Letter to the editor

Acinetobacter in intensive care

Over an 11-month period in 1996-97, we experienced an outbreak of *Acinetobacter calcoaceticus-baumannii* complex (ACBC) infections in an intensive care unit (ICU). The organism was isolated from the sputum of 22 patients and 32 samples of ventilator-circuit trap water.

Strains from 18 of the patients and the 32 water samples were typed by clamped homogenous electric field fingerprinting (CHEF). The strains were indistinguishable, except for an ACBC organism from one patient who was not ventilated.

Ventilator circuits included Fisher Paykel Model 720 continuous feed humidifiers. The humidifier temperature probes were disinfected with alcohol, as recommended by the manufacturers. The outbreak was aborted immediately, following institution of ethylene oxide sterilisation of the temperature probes. Similar outbreaks involving Fisher Paykel humidifiers have been described in the USA 1 and Canada 2. The

strains in our outbreak were relatively sensitive to antibiotics, showing *in vitro* resistance to amoxycillin and ceftriaxone and sensitivity to ceftazidime, ticarcillin, gentamicin and ciprofloxacin. There was variable resistance to amoxycillin/clavulanate, even in organisms isolated from the same patient. This phenomenon was also recorded in the Canadian outbreak.

Alcohol disinfection of temperature probes is a common practice in ICUs. The outbreaks indicate that these organisms are resistant to alcohol disinfection in such situations and that a sterilising process is necessary for management of humidifier temperature probes. Details of the outbreak will be reported elsewhere.

References

- 1. Fox B & Reagan L. Personal communication, 1998.
- Kaul R et al. Investigation of a multi year multiple critical care unit outbreak due to a relatively drug-sensitive Acinetobacter baumannii: risk factors and attributable mortality. J Infect Diseases 1996; 174:1279-87.

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