

The main advantage of this apparatus is the treatment of contaminated materials inside hospital wards, at the point of initial collection, by nonspecialized staff. As it works without grinding, no potentially infectious particles are suspended in the air during the treatment. The pancakes produced are solid and easy to manipulate. After treatment, waste can be eliminated as household rubbish in classic incinerators. The cost of this final treatment is much lower than the cost of incineration of infectious waste. Finally, this apparatus is both a waste disinfection and disposal system that avoids hazardous transport from the point of initial collection to the incinerator. Nevertheless, it is necessary to promote separation between contaminated and nonhazardous hospital waste that requires no special handling and disposal. It would be helpful to implement a program for reducing biomedical waste, including reviewing waste practices, educating staff,<sup>25</sup> and redefining infectious waste (the small proportion of medical waste that could potentially transmit an infectious disease).<sup>26</sup>

Despite the lack of association between dissemination of microorganisms from clinical waste and the development of infectious diseases, machines like Dipsys 25 are necessary to avoid such risk and to conform to legislation.

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## Risk Factors for Persistent Carriage of MRSA

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Harbarth and colleagues, from the University Hospitals of Geneva, Switzerland, determined risk factors associated with persistent carriage of methicillin-resistant *Staphylococcus aureus* (MRSA) among 102 patients enrolled in a double-blinded, placebo-controlled trial of nasally administered mupirocin ointment. MRSA decolonization was unsuccessful in 77 (79%) of 98 patients who met the criteria for evaluation.

By univariate analysis, four variables were found to be associated with persistent MRSA colonization ( $P < .1$  for all 4): absence of mupirocin treatment, previous fluoroquinolone therapy,  $\geq 2$  MRSA-positive body sites, and low-level mupirocin resistance. After multivariable Cox proportional hazards modeling, the presence of  $\geq 2$  positive body sites (adjusted hazard ratio [AHR], 1.7; 95% confidence interval [CI<sub>95%</sub>], 1.0-2.9) and previous receipt of a fluoroquinolone (AHR, 1.8; CI<sub>95%</sub>, 1.0-3.3) were independently associated with MRSA persistence, whereas nasal mupirocin tended to confer protec-

tion (AHR, 0.6; CI<sub>95%</sub>, 0.4-1.0). Low-level mupirocin resistance was observed in nine genotypically different MRSA strains and was not independently associated with chronic MRSA carriage (AHR, 1.5; CI<sub>95%</sub>, 0.9-2.5). These findings suggest that multisite MRSA carriage and previous receipt of a fluoroquinolone are independent risk factors for persistent MRSA colonization.

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