Transmission of MRSA Traced to Breast Milk

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WASHINGTON — Methicillin-resistant *Staphylococcus aureus* has been transmitted via breast milk, Dawn Terashita Gastelum, M.D., reported in a poster presentation at the annual Interscience Conference on Antimicrobial Agents and Chemotherapy.

The two reported cases, which resulted in MRSA outbreaks in neonatal intensive care units at two Los Angeles hospitals, suggest that hospital NICUs should consider screening mothers and family members for skin lesions at the time of delivery and obtaining breast milk cultures before infant feedings, said Dr. Terashita Gastelum of the Los Angeles County Department of Health Services.

The first case was in a premature (1,180 g at birth) quadruplet born to an Algerian mother who developed mastitis the day after delivery and was treated with dicloxacillin. Her breast milk was collected 3 days later and fed to the quadruplets and 12 days after that, the baby girl died of MRSA sepsis.

The bacterium subsequently was found in nasopharyngeal cultures of the mother, her three surviving infants, another infant in the NICU, and the mother's frozen postpartum breast milk samples. Molecular fingerprinting was identical for the four infants and the breast milk, but the mother's nasopharyngeal isolate was different.

"Since the mother was actually colonized by a different strain, it is unlikely that the infants obtained the MRSA during birth or through skin-to-skin contact. The breast milk is the only known source," Dr. Terashita Gastelum told FAMILY PRACTICE NEWS.

"It is easy to imagine that the macerated skin of the nipple on a postpartum woman is more susceptible to infection," she said at the conference, sponsored by the American Society for Microbiology.

The second case was an 1,199-g male infant born to an African American mother, who was fed her breast milk the day of birth and developed MRSA sepsis 8 days later. This mother had no sign of mastitis, but MRSA was cultured from her breast milk collected on the day of delivery. Four other infants from the NICU were also positive: two colonized and two infected. Isolates from the breast milk and the five cases were identical. ■

140 L.A. Children Hospitalized With MRSA in 6 Months

WASHINGTON — A clonal outbreak of community-acquired methicillin-resistant *Staphylococcus aureus* in Los Angeles County led to a high rate of hospitalizations among children in 2003, Elizabeth Bancroft, M.D., reported in a poster at the annual Interscience Conference on Antimicrobial Agents and Chemotherapy.

Following skin infection outbreaks of MRSA (USA 300; ST:8) in 2002, community-acquired methicillin-resistant *S. aureus* (CAMRSA) infections in hospitalized children less than 18 years of age was made a reportable condition from May 5 to Nov. 7, 2003. A total of 140 cases were reported between those dates, said Dr. Bancroft of the Los Angeles County Department of Health Services.

Mean age of the children was 6.25 years (range 0-17), 51% were female, 66% were Hispanic, 16% white, 15% black, and the remainder said they were "other." Their mean length of stay was 5.13 days (range 1-30). Diagnoses included cellulitis in 44%, abscess in 36%, and a combination of the two in 11%.

Prior misdiagnosis as insect or spider bites occurred in 23%, and 75% of those who had been treated with antibiotics were initially treated inappropriately with β-lactams, she said.

Among 82 for whom a caregiver was interviewed, 24 (29%) had household contact with a skin infection within a month of the child's infection. Other nosocomial risk factors were present in 29 (35%), while risk factors for community-acquired infection were present in 38 (46%), including 9 (11%) who had contact with a recently incarcerated person.

Of 83 isolates analyzed, 79 (96%) were consistent with the USA 300; ST:8 CAMRSA genotype, even though many of the children had nosocomial risk factors.

—Miriam E. Tucker