

Abstracts of current literature on epidemiology, diagnosis, and treatment

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SPLenic LYMPHOMA WITH VILLOUS LYMPHOCYTES AND HEPATITIS C VIRUS

Researchers evaluated whether hepatitis C virus (HCV) infection has a role in splenic lymphoma with villous lymphocytes and investigated the effect of antiviral therapy on the course of splenic lymphoma with villous lymphocytes in patients with and without HCV infection. Nine patients who had splenic lymphoma with villous lymphocytes and HCV infection were compared with 6 patients who also had splenic lymphoma with villous lymphocytes but were HCV-negative. Both groups received 3 million IU of recombinant interferon alfa-2b subcutaneously 3 times a week for 6 months. In HCV-positive patients with detectable HCV RNA who had no therapeutic response to interferon, ribavirin (1000–1200 mg daily) was added. Of the 9 patients with HCV infection, 7 had complete remission of their lymphomas after the loss of detectable HCV RNA. The other 2 patients had a partial and a complete remission after the addition of ribavirin and the loss of detectable HCV RNA. One patient had a relapse when the HCV RNA load again became detectable in the blood. In contrast, none of the 6 HCV-negative patients had a response to interferon therapy. Study results indicated that HCV may play a critical role in the course of splenic lymphoma with villous lymphocytes. The authors recommend performing systematic screening for HCV infection in patients with a diagnosis of splenic lymphoma with villous lymphocytes.

Hermine O, Lefrère F, Bronowicki J-P, et al. Regression of splenic lymphoma with villous lymphocytes after treatment of hepatitis C virus infection. N Engl J Med 2002;347:89–94.

SERUM PROCALCITONIN LEVEL FOR DIAGNOSIS OF BACTEREMIA

A study was performed to assess the ability of serum procalcitonin (PCT) levels to differentiate bacteremic from nonbacteremic infection in hospitalized patients suspected of having community-acquired infections. Serum samples were obtained from adult inpatients with acute fever to determine the serum PCT level, C-reactive protein (CRP) level, and erythrocyte sedimentation rate (ESR). The PCT level was measured by use of an immunoluminometric assay. A bacteremic episode was defined by a positive blood culture associated with clinical symptoms of infection. Of 165 patients, 22 (13%) had bacteremic episodes and 143 (87%) had nonbacteremic episodes. Mean serum PCT levels, CRP levels, and ESRs were significantly higher in bacteremic patients than in nonbacteremic patients ($P < 0.001$, 0.007 , and 0.024 , respectively). The highest negative predictive value for PCT findings was 98.8%, which was associ-

ated with the cutoff value of 0.4 ng/mL. The area under the receiver operating characteristic curve was 0.83 for PCT, which was significantly higher than that for CRP (0.68 ; $P < 0.001$) and ESR (0.65 ; $P < 0.05$). Researchers concluded that a PCT value of less than 0.4 ng/mL could accurately rule out the diagnosis of bacteremia, thus helping physicians limit the number of blood cultures to be processed and the number of antibiotic prescriptions dispensed.

Chirouze C, Schuhmacher H, Rabaud C, et al. Low serum procalcitonin level accurately predicts the absence of bacteremia in adult patients with acute fever. Clin Infect Dis 2002;35:156–61.

HEPATITIS B e ANTIGEN AND RISK FOR HEPATOCELLULAR CARCINOMA

A prospective study evaluated the relationship between positivity for hepatitis B e antigen (HBeAg) and the risk for hepatocellular carcinoma among men in Taiwan. In 1991 and 1992, 11,893 men (age 30–65 years) were enrolled from 7 townships in Taiwan. Serum samples obtained at the time of enrollment were tested for hepatitis B surface antigen (HBsAg) and HBeAg by radioimmunoassay. Diagnosis of hepatocellular carcinoma was confirmed with the National Cancer Registry in Taiwan and with death certificates. A multiple regression analysis determined the relative risk of hepatocellular carcinoma among men who were positive for HBsAg alone or for HBsAg and HBeAg, compared with those who were negative for both. A total of 111 cases of hepatocellular carcinoma were diagnosed during 92,359 person-years of follow-up. The incidence rate (per 100,000 person-years) was 39.1 among men who were negative for both HBsAg and HBeAg, 324.3 among those who were positive only for HBsAg, and 1169.4 among those who were positive for both HBsAg and HBeAg. After adjustment for other risk factors, the relative risk of hepatocellular carcinoma was 9.6 for men who were positive for HBsAg alone and 60.2 for those who were positive for both HBsAg and HBeAg, compared with men who were negative for both. Researchers concluded that positivity for HBeAg is associated with an increased risk of hepatocellular carcinoma.

Yang H-I, Lu S-N, Liaw Y-F, et al. Hepatitis B e antigen and the risk of hepatocellular carcinoma. N Engl J Med 2002;347:168–74.

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