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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