an-
other dermatologist because of a recalcitrant dermatosis
diagnosed on biopsy as Grover’s disease. It had per-
sisted for 8 months despite treatment with erythromy-
cin, oral and topical steroids, antihistamines, sulfapyr-
idine, hydroxyzine, vitamin A orally, isotretinoin top-
ically, tetracycline, nystatin (Mycostatin) tablets, and
lidane 1%. The patient gave a history of gout, con-
siderable alcohol intake, and cigarette smoking, and he
was overweight.

Physical examination revealed a somewhat obese
white man with a generalized erythrodermic rash com-
posed of multiple, discrete papules, some of which were
coalescent, crusted, and excoriated, involving the
trunk, neck, and extremities. Biopsy of two lesions
from the trunk were diagnostic of focal acantholytic
dyskeratosis as seen in Grover’s disease. Fasting pre-
treatment blood chemistries revealed an elevated tri-
glyceride level of 395.

**Therapy.** Isotretinoin, 40 mg per day, was begun
and after 1 week there was no appreciable change in
either the pruritus, erythema, or extent of lesions. The
triglyceride level had risen to 600 mg and the patient
was referred to her internist for evaluation and cardiac
profile. Smoking and alcohol were interdicted and a
low fat, low cholesterol diet was prescribed. The iso-
tretinoin was discontinued until the triglycerides were
lowered. Three weeks after stopping the isotretinoin the
triglycerides were reduced to 339 mg, and 6 weeks later,
down to 166 mg. The patient was then advised to begin
10 mg daily of isotretinoin because of persistent cuta-
neous symptoms. However, without medical advice he
took 40 mg daily for 3 weeks and noticed a marked
improvement in his dermatosis at the end of that time.
His triglycerides rose to 280 but because of the marked
clinical benefit it was decided to continue the same
dosage for an additional month. When the patient re-
turned 5 weeks later he had discontinued his low fat
diet and had been drinking to excess. His Grover’s
disease was in remission, but his triglycerides had in-
creased to 980 mg. The isotretinoin was discontinued,
and the dermatosis relapsed 3 weeks after stopping the
drug.

**Case 4**

A 59-year-old white man presented with a rash on
the chest, shoulders, and upper part of the back of 6

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**Fig. 1.** Case 1. Pretreatment photograph shows diffuse,
erthematous papular and crusted lesions involving the anterior aspect of the chest.

**Fig. 2.** Case 1. Posttreatment photograph shows clearing of lesions of Grover’s disease
3 weeks after isotretinoin, 40 mg/day.

**Fig. 3.** Case 1. Biopsy of sections of skin revealed focal acantholytic dyskeratosis of the
epidermis. The acantholysis is pemphigus-like with a few acantholytic cells within su-
prabasilar clefts. (Hematoxylin-eosin stain; original magnification, X 125.)

**Fig. 4.** Case 2. Pretreatment photograph shows erythematous, crusted papules on the
infra-mammary area and upper abdomen present for 2 months prior to treatment.

**Fig. 5.** Case 2. Posttreatment photograph 1 month after isotretinoin therapy. Most lesions
have cleared compared to the pretreatment photograph shown in Fig. 4.

**Fig. 6.** Case 2. Pretreatment close-up photograph of lesions of persistent TAD in the right
infra-mammary area.

**Fig. 7.** Posttreatment close-up photograph of right inframammary area showing clearing
of all lesions. (Compare with Fig. 6.)
weeks’ duration. There was no history of previous treat-
ment and the patient did admit to regular extensive sun
exposure. Physical examination revealed a well-devel-
oped, deeply tanned white man in distress from extreme
pruritus. There was no history of associated illness or
skin disorder. Laboratory tests were all within normal
range. A biopsy of a chest papule was diagnosed as
TAD.

**Therapy.** The patient was started on isotretinoin, 40
mg daily, as the only therapy. He returned in 2 weeks
with some improvement in pruritus but the skin eruption
had persisted. Repeat lipid profile was normal and iso-
retinoin therapy was continued for 2 more weeks. At
the end of 1 month all lesions appeared less erythem-
atous and less profuse and the pruritus was considerably
improved. The therapy was maintained for 2 more
weeks and the benefit objectively and subjectively con-
tinued. The dosage remained at 40 mg daily, and after
4 more weeks (2 months after starting treatment) the
patient’s skin was totally clear. Isotretinoin therapy was
stopped and the disease had remained in remission for
5 months.

**COMMENT**

All four of my patients appeared to respond to
40 gm daily of isotretinoin with complete clearing
occurring over various time intervals depending on
the severity and extent of the initial dermatosis.
The patient whose disease had persisted for 8
months (Case 3) relapsed after isotretinoin dosage
was reduced and then discontinued because of a
markedly elevated serum triglyceride level. The
other patients, whose disease had been present for
6 to 8 weeks, were followed for up to 10 months
and had remained in remission.

The side effects of isotretinoin given systemi-
cally, including dry skin, cheilitis, and triglyceride
elevation, have been thoroughly reviewed. Some
of these were noted in the patients treated. How-
ever, except for Case 3, it was not necessary to
alter or discontinue therapy.

Systemic isotretinoin may be a useful treatment
for symptomatic TAD. The mechanism of action
of 13-cis-retinoic acid in disorders of keratiniza-
tion remains unknown, but in certain patients this
new treatment may provide prolonged remission
and relief from the uncontrollable pruritus often
present in this disorder.

The usual precautions recommended by the drug
manufacturer should be followed, as in all patients
taking isotretinoin, and blood chemistries, including
lipid profile, should be closely monitored dur-
ing therapy.

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