



Clinical Digest

ONLINE EDITION

INFECTION CONTROL

Do Diabetic Foot Clinics Spread MRSA?

Are high-volume outpatient diabetic foot clinics hotbeds of methicillin-resistant *Staphylococcus aureus* (MRSA)? While recent reports have linked such clinics to rises in MRSA rates, it's not clear whether these increases are due to bacterial acquisition in the clinic or merely to growing prevalence in the general population. To find out, researchers from University of Manitoba, Health Sciences Centre, and Manitoba Health, all in Winnipeg, Canada, analyzed 10 years' worth of data on MRSA cases from the Diabetic Foot and Complicated Wound Clinic (DFCWC) in Winnipeg.

The DFCWC has 1,500 to 2,500 patient visits annually, approximately 80% of which are for assessment and treatment of diabetic foot infections. Clinic staff employ universal infection control precautions for all patients and additional contact precautions—such as wearing gowns and gloves and

practicing hand hygiene before and after visiting the room—for patients known or believed to be infected or colonized with MRSA. Furthermore, when the presence of MRSA is known, staff decontaminate room surfaces with an activated hydrogen peroxide-based sanitizer before reusing the room. An electronic system is used to track patients with known or suspected MRSA infection or colonization. Patients are screened for MRSA (through sampling of anterior nares and all areas with nonintact skin) if they have had a known exposure to another MRSA-positive patient or have been hospitalized for more than 24 hours in the past six months. Cultures of wound swabs are used when infection is clinically suspected or when ongoing antibiotic therapy proves inadequate.

For the present study, researchers reviewed electronic records from October 1997 to October 2007. Among the 5,103 new patients who visited the DFCWC during this period, the researchers identified 91 patients with MRSA infection (3.8

per 1,000 visits). Of these 91 patients, only six (6.7%) were considered to have possibly acquired MRSA at the DFCWC. The remaining patients either had a previously positive MRSA culture or were diagnosed with MRSA infection on their first clinic visit.

Pulsed-field gel electrophoresis revealed heterogeneous MRSA strains for the six cases of possible clinic-acquired infection—and for all cases of MRSA infection in clinic patients. Furthermore, the pattern of strains isolated from clinic patients was consistent with that found in the general population.

The researchers say their findings do not support the notion that diabetic foot clinics play a role in the spread of MRSA to attendees. They add that any cases identified as possibly acquired at the DFCWC actually may have acquired MRSA from other sources, such as prior hospital stays, visits from home-care health professionals, or visits to the wound dressing clinic. ●

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