

Tea as a Source of *Acinetobacter baumannii* Ventilator-Associated Pneumonia?

To the Editor:

Acinetobacter baumannii increasingly has been involved as an agent of hospital outbreaks worldwide. The most common site of nosocomial infections is the respiratory tract, especially in ventilated patients, followed by bloodstream infections.¹ The incidence of *Acinetobacter* species as a cause of nosocomial pneumonia has increased despite advances in the management of ventilated patients and the use of better disinfection procedures for ventilatory equipment. Spread of *Acinetobacter* via hands of staff members was found to be important in many studies.² Outbreaks due to contaminated medical equipment and materials, including mattresses and pillows, also have been reported,³ but tea or other fluids used for mouth hygiene have not previously been reported as a source of infections caused by *Acinetobacter* species.

Between October 1997 and October 1998, *A. baumannii* (identified by API 20 NE, bioMérieux, Nürtingen,

Germany) was isolated in our neurological intensive-care unit from tracheal secretions (39 patients), a cerebrospinal fluid specimen, and a skin swab. All isolates but one were sensitive to cotrimoxazole. Ventilator-associated pneumonia caused by *A. baumannii*, alone or in combination with other pathogens, was diagnosed in 18 patients. There was one case of relapsing *Acinetobacter* ventriculo-peritoneal shunt infection.

Genotyping by randomly amplified polymorphic DNA-polymerase chain reaction revealed 10 genetically different strains, 6 of which were involved in small clusters of colonized or infected patients.⁴

Sampling of 288 environmental sites (including hands of personnel) revealed three strains isolated from tapwater and from anti-splash nozzles that were identical to those found in three patients. Contaminated respiratory equipment or contamination of the patients' inanimate environment could not be identified. One of the outbreak strains also was isolated from tea used for mouth care. Native tea was found to be heavily contaminated with a wide range of gram-negative bacteria, but not with *A. baumannii*.

Contamination of the brewed tea may have occurred due to mixing the

hot tea with tap water to cool it or to brewing with tap water insufficiently heated in an automatic water heater.

Our findings raise the possibility of the acquisition of *A. baumannii* from tea used for mouth hygiene.

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Vancomycin Use in 41 US Hospitals

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The emergence of vancomycin-resistant *Staphylococcus aureus* in the United States and Japan has intensified efforts to use antimicrobials more judiciously, but coming up with effective ways to reduce the use of vancomycin in hospitals has proven to be a tough challenge. To evaluate antimicrobial use across the country, Fridkin and colleagues surveyed 108 adult ICUs in 41 US hospitals to find out how much van-

comycin they used during 1996 to 1997, as well as what proportion of their total *S. aureus* isolates were resistant to methicillin.

The median rate of vancomycin use was found to be lowest in coronary care ICUs and highest in surgical ICUs. Approximately only one quarter of the hospitals required prior approval for the use of vancomycin. Also, rates of methicillin-resistance, central-line-associated bloodstream infections, and type of ICU all were independent predictors of vancomycin use. The researchers note that not a single infection control

practice was associated with reduced use of vancomycin.

The authors conclude that the use of vancomycin is determined mostly by the endemic extent of methicillin-resistant organisms and central-line-associated infections. They emphasize that hospitals trying to reduce the use of vancomycin need to focus on further improving their infection control practices.

FROM: Fridkin SK, Edwards JR, Pichette SC. Determinants of vancomycin use in adult intensive care units in 41 United States hospitals. *Clin Infect Dis* 1999;28:1119-1125.