

Stenotrophomonas maltophilia bacteraemia in Turkish children.

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BACKGROUND: *Stenotrophomonas maltophilia* is an important cause of life-threatening nosocomial infection. **AIM:** To evaluate the clinical features, antibiotic treatment and prognosis of *S. maltophilia* bacteraemia. **METHODS:** Patients with blood cultures positive for *S. maltophilia* at the Children's Hospital, Ankara University Medical School between 1995 and 2005 were evaluated retrospectively. The results were compared with those of a case-control group of patients with *Pseudomonas aeruginosa* bacteraemia (n=33). Antibiotic susceptibilities of *S. maltophilia* strains were determined by disc diffusion. Susceptibility to ciprofloxacin was also determined by broth dilution. **RESULTS:** Thirty-six (2.2%) blood cultures were positive for *S. maltophilia*. Neutropenia was more common in the *P. aeruginosa* group (p=0.001). Breakthrough bacteraemia developed more commonly during carbapenem treatment in the *S. maltophilia* group (p=0.02). Ciprofloxacin and trimethoprim-sulfamethoxazole in combination with/without an aminoglycoside were the antibiotics most commonly selected to treat *S. maltophilia* bacteraemia. Mortality was more common in the *P. aeruginosa* (13/33) than in the *S. maltophilia* (2/33) group (p=0.001). According to susceptibility, determination by the disk diffusion method, beta-lactam antibiotics, aminoglycosides and chloramphenicol had little or no effect, whereas trimethoprim-sulfamethoxazole, doxycycline and fluoroquinolones were more active against *S. maltophilia* strains. However, ciprofloxacin susceptibility results were quite different when determined by disk diffusion (97% isolates susceptible) and broth dilution (49% isolates susceptible). **CONCLUSIONS:** Although *S. maltophilia* bacteraemia is rare in children, antibiotic resistance to these strains is an important problem. Tetracyclines, trimethoprim-sulfamethoxazole and fluoroquinolones are the most active agents against *S. maltophilia* strains.

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