

vulvovaginitis, group A streptococcus was isolated from nearly 20% of children but just over 1% of women of childbearing age.¹ This difference between prepubertal and postpubertal females may be explained by the absence of estrogen-stimulated vaginal cornification and the absence of vaginal colonization with lactobacilli in prepubertal females. This creates an alkaline environment optimal for streptococcal growth.^{2,4} In the present case, the infection may have been acquired from a household contact with streptococcal pharyngitis. However, host susceptibility factors, if any, remain unclear.

Group A streptococcus vulvovaginitis can be easily diagnosed once it is considered because it can be accomplished by simple vulvovaginal culture. Treatment is also straightforward. Systemic penicillins usually yield prompt resolution of symptoms within 24 hours, as in this case. In summary, group A streptococcal vulvovaginitis is rare in women of childbearing age, but clinicians should be aware that it does occur.

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Financial Disclosure: None.

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Estrogen Dermatitis: Treatment With Progestin-Only Pill

Estrogen dermatitis is rare, but making the diagnosis is important to ensure that patients receive the correct treatment. We describe the successful use of the progestin-only pill in a case of estrogen dermatitis, which allowed our patient to discontinue long-term steroid therapy.

Report of a Case. A 38-year-old woman with a 20-year history of skin eruptions was referred to an allergy clinic. The first skin eruptions noted were on her lower legs and were diagnosed by biopsy as erythema multiforme (**Figure**). For the previous 14 years, the skin eruptions had been confined to blisters and ulcers around her mouth. Owing to the severity of these lesions she was prescribed high doses of oral steroids. More recently, the rash was noted to be associated with her menstrual cycle, and she commenced the high-dose steroid treatment on the first day of her menses. This resulted in some improvement in the eruptions. Further questioning estab-

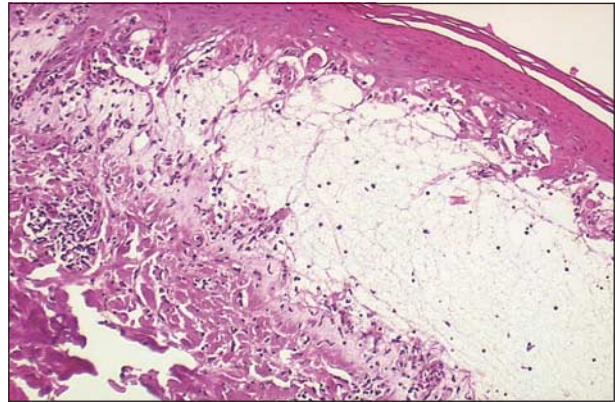


Figure. A skin biopsy specimen taken in 1988 from a lesion on the patient's right leg shows features of bullous erythema multiforme. There is a subepidermal bulla and necrosis of the basal and squamous layers of the overlying epidermis. Beneath the bulla is a moderate perivascular infiltrate (hematoxylin-eosin, original magnification $\times 100$).

lished that the rash had cleared during each of her 2 pregnancies and had recurred post partum. Eight months prior to her referral, she started taking the combined oral contraceptive pill, and this was associated with a small improvement.

At the allergy clinic, skin prick and intradermal testing with conjugated estrogens and medroxyprogesterone were carried out to investigate whether the eruptions were hormonally related. Intradermal testing gave a positive result for estrogen, with the rest of the testing giving negative results. With the diagnosis of estrogen dermatitis now confirmed, treatment with the combined contraceptive pill was replaced with a progestin-only pill. There was an immediate and dramatic improvement, with no further skin eruptions. The improvement has continued for 12 months, and the patient is free of skin lesions for the first time in 20 years. She has been able to stop all steroid therapy. There has been some breakthrough bleeding with the progestin-only pill, but the patient is so pleased with the improvement that she is willing to continue the medication despite this adverse effect.

Comment. Estrogen dermatitis has been recognized for more than 50 years but was not officially described until 1995.¹ The term is used for skin eruptions (papulovesicular lesions, urticaria, eczema, or pruritus) that worsen with the menstrual cycle in patients with evidence of estrogen sensitivity either by skin prick testing or oral challenge.

Many successful treatment options for estrogen dermatitis have been described, including withdrawal of exogenous sex hormones,¹ tamoxifen therapy,^{1,2} and oophorectomy.³ In the original case series,¹ 1 patient was found to have a good response to medroxyprogesterone but was unable to continue the treatment due to metrorrhagia. Herein we describe full resolution of symptoms of estrogen dermatitis with the progestin-only pill. Although it could be argued that the improvement seen in our patient was the result of discontinuation of exogenous estrogen therapy, the length of the history of skin eruptions before the use of exogenous estrogens indicates a prior sensitivity to endogenous estrogens.

Both tamoxifen therapy and oophorectomy are drastic treatment options that most women would want to avoid, although they are undoubtedly required in some cases of estrogen dermatitis. The progestin-only pill may be a useful alternative treatment in patients with estrogen dermatitis and one that patients may find more acceptable. To our knowledge this is the first time this less dramatic treatment option has been described for a patient with estrogen dermatitis.

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Financial Disclosure: None.

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Acknowledgment: We thank the Institute of Clinical Pathology and Medical Research at Westmead Hospital for providing the histologic slide.

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Small Eumycetic Mycetoma Due to Black Grain

A 71-year-old male farmer from Acapulco, Guerrero, Mexico, was seen at the Centro Dermatológico Pascua, Mexico Federal District, with a light brown, dome-shaped, soft nodule on the dorsum of his left foot (**Figure 1**). The nodule was 1 cm in diameter and had a central pore. A small fistula with no secretion was present on the arch of the sole of the same foot. The lesion appeared 2 years after the foot was pierced with a thorn.

A skin biopsy specimen showed an epidermis with acanthosis and some ulcerated areas. In the reticular dermis was a dense focus of lymphocytes, histiocytes, and polymorphous cells surrounding a brown grain that contained vesicles and filaments (**Figure 2**). Histologic analysis confirmed the diagnosis of mycetoma due to the black



Figure 1. Clinical aspect of the patient's light brown, dome-shaped, 1-cm soft nodule on the dorsum of the left foot. Note the central pore.

grain. The direct mycologic study and culture findings were negative.

The small eumycetic mycetoma due to the black grain was treated with 200 mg of itraconazole daily for 6 months, and hepatic function was monitored. The patient healed completely with scarring. He had clinical follow-up examinations for 1 year without relapse.

Mexico is the first country in North America to be affected with mycetomas, and those produced by real fungi are rare (only 2.2% in all of the Mexican Republic¹ and 5% to 10% of cases in the Mexican west²). This patient typifies the classic presentation of the mycoses: male, farmer, affected on the lower limbs, living in an epidemiologically affected zone (Acapulco, with a tropical climate), and a history of trauma.

Perhaps because there were so few grains present in the lesion, growing the fungus for adequate identification and classification of the causative organism was difficult. Histopathologic identification of the causative organism (real fungal specimen) in the absence of positive cultures has also been used for the diagnosis of mycetoma.³ In our case, we suspected that the etiologic agent was *Madurella* species because the grain was characteristically black macroscopically (1-2 mm) and may correspond to a *Madurella mycetomatis* grain in its microscopic characteristics (uniformly brown, formed by real tabicated hyphae, and surrounded by a necrotic and inflammatory reaction⁴). But we must consider that *Pyrenochaeta* species is also a black grain with similar characteristics to those of *Madurella* species.

The first-line treatment for eumycetic mycetoma is surgery (the skin biopsy served this function in our patient) because eumycetic mycetoma is often extremely resistant to medical therapy. In the 1960s, the therapy consisted of surgery and medication with dapsone. Later antifungal drugs such as griseofulvin, amphotericin B, ketoconazole, and itraconazole were used.

Minimycetoma is a term used in Mexico, established by Lavallo,⁵ to identify deep actinomycetal mycetomas due to *Nocardia brasiliensis* with atypical aspect (few fistulae), usually observed in children or young people, localized on the face, trunk, and superior limbs, and showing great improvement with sulfonic treatment. Minimycetoma may be confused with folliculitis, other mycoses, or even with soft tissue tumors or cystic le-

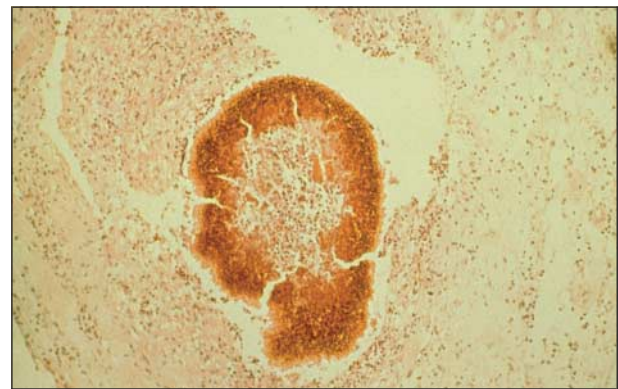


Figure 2. A dense focus of lymphocytes, histiocytes, and neutrophil cells. Also visible is a brown grain (*Madurella* species) that contains vesicles and filaments (hematoxylin-eosin, original magnification $\times 40$).