

Dermatology Digest

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FIGURE 1
Hyperkeratotic
papules on an axilla

Underarm rash worsens with OTC treatment

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›CASE

A 34-year-old woman presented with a 1-month history of a slightly pruritic rash on her left axilla. She first noticed the small bumps 4 weeks earlier. Believing she may have irritated the skin, the patient did not initially treat the rash. Approximately 1 week later, a mild pruritus developed and the rash appeared to have spread. She tried an OTC cortisone cream, but it caused a burning sensation.

The patient said she had been using the same deodorant for the past 3 years, does not apply cream or powder to her axilla, and washes her clothes with only a gentle detergent. The patient is otherwise healthy.

Physical examination revealed a 3 × 2-cm hyperpigmented area of multiple hyperkeratotic papules, and some had coalesced into plaques (Figure 1). In addition, small scales that peeled off easily with manipulation were noted. The rash was limited to the outer quadrant of the axilla with no palpable axillary lymph node involvement. The right axilla did not have a similar rash.

Tinea infection was the presumed diagnosis, and a course of a topical antifungal ointment was given. The patient returned 2 weeks later with no improvement in the rash. At this time, a punch biopsy was performed for definitive diagnosis.

›WHAT IS THE MOST LIKELY DIAGNOSIS?

- *Folliculitis*
- *Acanthosis nigricans*
- *Axillary granular parakeratosis*

›DISCUSSION

The pathology report was consistent with axillary granular parakeratosis, a relatively rare benign disorder that manifests as unilateral or bilateral hyperpigmented erythematous scaly papules or plaques.^{1,2} Although most commonly found on the axilla, granular parakeratosis may also occur in

other intertriginous areas.^{1,3} It is seen in both sexes but more commonly manifests in middle-aged women. The rash is usually asymptomatic, but mild pruritus or a burning sensation has been reported.^{1,4}

Although the etiology is unknown, suspected causes include local irritants, such as deodorants and antiperspirants. Definitive diagnosis is made by punch biopsy. The classic histopathology demonstrates a thickened stratum corneum with retention of keratohyalin granules.^{1,3} Treatments include oral corticosteroids, isotretinoin, topical agents, cryotherapy, and discontinuation of underarm products.^{2,3} In some cases, the rash resolves spontaneously.

Folliculitis is an inflammation of the hair follicle often caused by bacteria. Obstruction of the hair follicle results in a pustular lesion. Although folliculitis may have been a consideration in this case, the clinical presentation made this diagnosis unlikely.

Acanthosis nigricans is associated with increased insulin resistance. The condition, often accompanied by obesity and diabetes mellitus, is characterized as a light brown to black velvety plaque with indiscernible margins. A lack of associated findings consistent with acanthosis nigricans made this diagnosis unlikely.

Treatment The patient decided against any further treatment. She changed her underarm deodorant and avoided wearing tight fitting clothing. At an 8-week follow-up, some resolution of the rash appeared along its outer border. **JAAPA**

Joe R. Monroe, PA-C, MPAS, department editor

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