

# Dermatology Digest

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**FIGURE 1**  
Papulosquamous rash

## Reaction to OTC cream identifies rash

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### ▶CASE

The patient is a 52-year-old man who has suffered from an itchy rash on his chest for more than 20 years. He had consulted any number of health care providers in that time and tried several prescription topical treatments. Only one treatment was found to somewhat relieve his symptoms. A clotrimazole/betamethasone combination cream briefly relieved the itching; it did not, however, clear up the rash. No laboratory tests were performed or cultures obtained from the rash. The patient had used up the prescription cream and switched to an OTC 1% hydrocortisone cream on his own. The OTC cream made the rash far worse, in terms of both extent and discomfort. This flare-up led him to seek care at our dermatology clinic.

**HISTORY** The rash first appeared many years ago in the summertime and then cleared up, for the most part, by winter. But as the weather warmed up again in spring, the rash reappeared. The flare-ups followed this cycle each year. At times, the rash spread to his buttocks and groin area as well. The patient was otherwise healthy and not immunosuppressed.

On examination, a florid, papulosquamous, distinctly marginated rash was seen covering most of the patient's anterior neck and upper chest (see Figure 1). A similar rash was seen on the buttocks and in the groin area.

### ▶THE MOST LOGICAL NEXT STEP IS

- To prescribe nystatin cream
- To prescribe oral terbinafine
- To prescribe tolnaftate cream
- To perform a KOH preparation test

### ▶DISCUSSION

The correct answer is to perform a potassium hydroxide (KOH) preparation test. This test detects fungal elements. Until a KOH preparation is done, the diagnosis and, thus, the appropriate treatment are uncertain, particularly given the patient's history. Prescribing any other medication to treat this patient's rash before confirming a specific diagnosis would be an inappropriate course of action.

**COMMENT** "There is no substitute for the correct diagnosis" is a principle of medicine that is perfectly illustrated by this case.

Without a correct diagnosis, this patient resorted to trying a number of treatments; when one didn't work as well as expected, he tried another. Hence, 20 years later, the rash still had not resolved. Fortunately, the patient finally tried the one treatment that would destabilize his condition and force him to seek a medical evaluation.

A sudden worsening of a longstanding rash caused by applying topical steroids strongly suggests dermatophytosis, a type of fungal infection—a diagnosis confirmed by the KOH preparation test. This patient was then confidently treated with topical oxiconazole (Oxistat) lotion.

Nystatin cream will do little for the type of fungal infection this patient had because it is indicated only for a yeast infection. Tolnaftate (Tinactin) is indicated for this type of fungal infection but may not be very effective. Oral terbinafine (Lamisil) would have worked nicely; however, it should be prescribed only after the diagnosis is confirmed, either by culture or microscopic evaluation, and only if the infection is severe and/or so widespread that applying a topical antifungal preparation would be impractical.

Truth be told, not much of anything is likely to cure the patient's rash. The best he can hope for is to control the flare-ups, for the simple reason that his body is not able to fend off this ubiquitous pathogen. **JAAPA**