Tuberculosis of the Cystic Duct Lymph Node

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Tuberculosis of the cystic duct lymph node associated with cholelithiasis is rare. We report a case of a 40 year-old woman with this pathology. She presented with anorexia, biliary colic, postprandial fullness and fever. Imaging studies revealed cholelithiasis and several visible portal lymph nodes. Cholecystectomy was performed and histopathological examination showed tuberculosis of the cystic duct lymph node without affecting the gallbladder. The presence of gallstones and lymphadenopathy in computed tomography, associated with persistent fever and symptoms that resemble cholecystitis, should cause suspicion of tuberculosis. However, diagnosis is usually achieved by microscopic appearance of caseating granulomas and isolation of *Mycobacterium tuberculosis*. The treatment in this case consisted of cholecystectomy and antitubercular chemotherapy.

Key Words: Cystic duct, lymph node, tuberculosis, gallstone.

After pulmonary tuberculosis, the gastrointestinal tract is one of the commonest sites of development of this pathology. However, hepatobiliary tuberculosis is rare, seen in aproximately 1% of all abdominal cases [1]. Tuberculosis of the cystic duct lymph node isolated has not been found in literature. The diagnosis is difficult because of the absence of characteristic symptoms and signs. Therefore, we report a case of this pathology associated with cholelithiasis.

Case Report

A 40-year-old woman had been well until 8 months before admission when she developed anorexia and lost 7 kg. At clinical investigation, she had upper abdominal pain presented as biliary colic, postprandial fullness and afternoon fever. There was no history of jaundice.

Received on 22 September 2003; revised 15 December 2004.
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The Brazilian Journal of Infectious Diseases 2004;8(1):112-114

There was no abnormality at chest X-ray. Endoscopy disclosed gastritis. At abdominal ultrasound, the gallbladder was dilated with a large gallstone and the liver and the spleen were enlarged.

At videolaparoscopic surgery, cholecystectomy was performed. Histopathological examination of the cystic duct lymph node showed granulomas with caseating necrosis and Langhans-type giant cells (Figure 1). The gallbladder itself had no signs of this pathology.
After operation, the patient was submitted to computed tomography in order to find any evidence of disease. It was possible to find several lymph nodes surrounding the portal vein (Figure 2).

The patient was treated with isoniazid, rifampicin and pyrazinamide. After 30 days, hepatosplenomegaly was reduced. She gained weight and had no fever.

Discussion

Tuberculosis of the cystic duct lymph node is rare. When present, the gallbladder is also affected [2]. However, it is possible that high concentrations of bile acids provide protection against the tubercle bacillus [3]. The presence of gallstones, which was detected in more than 90% of the reported cases of gallbladder

Figure 1. Cystic duct lymph node showing granulomas with caseating necrosis and a Langhans-type giant cell (arrow)

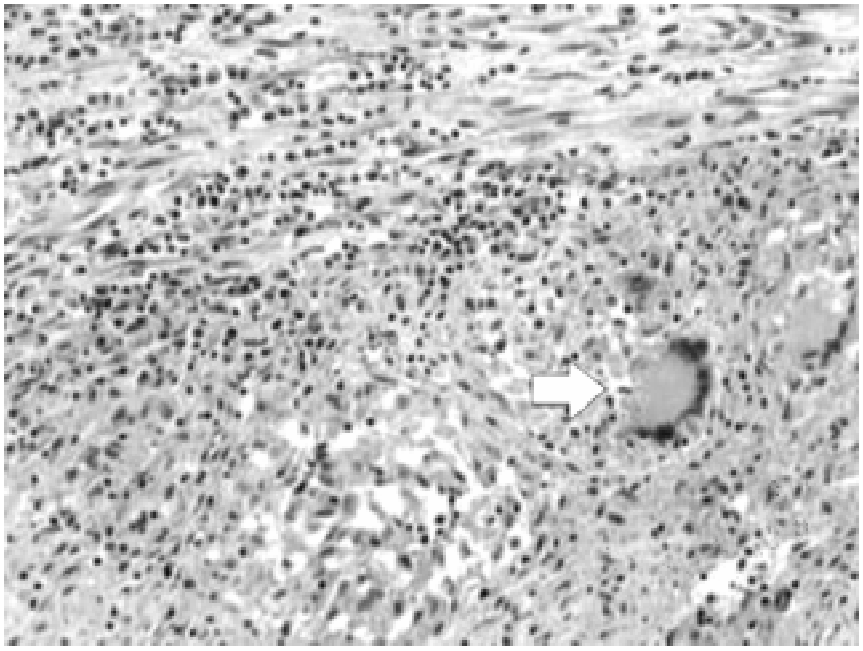
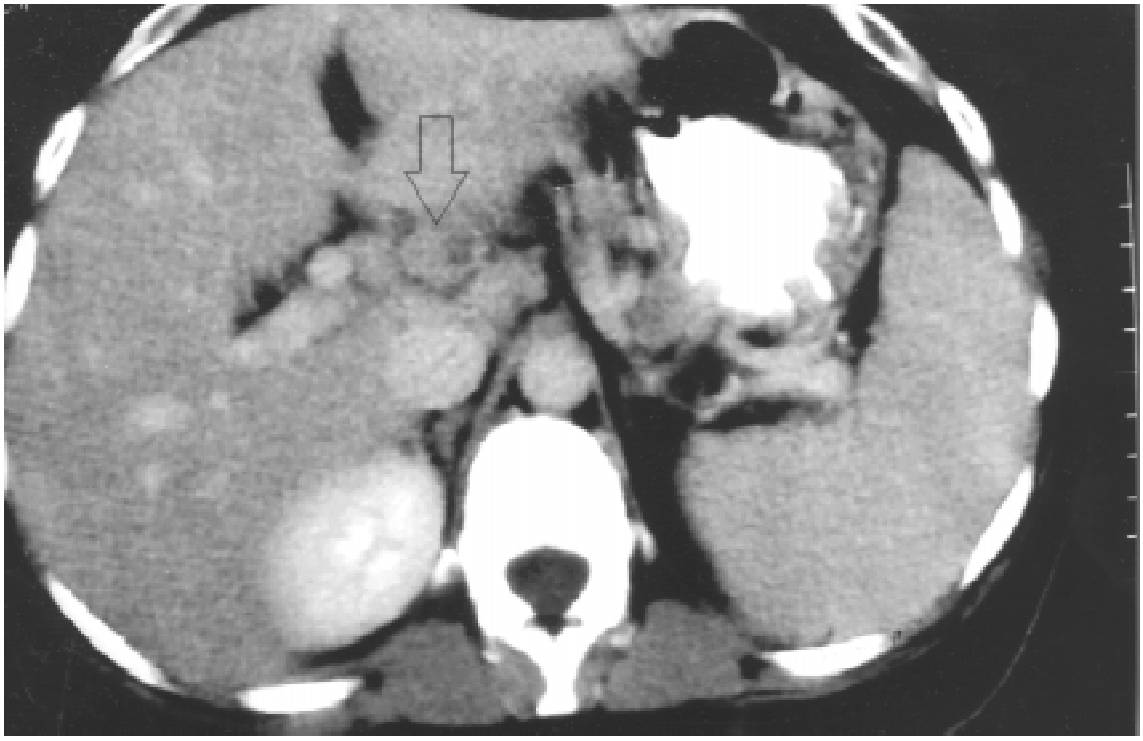


Figure 2. Post-operative computed tomography showing several periportal lymph nodes (arrow)



tuberculosis, may play an important role in the development of this disease [4,5]. Although our patient had a gallstone, she did not develop this association of the disease.

Diagnosis of this pathology associated with cholelithiasis is difficult because the symptoms resemble cholecystitis: postprandial pain, dizziness and fever [5,6]. Although jaundice is usually not seen [1], a few cases have been reported [2,7]. Leukocytosis is a common feature [5].

Making an early diagnosis of this pathology is important to avoid gallbladder tuberculosis and the formation of biliary fistulae that may progress to biloma and infected abscess [8,9]. Although ultrasound and computed tomography may be of valuable importance as they can disclose the presence of gallstones and lymphadenopathy, the diagnosis is usually achieved by microscopic appearance of caseating granulomas and isolation of *M. tuberculosis* [6]. A suitable technique used to detect its presence is the PCR method, especially when the culture of the pathogens is difficult [6].

The treatment consists of antitubercular chemotherapy [8] and cholecystectomy when there are gallstones.

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