Case Reports

Inflammatory Pseudotumor of the Spleen: Report of a Case

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Abstract: A case of an inflammatory pseudotumor arising in the spleen of a 60-year-old Japanese male is described herein. This benign lesion is extremely rare, with only 12 cases, including our own, having been reported in the world literature. We preoperatively diagnosed the splenic tumor as a metastasis, due to the coexistence of advanced stage carcinoma in the sigmoid colon. However, after splenectomy, histopathological examination of the mass revealed an inflammatory process. Inflammatory pseudotumors often pose diagnostic difficulties because the clinical and radiologic findings are suggestive of malignancy. The clinical and pathological features of cases previously reported are reviewed following the presentation of this case.

Key Words: inflammatory pseudotumor, benign splenic tumor

Introduction

Inflammatory pseudotumors are known to occur in a wide variety of anatomic locations, including the orbit, respiratory tract, gastrointestinal tract and soft tissues.1 However, primary benign tumors of the spleen are rare, with inflammatory pseudotumors being one type of benign lesion to be frequently misdiagnosed as a malignant neoplasm or other benign tumor.

To our knowledge, only 11 well-documented cases of an inflammatory pseudotumor of the spleen have ever been reported. Recent advances in imaging techniques, such as ultrasonography and computed axial tomography (CT), however, have aided in better identification of space occupying lesions of the spleen.

In the present paper, we describe a case of an inflammatory pseudotumor of the spleen associated with sigmoid colon cancer. Although the clinical and radiologic features were suggestive of metastasis, the lesion was histopathologically diagnosed as inflammatory and benign.

Case Report

A 60-year-old male presented with a 3-month history of constipation and left upper quadrant pain. Physical examination was unremarkable although laboratory investigations revealed mild anemia, with a hundred count (Hct) of 26%, mild leukocytosis, with a WBC of 9,700/mm3 and a slight elevation of serum carcino-embryonic antigen (CEA) to 5.3 ng/dl. Other values were all within normal limits.

Barium enema showed a large mass with irregular borders in the sigmoid colon (Fig. 1) and the subsequent histopathological examination of biopsy specimens revealed an adenocarcinoma. Ultrasonography showed an inhomogeneous hypoechoic mass in the spleen and CT demonstrated a partially calcified hypodense mass, measuring 10 x 8 cm, in the lower pole of the spleen. Magnetic resonance imaging (MRI) also revealed the splenic mass. The mass showed low intensity on T1-weighted images and high intensity with an inhomogeneous structure on T2-weighted images (Fig. 2).

The splenic tumor was thereby preoperatively diagnosed as a metastatic lesion from the sigmoid colon cancer. An exploratory laparotomy revealed no ascites, metastases to the liver or dissemination in the peritoneal wall. The carcinomatous lesion in the sigmoid colon had invaded the serosa and infiltrated into the wall of the urinary bladder. The paraaortic lymph nodes were also considered to be involved by carcinoma. The splenic tumor was situated in the lower pole of the spleen. Thus, a left hemicolectomy with partial resection of the urinary bladder and
Fig. 1. Barium enema showed a stricture in the sigmoid colon

Fig. 2. Magnetic resonance imaging revealed a mass with low intensity on T1-weighted images and high intensity on T2-weighted images

Fig. 3. Macroscopic findings of a cross section showed a well-capsulated, un-homogenous, solid tumor