Asymptomatic Primary Biliary Cirrhosis

Linda Goodwin, MD, FACP

Address: Creative Risk Analysis, Inc., 1501 New Gate Court, Concord NC 28027; ph: 704-721-3645; fax: 704-721-3645; e-mail: lgoodwin@vnet.net.

Correspondent: Linda Goodwin, MD, FACP.

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A 67-year-old female applying for life insurance has the following history. Three years prior to application she was diagnosed with primary biliary cirrhosis (PBC) during an evaluation for gallstones and subsequent cholecystectomy. She was asymptomatic, has remained so, and is on no treatment for PBC. At the time of diagnosis, her alkaline phosphatase was 4 times normal, and her anti-mitochondrial antibody was positive. However, her transaminases, bilirubin, and prothrombin times were all normal. These labs tests have remained in the same range for the past 3 years. A liver biopsy was performed at the time of her cholecystectomy, and it was interpreted as showing Grade I PBC changes. Physical exams by her physician have shown only mild, stable liver enlargement. The figure illustrates the characteristic histological findings.

PBC incidence is increasing, but this may be related to earlier detection due to improved laboratory methods of diagnosis. In turn, this has led to greater numbers of patients who are asymptomatic or whose liver biopsies show early stage disease. The underwriter or medical director must try to determine the probability of progression and death in such cases.

A recent large population-based study found that 61% of newly diagnosed PBC patients were asymptomatic. By liver biopsy and lab testing, these patients were at a less advanced stage of disease when diagnosed than patients who were symptomatic. However, the median survival for both groups was similar; 9.6 years for the initially asymptomatic group vs 8.0 years for the initially symptomatic group. Five years after diagnosis, 50% of the initially asymptomatic patients developed symptoms of PBC. Twenty percent progressed to die of liver disease or to require a liver transplant. Forty-five percent remained asymptomatic at the time of death.

In a study of 91 PBC patients who were initially asymptomatic, no prognostic features were found to predict which asymptomatic patients would progress vs which would remain asymptomatic, including such
variables as hepatomegaly, histological stage, and associated autoimmune disorders.3

Underwriters are likely to see increasing numbers of asymptomatic PBC patients. As yet, there does not appear to be a reliable method of determining which of these individuals is more likely to have a slower progression or lower risk of mortality and which are likely to progress more rapidly to death. Thus, all cases of PBC should be approached cautiously from an underwriting perspective.

REFERENCES