Primary Biliary Cirrhosis and Sarcoidosis

To the Editor:

In a recent review of primary biliary cirrhosis (PBC), the possible association of this disease with sarcoidosis is not mentioned.1 Although most patients with sarcoidosis have no clinical evidence of liver disease, hepatic granulomas occur in 60 percent of patients with this disease.2 Rarely, patients with sarcoidosis may develop chronic intrahepatic cholestasis, which may progress to biliary cirrhosis and liver failure. Since many patients with PBC show chronic hepatic granulomas, the question arises of the relation between these two disorders. Similarities between PBC and sarcoidosis with chronic intrahepatic cholestasis were described more than 25 years ago. In 1969, Karlisch et al3 reported the case of a 47-year-old woman with enlarged hilar and parastrachal lymph nodes, a positive Kveim test, circulating antimitochondrial antibodies and progressive cholestatic liver disease. Maddrey et al,4 in a study of 20 patients with sarcoidosis and chronic hepatic disease, described two patients who had features of PBC: they subsequently described two other patients with pulmonary granulomas and progressive cholestatic liver disease.4 Antimitochondrial antibodies were positive in one of two patients tested in this group of four. Stanley et al5 described two middle-aged women with pruritus, liver findings compatible with PBC, and positive antimitochondrial antibodies. Both patients had pulmonary infiltrates; after they died from liver disease, autopsy showed pulmonary granulomas. Rudzki et al6 described a series of five young men who had evidence of systemic granulomatous disease with clinical and biochemical data similar to those of PBC. Antimitochondrial antibodies were not found; survival exceeded the usual survival of patients with PBC and the authors considered sarcoidosis as the most likely diagnosis. Fagan et al7 described four women with high titers of antimitochondrial antibodies and hepatic granulomas, in addition to prominent pulmonary signs and symptoms. Kveim test was positive in one of the three patients tested; all patients had abnormal chest radiographs and three of them had lung granulomas on biopsy. The authors stressed that their patients’ disorders were not discrete entities, but had clinical, serologic and histologic findings that overlapped those of Sjögren’s syndrome, celiac disease and mixed connective disease as well as sarcoidosis and PBC. About 95 percent of patients with PBC have positive antimitochondrial antibody tests, as opposed to 1 percent of patients with sarcoidosis. It therefore seems reasonable to use this finding as a defining characteristic for PBC. The absence of antimitochondrial antibodies would identify patients with chronic intrahepatic cholestasis complicating sarcoidosis. Patients with chronic intrahepatic cholestasis, extrahepatic granulomas and circulating antimitochondrial antibodies would be considered to have both sarcoidosis and PBC. Sarcoidosis should be added to the list of diseases that may be associated with PBC.

Interaction of Rifampin and Glyburide

To the Editor:

Numerous clinically significant drug interactions have been reported with the use of rifampin, including the sulfonilureas, tolbutamide and chloropropamide.14 We recently observed a case suggestive of an effect of rifampin on serum glyburide concentrations. To our knowledge, this is the first report of this interaction in the literature. A 67-year-old woman was diagnosed with renal tuberculosis in March, 1988 on the basis of a urine test positive for acid-fast bacilli and positive urine cultures for Mycobacterium tuberculosis. On March 10, therapy was begun using rifampin (600 mg daily), isoniazid (300 mg daily), and pyridoxine (50 mg daily). The patient’s past medical history included adult onset diabetes mellitus, hypertension, gout, and mild renal insufficiency. Medications for these problems included allopurinol (100 mg daily), glyburide (5 mg daily), pentoxyfylline (400 mg three times daily), furosemide (120 mg in the morning and 80 mg in the evening), nifedipine (20 mg three times daily) and methylpaps (250 mg twice daily). Glyburide dosage was increased to 10 mg in the morning and 5 mg in the evening in July, 1988. In August, insulin therapy (10 units in the morning and 5 units in the evening) was added to help control serum glucose levels. Insulin dosage was further increased in October, 1988 to 15 units in the morning and 5 units in the evening. In October, 1988, furosemide was replaced with metolozane (5 mg daily).

Using a modification (unpublished) of the method of Adams et al,1 serum glyburide concentrations were determined twice before rifampin therapy was discontinued on December 10 and then three times after rifampin was stopped. Morning trough glyburide serum concentration rose dramatically upon discontinuation of rifampin therapy (Fig 1). Renal and hepatic function remained stable throughout this period.

This case is strongly suggestive of a glyburide and rifampin

REFERENCES

1 Pratter MB, Irwin RS. Usefulness and safety of pharmacological bronchoprovocation challenge in evaluating patients with normal spirometric tests who are suspected of having asthma. Chest 1988; 93:989-900

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REFERENCES

5 Maddrey WC, Sha E, Kreff E. When sarcoidosis overlaps primary biliary cirrhosis. J Respir Dis 1985; 6:41-45