

Abstracts of current literature on epidemiology, diagnosis, and treatment

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FAILURE OF MACROLIDE THERAPY IN PATIENTS WITH BACTEREMIC PNEUMOCOCCAL INFECTION

A matched case-control study of patients with bacteremic pneumococcal infection at 4 hospitals determined whether the development of pneumococcal bacteremia during macrolide therapy was more common among patients with macrolide-resistant pneumococci than among patients with macrolide-susceptible pneumococci. Case patients (n = 86) were patients with bacteremia caused by a macrolide-nonsusceptible pneumococcus, and control subjects (n = 141) were patients with bacteremia caused by a macrolide-susceptible pneumococcus. Controls were matched to case patients according to hospital, sex, age group, and the year that bacteremia developed. Excluding patients with meningitis, 18 (24%) of 76 case patients but none of the 136 control subjects were found to be taking a macrolide antibiotic at the time that blood samples were obtained for culture ($P < .001$). Moreover, when patients with the low level-resistant M phenotype were analyzed and those with meningitis were excluded, 5 (24%) of 21 case patients but none of 40 matched controls were found to be taking a macrolide antibiotic ($P = .002$). The authors concluded that development of breakthrough bacteremia during macrolide therapy is more likely to occur among patients infected with a macrolide-resistant pneumococcus.

Lonks JR, Garau J, Gomez L, et al. Failure of macrolide antibiotic treatment in patients with bacteremia due to erythromycin-resistant *Streptococcus pneumoniae*. *Clin Infect Dis* 2002;35:556-64.

PEGINTERFERON ALFA-2A PLUS RIBAVIRIN FOR CHRONIC HEPATITIS C INFECTION

A randomized, controlled study was conducted to determine whether peginterferon alfa-2a plus ribavirin is more effective than interferon alfa-2b plus ribavirin or peginterferon alfa-2a alone in the treatment of chronic hepatitis C virus (HCV) infection. A total of 1121 patients were randomly assigned to receive subcutaneous, once-weekly injections of 180 μ g of peginterferon alfa-2a plus either daily ribavirin (1000 or 1200 mg, depending on body weight) or placebo or to receive subcutaneous, thrice-weekly injections of 3 million units of interferon alfa-2b plus ribavirin for 48 weeks. The study's primary efficacy endpoint was sustained virologic response, defined as the absence of detectable HCV RNA at the end of follow-up, according to a polymerase chain reaction (PCR) assay. Significantly more patients treated with peginterferon alfa-2a plus ribavirin had a sustained virologic response, compared with those treated with interferon alfa-2b plus ribavirin (56% vs 44%, $P < .001$) or peginterferon alfa-2a plus placebo (56% vs 29%, $P < .001$). Of pa-

tients with HCV genotype 1 who received peginterferon alfa-2a plus ribavirin, 46% had a sustained virologic response, compared with 36% of those who received interferon alfa-2b plus ribavirin ($P = .01$) and 21% of those who received peginterferon alfa-2a plus placebo ($P < .001$). The authors concluded that once-weekly peginterferon alfa-2a plus ribavirin is more effective than interferon alfa-2b plus ribavirin or peginterferon alfa-2a alone for the treatment of patients with chronic HCV infection.

Fried MW, Shiffman ML, Reddy KR, et al. Peginterferon alfa-2a plus ribavirin for chronic hepatitis C virus infection. *N Engl J Med* 2002; 347:975-82.

SEN VIRUS PREVALENCE, TRANSMISSION, AND TREATMENT

To document the prevalence and routes of transmission of SEN virus (SEN-V) in a community-based population and in patients referred to a liver disease unit, stored serum samples were obtained from 160 inhabitants of a Canadian Inuit settlement and 140 patients with liver disease and were tested for SEN-V DNA by PCR assay. Of serum samples obtained from the community-based population, 57 (36%) of 160 tested positive for SEN-V DNA; 24 (42%) of these were positive for SEN-V subtype H (SEN-V-H) and 39 (68%) were positive for SEN-V subtype D (SEN-V-D). Overall, SEN-V-positive persons tended to be younger and were more often male than were SEN-V-negative persons. The mean serum aminotransferase and alkaline phosphatase levels and the serologic markers for infection with hepatitis A virus and hepatitis B virus were similar in SEN-V-positive and SEN-V-negative individuals. Of the 140 patients with liver disease, 30 (21%) were SEN-V positive. Of these patients, 11 (37%) were SEN-V-H positive and 20 (67%) were SEN-V-D positive. Age, sex, risk factors for viral acquisition, prevalence of symptoms, and liver biochemical and histologic findings were similar in SEN-V-positive patients and SEN-V-negative patients. The authors concluded that SEN-V is a common viral infection in both healthy persons and patients with chronic liver disease and that transmission of SEN-V likely occurs via nonparenteral routes.

Wong SG, Primi D, Kojima H, et al. Insights into SEN virus prevalence, transmission, and treatment in community-based persons and patients with liver disease referred to a liver disease unit. *Clin Infect Dis* 2002;35:789-95.

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