Peritoneal Tuberculosis with Gastric Cancer A Case Report

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ABSTRACT

This is a report of a case with both peritoneal tuberculosis and gastric cancer. Physicians should have a high index of suspicion of peritoneal tuberculosis if the patient is febrile with a past history of tuberculosis.

Tuberculosis Peritoneal con Cáncer Gástrico Reporte de Caso

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RESUMEN

Este es el reporte de un caso con tuberculosis peritoneal y cáncer gástrico a la vez. Los médicos debáan tener un alto índice de sospecha de tuberculosis peritoneal si se trata de un paciente febril con antecedentes de tuberculosis.

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INTRODUCTION

Although tuberculosis has been an uncommon disease in Japan, the number of cases of tuberculosis has been increasing recently. Peritoneal tuberculosis is still rare (1, 2) and is usually difficult to diagnose before surgery. We report herein a case of mesenteric tuberculosis with gastric cancer, which was found during operation for gastric cancer. It might have been diagnosed preoperatively, if it were considered before surgery in a febrile man with a past history of tuberculosis.

CASE REPORT

The patient was a 60-year old man who had a past history of tuberculosis. He had been diagnosed with old pleuritis in December 1999. He complained of epigastric discomfort since August 2001. Upper gastrointestinal endoscopy revealed an ulcerous lesion at the gastric angle, and histology confirmed an adenocarcinoma. He was admitted to hospital for gastrectomy and was noted to have a low grade fever and an elevated white blood cell count of about 10 000/mm³. An abdominal ultrasound, computed tomography (CT) scan, and magnetic resonance imaging (MRI) showed no liver metastasis and no metastasis to the lymph node. Barium enema

examination revealed that the appendix was adherent to the parietal ascending colon wall. In October 2001, distal partial gastrectomy was performed. At gastrectomy, gastric cancer was found on the lesser curvature of the stomach and another tumour, 7cm in diameter, was noted on the mesentery. Mesenteric metastasis and a granulomatous appendicitis were observed and tumour resection and ilectomy were performed (Fig. 1). Histology of the gastric lesion revealed a poorly differentiated adenocarcinoma that had invaded the subserosa. On the other hand, the tumour of the mesentery was granulomatous tuberculosis involving the mesenteric



Fig.1: The necrotic tumour is recognized on the basal part of supra mesenterium (arrowheads).

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Fig. 2: The abdominal computed tomography scan shows that the tumour is multicellular and enhanced by contrast medium (arrow).

artery and vein. No neoplastic cells were noted in the lesion. On retrospective review of the computed tomography, a mesentric tumorous lesion was noted and was enhanced by contrast medium. After the operation, he was treated with antituberculous drug and anticancer chemotherapy. He received intramuscular streptomycin from day 2 to day 12 post-operatively and isoniazid, ethambutol hydrochloride and rifampicin were administered with tegaful uracil after oral intake commenced (3). The low grade fever subsided and the leucocytosis decreased. Three years after the operation, he is well without evidence of tuberculosis and/or cancer recurrence.

DISCUSSION

The incidence of peritoneal tuberculosis was reported as 0.5% of 50 000 patients per year in Japan (1). Peritoneal tuberculosis is classified as: wet tuberculous peritonitis with ascites, dry form without ascites and caseous form with caseation necrosis. The dry form is very rare. Only 5 cases were found for the 10-year period 1981 to 1990 in Japan (1). While CT scans showed an abdominal mass in 72% of the patients with abdominal tuberculosis, diagnoses of peritoneal carcinomatosis, colon cancer, Crohn's disease and ovarian cancer were considered (6). It is difficult to differentiate between the dry form of tuberculous peritonitis and cancer. Typically, an abdominal CT scan reveals that this type is a multicellular mass, with ring enhancement (4, 5). The CT scans for the present peritoneal tumour demonstrated the typical image of peritoneal tuberculosis (Fig. 2). The symptoms and signs of peritoneal tuberculosis are non-specific and physicians need to have a high index of suspicion of peritoneal tuberculosis if the patient is febrile with a past history of tuberculosis.

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