

Pneumonia caused by methicillin-resistant *Staphylococcus aureus*

Rubinstein E, Kollef M H, Nathwani D.

A recent increase in staphylococcal infections caused by methicillin-resistant *Staphylococcus aureus* (MRSA), combined with frequent, prolonged ventilatory support of an aging, often chronically ill population, has resulted in a large increase in cases of MRSA pneumonia in the health care setting. In addition, community-acquired MRSA pneumonia has become more prevalent. This type of pneumonia historically affects younger patients, follows infection with influenza virus and is often severe, requiring hospitalization and causing the death of a significant proportion of those affected. Importantly, hospital-acquired MRSA and community-acquired MRSA are important causes of pneumonia and present diagnostic and therapeutic challenges. Rapid institution of appropriate antibiotic therapy, including linezolid as an alternative to vancomycin, is crucial. Respiratory infection-control measures and de-escalation of initial broad-spectrum antibiotic regimen to avoid emergence of resistant organisms are also important. This article reviews the clinical features, diagnosis, and therapies for MRSA pneumonia.