



# Diabetes-Related Foot Ulcers with Staphylococcus Aureus Isolated

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## Abstract

The patient's endogenous flora is the main source of *Staphylococcus aureus*, which is the main cause of diabetic foot infection. A substantial risk factor for developing diabetic foot infections has been identified as *S. aureus* nasal carriage. The study evaluated the associations between methicillin-resistant *S. aureus* and *S. aureus* using the same individuals' antibiotic sensitivity profiles, nasal carriage, and isolation from diabetic foot infections. Patients with a high risk of nasal methicillin-resistant *S. aureus* infection, which can cause a diabetic foot infection and substantial medication resistance.

**Keywords:** Diabetes Mellitus; Staphylococcus Aureus; Antibiotic

## Introduction

Diabetes mellitus is a chronic metabolic disease characterized by hyperglycemia. It is a leading cause of morbidity and mortality worldwide. The prevalence of diabetes mellitus is increasing globally, with an estimated 25% of the world population affected by the disease in 2021. Diabetes mellitus is a leading cause of foot ulcers, which are a common complication of the disease. Foot ulcers are a serious condition that can lead to amputation if not treated properly. The most common cause of foot ulcers is diabetes mellitus. The pathogenesis of diabetic foot ulcers is complex and involves multiple factors, including peripheral neuropathy, peripheral vascular disease, and foot deformities. The most common bacteria isolated from diabetic foot ulcers are *Staphylococcus aureus*, *Pseudomonas aeruginosa*, and *Klebsiella pneumoniae*. *Staphylococcus aureus* is a gram-positive bacterium that is commonly found in the human nose and skin. It is a leading cause of skin and soft tissue infections, including diabetic foot ulcers. The pathogenesis of diabetic foot ulcers is complex and involves multiple factors, including peripheral neuropathy, peripheral vascular disease, and foot deformities. The most common bacteria isolated from diabetic foot ulcers are *Staphylococcus aureus*, *Pseudomonas aeruginosa*, and *Klebsiella pneumoniae*.

