An autopsy case of malignant fibrous histiocytoma of the mediastinum, presenting multiple metastases to the small intestine and to the brain — A rare case report with a review of the literature —

Jun MISONOU1, Makoto KANDA1, Toshiaki SHISHIDO2, Masakazu ABE2, Takayoshi MIYAKE2, Tsugumichi KAWAMURA2, Isao MAEKAWA2, Noriyuki ITOU3, Tomoyoshi ATSUTA3, Hiroshi KUBOTA3, and Tadashi MURAKAMI4
Departments of 1Pathology, 2Internal Medicine, 3Surgery, and 4Thoracic Surgery, Asahikawa City General Hospital, Asahikawa 070, Japan

Summary: An autopsy case of malignant fibrous histiocytoma (MFH) of the mediastinum in a 25-year-old Japanese man is described. He initially complained of general fatigue and intermittent tarry stool, and was radiographically revealed to have a huge mass within the mediastinum as well as multiple nodules within the abdominal cavity, respectively. The mediastinal tumor could not be resected because of direct tumor invasion into surrounding tissues. Within the abdominal cavity, three distinct tumor nodules were discovered in the jejunum, which could be resected surgically. Histopathologically, the components of both lesions were very similar, and the present case was interpreted as multiple metastases of mediastinal MFH to the intestinal wall. In spite of various kinds of treatment, the mediastinal tumor rapidly enlarged, causing SVC syndrome. Brain CT findings suggested multiple metastases which were considered to be the cause of death. Autopsy confirmed that the main tumor nodule was located within the mediastinum, with brain metastases. The present case of mediastinal MFH is considered to be the youngest case as well as the first case presenting intestinal metastases. Gastroenterol Jpn 1990;25:746–752

Key words: malignant fibrous histiocytoma; mediastinal diseases; mediastinal neoplasms; metastatic brain neoplasms; metastatic intestinal neoplasms

Introduction

Metastases of tumor cells to the small intestine rarely occur. Moreover, those of malignant fibrous histiocytoma (MFH) are considered to be extremely rare. The present case is the 19th reported case of MFH originating within the mediastinum since the first report by Tewfik in 19811. The present case is unique in that it occurred in a 25-year-old young man as well as that the patient had undergone a successful resection of multiple metastatic nodules in the jejunum. To the best of our knowledge, cases of mediastinal MFH with metastases both to the brain and to the intestine have not been described. After description of the present case, previously reported cases of this disease will be thoroughly reviewed.

Case Report

Clinical history
A 25-year-old Japanese man who had suffered from intermittent tarry stool and abdominal pain since January, 1989 was admitted to the department of internal medicine, Asahikawa municipal general hospital on March 8th, 1989, because his
general condition gradually worsened with continuous high body temperature. Chest radiography on admission demonstrated an abnormal huge shadow 9.0 × 4.0 cm in size, located in the apical portion of the right lung, with rapid increase in size during the course (Fig. 1). Chest computed tomography also disclosed a mass 7 cm in diameter adjacent to the apical portion of the right lung (Fig. 2). Open biopsy of the tumor was performed 2 days after admission. Histopathological features of the biopsied specimen were com-