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## Medical News

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### Methicillin-Resistant *Staphylococcus aureus* Nosocomial Infections in an Intensive Care Unit: Risk Factors, Morbidity, and Cost

Methicillin resistance and infections caused by methicillin-resistant *Staphylococcus aureus* (MRSA) represent a growing problem and a challenge for healthcare institutions. Lepelletier et al. from the Laboratoire de Bacteriologie-Virologie, Hygiene Hospitaliere, Hopital Laennec, Nantes, France, evaluated the risk factors, morbidity, and cost associated with infections caused by MRSA and methicillin-susceptible *S. aureus* (MSSA). They performed an unmatched case-control study in a 20-bed medical intensive care unit from 1994 to 2001. All patients with pneumonia, bacteremia, and urinary MRSA (cases) or MSSA (controls) nosocomial infections were included in the study. Twenty-four patients with MRSA infection were compared with 64 patients with MSSA infection. Patients with MRSA infection were older (56 vs 45 years;  $P < .01$ ), had a longer stay (47 vs 35 days;  $P <$

.05), and were infected later (22 vs 10 days;  $P < .00001$ ) than patients with MSSA infection. No difference was observed between the two groups according to the Omega index or mortality. MRSA infection involved extra cost due to antimicrobial treatment (184 vs 72;  $P < .005$ ) and length of stay (37,278 vs 27,755;  $P < .05$ ). The authors concluded that patients infected by MRSA in this relatively small study seemed to be different from patients infected by MSSA but without effect on the Omega index or mortality. Methicillin resistance did involve extra costs due to antimicrobial treatment and length of stay.

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