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MRSA Outbreak Within a Family

by Gina Pugliese, RN, MS
Medical News Editor

Dr. A. J. Simpson and colleagues at St. Bartholomew's Hospital in London, England, recently reported an outbreak within a family of serious infection with methicillin-resistant *Staphylococcus aureus* (MRSA), including two cases of endocarditis related to injectable drug use.

The first case was an 8-year-old child who had a grommet insertion and an ear swab that grew MRSA that also was resistant to erythromycin. Eight months later, the 33-year-old mother of the child presented with a pain in her leg. She had been hospitalized 2 years earlier with cellulitis. Blood cultures grew MRSA, and an echocardiogram showed vegetation on the aortic and mitral valves. She subsequently developed septic arthritis of the hip and navicular osteomyelitis due to MRSA. Four months later, the 36-year-old husband of case 2 presented with rigors, and blood cultures grew MRSA with the same antibiogram and phage-typing patterns as the isolates from the wife and son. He was suspected to have endocarditis, and a repeat echocardiogram after 4 weeks showed vegetation on the mitral valve.

This is believed to be the first reported outbreak of MRSA within a family. The original source of the MRSA is unclear. It is possible that either the mother or the son may have acquired the organism in the hospital, but dissemination within families is thought to be a rare event.

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