

Administration of Antibiotics Before Admission in Patients with Meningococcal Disease

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Summary

Purpose: To determine whether parenteral or oral antibiotics given before admission to a regional hospital with a special intensive care unit (ICU) reduce the case fatality rate in patients with meningococcal disease.

Design: Prospective analysis of 164 consecutive patients with meningococcal disease admitted to 5 regional hospitals in the Czech Republic between August 1996 and October 2001. Main outcome measure was number of deaths from meningococcal disease. Fisher's exact test was used for statistical analysis.

Main findings: Nine out of 116 patients (8%) given antibiotics before admission died, compared with five deaths in 48 patients (10%) admitted without such a treatment ($p=0.55$). None of 19 patients given oral or combined oral and parenteral pre-admission antibiotics died.

Conclusion: Parenteral and probably also oral antibiotics given before admission to a regional hospital and an adequate treatment of shock can reduce the case fatality rate from meningococcal disease.

Key words: meningococcal disease, antibiotics, pre-admission treatment, mortality

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