

Images in Infectious Diseases

Ecthyma gangrenosum caused by *Achromobacter xylosoxidans* bacteremia

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A 73-year-old woman with ovarian cancer undergoing chemotherapy presented with a three-day history of fever, vomiting, and confusion. She did not have a central venous access port. Physical examination revealed somnolence without meningeal irritation signs. A dry lesion located on the right forearm (Figure 1) was the only identifiable infectious focus. Neutropenia was not present. Blood and urine specimens were collected for culture, and piperacillin-tazobactam (3x4.5 g/day) was initiated. Urine culture yielded negative results, while two peripheral blood cultures grew *Achromobacter xylosoxidans*. Despite systemic antibiotic therapy, the patient succumbed to sepsis-related complications on the 5th day of hospitalization. The cultured microorganism was sensitive to piperacillin-tazobactam. Histologic examination confirmed Ecthyma gangrenosum (EG).

EG, a cutaneous infection, commonly affects immunocompromised patients with fulminant bacteremia. Dr. Lewellys Barker first described EG as a manifestation of *Pseudomonas aeruginosa* in 1897¹. While *P. aeruginosa* remains the most commonly identified and implicated pathogen in EG, other microorganisms can also contribute to its etiology². The primary site of EG is usually in the axillary and anogenital regions; however, cases with localized involvement of the arms, legs, trunk, and face have been documented in the literature^{1,2}. EG has a poor prognosis, especially in neutropenic immunocompromised patients¹. *A. xylosoxidans* bloodstream infections have been successfully treated with antibiotics like ceftazidime, piperacillin-tazobactam, carbapenems, and trimethoprim-sulfamethoxazole³.

This report presents a case of EG, a potentially fatal disease, and highlights the importance of prompt skin biopsies and microbiologic cultures for early diagnosis and treatment.



FIGURE 1: Gangrenous ulcer with black eschar on the forearm.

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