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Bacteremia in Patients With Liver Cirrhosis

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Thulstrup and colleagues from the Institute of Epidemiology and Social Medicine, University of Aarhus, Aarhus, Denmark, examined the risk of bacteremia in patients with liver cirrhosis (compared with the risk for all Danish citizens >20 years of age who were living in North Jutland County, Denmark), as well as the type of bacteremia and the 30-day case-fatality rate. They used the Danish National

Registry of Patients to identify 1,339 patients with liver cirrhosis and the North Jutland County Bacteremia Database to identify episodes of bacteremia. They observed 117 cases of bacteremia in patients with liver cirrhosis (11.0 cases were expected), which yielded a standardized incidence ratio of 10.5 (95% confidence interval $[\mathrm{CI}_{95}]$, 8.8-12.7). Sixty-two cases of bacteremia were nosocomial infections. There were 53 cases of gram-positive bacteremia, 55 cases of gram-negative bacteremia, and 8 cases of polymicrobial bacteremia (1 case of candidemia was excluded from the analy-

sis). The most common cause of death was bleeding from gastroesophageal varices; the second most common cause of death was infection in the respiratory system. The 30-day case-fatality rate was 0.53 (CI $_{\rm 95}$, 0.39-0.73). Patients with liver cirrhosis had an increased risk of bacteremia and a poor prognosis.

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