How to handle a superbug: Insights on diagnosis and treatment of methicillin-resistant *Staphylococcus aureus*

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Methicillin-resistant *Staphylococcus aureus* (MRSA) has become a major scourge for modern medicine. The mortality rates are high and healthcare costs from these infections are staggering. There are many dilemmas that physicians face when dealing with infections caused by this superbug. On the one hand we would like to be able to identify an infectious agent as MRSA very rapidly. However, should we initiate treatment before we know the full extent of the particular isolate's resistance? Determining resistance still takes more time than we would like. How can we effectively combat this superbug without sacrificing the need to protect the patient's health? In order to answer these questions we need to understand how varied MRSA strains are; the types of infections that are caused by the various strains; and where these infections initiate. We also need to look at: what are the current identification methods, and how rapid are they; and what treatment regimens are encouraged for these infections. In order to defeat this superbug we need to be fully informed on these issues. Future generations are counting on us to act wisely in the war on MRSA.

Biography

Wanda C Reygaert is an Associate Professor of Microbiology and Immunology in the Biomedical Sciences Department at Oakland University William Beaumont School of Medicine. She earned her BS in Biology/Medical Technology from Indiana University, an MS in Biology/Microbiology from Purdue University, and a PhD in Molecular Biology from the University of Illinois at Chicago. She has been a member of the American Society for Clinical Pathology (ASCP) since 1993 and a member of the American Society for Microbiology (ASM) since 1999. She joined the OUWBSOM as a founding faculty member in the fall of 2009.

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