

Candida parapsilosis Infection In A Rose Thorn Wound

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Puncture wounds with rose thorns have been associated with a variety of skin and connective tissue infections. Sporotrichosis is well known as a fungal infection associated with rose thorn puncture; however, other causes exist.¹ We report a case of soft tissue infection caused by *Candida parapsilosis* following a rose thorn puncture and provide a brief review of *C. parapsilosis* infections.

Case Report

An 88-year-old woman visited her family physician in December for routine follow-up of hypertension and a recent episode of vertigo. She incidentally mentioned an inflamed area on her left leg, stating that she was worried about an infection. Initially she could recall no injury to the area but with further questioning recounted a puncture with a rose thorn 2 to 4 weeks before the visit. During the preceding week, she experienced itching and redness at the site. She reported no relief with antihistamine cream.

On examination her blood pressure was 150/86 mmHg, pulse 92 beats per minute, respirations 18/min, temperature 97.6°F. Findings on heart and lung examinations were normal. On the medial aspect of her left calf, the patient had a small (0.2-cm) puncture wound with minimal surrounding erythema. There was no evidence of foreign body. General and vascular examination of the lower extremities showed normal pulses and no other abnormalities.

The wound was treated conservatively with mupirocin 2 percent ointment, and the patient was told about the possible causes of the erythema, including fungal infection. She was asked to return in 1 week if the lesion had not resolved.

She returned 10 weeks later after using the mupirocin for 2 weeks, then trying a variety

of over-the-counter topical remedies, including hydrocortisone and polymyxin B-bacitracin ointments. She had developed an ulcer but had not returned because "It keeps scabbing over and feeling better, and I think it's going to heal."

Her temperature was 99.3°F, there was minimal left groin adenopathy, and she had a tender 0.5-cm ulcer with heaped-up margins, approximately 0.25-cm deep (Figure 1). Wet preparation for fungi using lactophenol cotton blue stain revealed slender, ovoid budding yeastlike forms. Bacterial and fungal cultures were obtained. The patient was prescribed itraconazole 100 mg daily with a presumptive diagnosis of sporotrichosis.

On examination 6 weeks later, the ulcer was found to be approximately the same diameter but more shallow and less tender. Routine and fungal cultures grew only *C. parapsilosis*. The itraconazole was continued, and the lesion was examined monthly. Liver function tests remained normal. After 14 weeks of therapy, the lesion was flat, markedly smaller, and nontender.

There was no palpable groin adenopathy. The itraconazole was discontinued, and the patient was instructed to apply ketoconazole 2 percent cream to the lesion. Complete healing occurred after approximately 6 additional weeks.

Discussion

Candida parapsilosis is a ubiquitous fungus now recognized as an important nosocomial pathogen. As reviewed by Weems,² this organism has been isolated from the environment, from animals, and from normal humans; it appears to be less virulent than *Candida albicans*, yet it has accounted for up to 27 percent of fungemias in a large hospital-based series. It is particularly associated with medical devices or invasive procedures. Parenteral hyperalimentation is a major risk factor for candidemia by *C. parapsilosis*. Of 56 endocarditis cases, one-half of the patients were intravenous narcotic users, 60 percent had preexisting valvular heart disease, and 30 percent had prosthetic valves. Eye infections, particularly postoperative endophthalmitis, device-related arthritis and peritonitis,

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