Abdominal Lymphadenopathy as the Initial Presentation of Sarcoidosis

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INTRODUCTION
Sarcoidosis is a chronic systemic disease of unknown etiology, characterized by non-caseating granulomas. Although lungs are involved in more than 90% of patients, extrapulmonary involvement is common (1). All organs, especially lymph nodes, liver, skin and eyes may be involved. Abdominal lymphadenopathy due to sarcoidosis has rarely been described and is usually associated with hepatic and/or splenic involvement (2). We report a case of sarcoidosis presenting with abdominal lymphadenopathy, without involvement of the abdominal viscera.

CASE REPORT
A 42-year-old African American, asymptomatic female was referred to our Liver Center for evaluation of abnormal liver enzymes detected on routine laboratory testing. Medical history was significant for hypertension, treated with amlodipine. She consumed moderate amounts of alcohol and had no risk factors for viral hepatitis. Family history was significant for lung cancer in father and cervical cancer in mother.

On physical examination, she was obese (BMI 38). Results of head and neck, cardiopulmonary, abdominal and skin examinations were unremarkable. There was no peripheral lymphadenopathy. Laboratory data showed normal bilirubin, AST 65 IU/L (normal 15–41), ALT 47 IU/L (normal 7–47), alkaline phosphatase 137 IU/L (normal 38–126) and GGT 331 IU/L (normal 7–50). Complete blood count and serum chemistries were normal. Serologies for hepatitis A, B and C were negative. Iron and copper studies and autoimmune markers were within normal limits. Abdominal ultrasound showed hepatic fatty infiltration, normal bile ducts, and lymphadenopathy in porta hepatis, gastrohepatic, and peripancreatic regions. Abdominal CT scan showed normal-sized liver and spleen without focal lesions, normal pancreas, and numerous, prominent lymph nodes ranging from 1.6 to 3.3 cm, the largest being in the porta hepatis region (Figure 1). Subsequent testing including HIV serology and chest X-ray were normal.

Due to concern for malignancy, the patient was referred for endoscopic ultrasound and fine-needle aspiration of peripancreatic and porta hepatis lymph nodes was performed (Figure 2). Pathologic examination showed non-caseating granulomas compatible with sarcoidosis (Figure 3); there were no malignant cells. Further testing showed an elevated serum ACE level of 87 mg/dl. Chest CT showed mediastinal and hilar lymphadenopathy. Because the patient was asymptomatic, she was not started on medical therapy.

DISCUSSION
Abdominal lymphadenopathy is commonly associated with lymphoma and metastatic disease, although it may be caused by a variety of benign conditions (3). Abdominal lymphadenopathy due to sarcoidosis has been reported in the literature and is usually associated with hepatic and/or splenic involvement.
Our patient was referred for evaluation of elevated liver enzymes. Up to 35% of patients with sarcoidosis have abnormal liver function tests. Alkaline phosphatase is more reliable than GGT in predicting liver involvement (4). Jaundice is rare and may be due to intrahepatic cholestasis, hepatocellular dysfunction, or extrahepatic bile duct compression by granulomatous hepatic hilar lymph nodes. Abdominal imaging showed hepatic steatosis without hepatomegaly or discrete nodules. Fine-needle aspiration of the enlarged lymph nodes was performed to rule out lymphoma or metastatic carcinoma. Sarcoidosis was confirmed by finding non-caseating granulomas. In the absence of radiographic evidence of hepatic involvement and the pattern of liver enzyme abnormalities, these derangements were attributed to alcoholic and non-alcoholic fatty liver disease. Although hepatomegaly is not a prerequisite for finding granulomas on liver biopsy, this was not performed because it would not have altered management. The role of corticosteroids in liver sarcoidosis is unclear. Although they may improve clinical symptoms, they have no effect on disease progression and may in fact worsen fibrosis (5). In conclusion, sarcoidosis is a benign condition commonly associated with lymphadenopathy. Although abdominal lymphadenopathy is more commonly seen in association with lymphoma or metastatic disease, sarcoidosis should be considered as an important differential diagnosis.

References