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LRA by ELISA/ACT®

CLINICAL PEARLS UPDATE#15

Cholangitis

December 15, 2003

Dear Colleague:

Autoimmune cholangitis and related syndromes (sclerosing cholangitis and biliary cirrhosis) affect 1-5 million Americans according to the Liver Society. Successful comprehensive management using LRA by ELISA/ACT® tests and treatment plans are illustrated in the attached abstract reports. Attached is a clinical update newsletter that details how this advanced approach can be applied in your practice with beneficial results.

Functional, *ex vivo* lymphocyte response assays (LRA by ELISA/ACT) offer the most advanced tests available for determination of the individual's responses to the widest available range of substances tested by any lab in the world.

We are grateful for the opportunities to be of service to you and your patients.

Sincerely,

Russ Jaffe, MD, Ph.D., CCN, NACB
Lab Director

Ben-Ari Z, Dhillon AP, Sherlock S. Autoimmune cholangiopathy: Part of the spectrum of autoimmune chronic active hepatitis. *Hepatology* 1993;18(1):10-15.

Department of Medicine, Royal Free Hospital School of Medicine, London, United Kingdom.

We describe four patients with features overlapping those of primary biliary cirrhosis and autoimmune chronic active hepatitis. Three were female and one was male; only one was symptomatic. Serum biochemical study showed increases in alkaline phosphatase and alpha-glutamyltranspeptidase levels. Markers of hepatitis B and C viruses were absent. In all four patients, serum mitochondrial antibodies could not be detected on immunofluorescence study and serum M2 antibodies were absent. All four patients had high titers of serum antinuclear antibody of diffuse type. Serum actin antibodies were detected in all four patients. Liver biopsy specimens showed histological features of primary biliary cirrhosis, with marked cellular infiltration of the portal areas and bile duct damage. Intralobular inflammation and piecemeal necrosis were mild. Three patients were treated with prednisolone and showed rapid clinical and biochemical remission. Serial liver biopsy specimens showed reduced inflammation, but bile duct lesions persisted. These patients probably form a subgroup of autoimmune chronic active type 1 with predominant bile duct damage. The subgroup might be termed autoimmune cholangiopathy.

On balance, what these studies show is that cholangitis is multifactorial. All of these components are included in the LRA by ELISA/ACT tests and treatment guide. Better outcomes are the results. Suppressing the symptoms with steroids is conventional therapy; addressing the immune burden using results from LRA by ELISA/ACT tests and antioxidant therapies included in the treatment guide are contemporary, lower risk, and potentially high gain.

Sherlock S. Primary biliary cirrhosis, primary sclerosing cholangitis, and autoimmune cholangitis. *Clin Liver Dis* 2000;4(1):97-113.

Department of Medicine, Royal Free Hospital School of Medicine, London, United Kingdom.

Primary biliary cirrhosis (PBC), and autoimmune cholangitis are presumed to be autoimmune cholestatic diseases, but the relevant antigens are unknown. Primary biliary cirrhosis is diagnosed by a positive serum mitochondrial antibody test. It usually affects women and has a very long course, culminating in liver transplantation or death. Ursodeoxycholic acid is probably the appropriate treatment. Primary sclerosing cholangitis (PSC) is marked by progressive destruction of extrahepatic and intrahepatic bile ducts. There is no specific diagnostic test or treatment. Cholangiocarcinoma is the dreaded complication and precludes liver transplantation, the only chance of a cure. Autoimmune cholangitis overlaps PBC and autoimmune chronic hepatitis. It is a rare condition, resembling PBC but with a negative serum mitochondrial antibody test; however, serum antinuclear antibodies and smooth muscle antibodies are present in high titers.

In her classic textbook on liver disease, Professor Sherlock includes even more information on the autoimmune nature of cholangitis.

Note: We believe the comprehensive optional treatment guide included with LRA by ELISA/ACT tests, if requested, provides the best current therapy for sustained remissions in biliary cirrhosis, sclerosing cholangitis, and autoimmune cholangitis.

