A 25-Year-Old Woman with an Ulcerative Earlobe Lesion
(See pages 613–5 for the Answer to the Photo Quiz.)

Figure 1.  

A and B, Right earlobe showing ulcerative, hyperkeratotic plaque with crusting and fissuring extending to the postauricular region and helix.  
C, Hematoxylin-eosin stain of a skin wedge biopsy specimen obtained from the same region (original magnification, ×40).  
D, Hematoxylin-eosin stain of the skin wedge biopsy specimen (original magnification, ×40).
A 25-year-old black woman who was native to Detroit, Michigan, presented to our infectious diseases outpatient clinic complaining of an 11-month history of a nonhealing ulcerative lesion located on the lower one-third of her right earlobe. She initially noticed the lesion after wearing costume earrings. Her right earlobe gradually became swollen, very tender, and erythematous, with associated serous drainage. Despite the fact that the patient did not use the earrings again, the lesion persisted and continued to grow. The patient’s history included working as a patient transporter in a tertiary care hospital in the city of Detroit for the previous 5 years. She denied any constitutional symptoms and denied any relevant significant medical history or travel history. The patient stated that she had had her earlobes pierced since childhood, and she denied any new piercing or any other type of manipulation of her ears. Prior to being referred to the infectious diseases clinic, she had undergone 2 biopsies of the ulcerative lesion, both of which had revealed “nonspecific inflammation” on histopathological analysis. Cultures of tissue specimens from the earlier biopsies were positive for *Staphylococcus epidermidis* and *Rhodotorula* species. During the previous 6 months, the patient had received multiple courses of oral antibiotics and oral antifungals without any improvement. On physical examination, the patient was a well-nourished, well-developed woman. The findings of the examination were unremarkable with the exception of the right ear. The right earlobe demonstrated an ulcerative lesion that measured ~4 cm in width with erythema and hyperkeratotic plaques; crusting and fissuring extended to the postauricular region and helix (Figure 1A and 1B). Complete blood counts, including differential and biochemical profile, were unremarkable. The patient underwent a third diagnostic deep-wedge biopsy, and the tissue specimens were sent for histopathological examination (Figure 1C and 1D), staining, and culture.

What is your diagnosis?