Intensive Control Program Curbs MRSA

BY MARY ANN MOON

FROM THE ARCHIVES OF INTERNAL MEDICINE

An intensive 15-year program to control methicillin-resistant *Staphylococcus aureus* in 38 French hospitals has proved effective despite the unusually high endemic rates of the infection there, according to a report.

Until now, "the feasibility of controlling endemic situations with high MRSA rates" over a long period of time has been questioned.

The experience with this program now "demonstrates that this objective can be reached at the scale of a large medical institution," said Dr. Vincent Jarlier of Université Pierre et Marie Curie, Paris, and his associates.

In the early 1990s an international comparison showed that MRSA rates among clinical *S. aureus* strains were "unacceptably" high in France, Spain, and Italy (approximately 35%), compared with countries in northern Europe (less than 2%), they said.

In response, an intensive, long-term program to control the organism was launched in 1993 at the largest public medical institution in France, according to Dr. Jarlier and his associates.

The Assistance Publique–Hôpitaux de Paris includes 38 teaching hospitals—23 acute care hospitals and 15 rehabilitation and long-term care hospitals—throughout Paris and its suburbs.

This institution admits about 1 million patients each year, and employs 19,000 physicians and 18,500 nurses.

The control program focused on rapidly identifying patients with MRSA infection or colonization and immediately notifying all caregivers of patients' MRSA status, isolation interventions such as using barrier precautions and having equipment dedicated to MRSA-positive patients, promoting hand hygiene, and providing feedback to the entire hospital community regarding the program results.

MRSA carriers were identified by special stickers on the doors to their rooms and in all lab reports and charts, the investigators said.

Hand hygiene efforts received a boost approximately halfway through the 15-year program with the promotion of alcohol-based hand-rub solutions instead of hand-washing.

Before this program was implemented in 1993, the proportion of MRSA among *S. aureus* strains had been 39.4% in this institution, Dr. Jarlier and his associates reported.

In 2007, that proportion had been cut to 21.6% in the acute care hospitals, a relative decrease of 45%, the investigators reported (Arch. Intern. Med. 2010;170:552-9).

The relative decrease was even greater—approximately 60%—in ICUs, and it was 44% in surgical wards, the investigators reported.

In the rehabilitation and long-term care facilities, the decrease in the proportion of MRSA among *S. aureus* strains was less pronounced (35%).

Similarly, the incidence of MRSA cases decreased by approximately half, from 1.16 per 1,000 hospital-days to 0.57 by the end of the study.

"When expressed per 100 admissions, the incidence of MRSA decreased in the acute care hospitals from 0.90 in 1996 to 0.44 in 2007," Dr. Jarlier and his colleagues said.

Again, in the rehabilitation and long-term care facilities, the decline was less marked but still significant, they added. ■

Disclosures: *None was reported.*

VERBATIM

'Swimming lessons at any age do not make a child drown proof nor lessen the need for effective pool barriers and adequate supervision.'

Dr. H. Garry Gardner, p. 26