CASE REPORT

Peritoneal Dissemination from Malignant Fibrous Histiocytoma of the Buttock: Unusual Metastases from a Rare Tumor

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We report a case of malignant fibrous histiocytoma (MFH) of the right buttock with multiple metastases to the lung, bone, and small intestine. He received resection and end-to-end anastomosis of the jejunum for the jejunal metastatic tumor, and mass excision of the metastatic tumor of the left femur followed by closed reduction and internal fixation and palliative radiotherapy. In addition, he received palliative radiotherapy to the metastatic pulmonary tumor with suspicious invasion into the thoracic aorta. However, one month after the completion of the aggressive local treatments, metastatic tumors recurred in the abdominal cavity, an extremely unusual site, resulting in peritoneal dissemination. He died of progressive disease 5 months after the initial diagnosis. (*Gut and Liver* 2008;2:213-215)

Key Words: Malignant fibrous histiocytoma; Buttock; Peritoneal cavity; Neoplasm seeding

INTRODUCTION

Malignant fibrous histiocytoma (MFH) is the most common soft tissue sarcoma diagnosed in older adults.¹ The tumors occur most commonly in the extremities and retroperitoneum but they can arise in any part of the body.² They are typically large deep-seated tumors showing progressive, often rapid enlargement. In addition, they have high propensity for metastasis to other organs, such as lung, bone and liver.

We here describe a rare case of MFH of the buttock with multiple metastases to the lung, bone and small intestine. In addition, while the disease develops as meta-

static tumor in abdominal cavity, resulting in peritoneal dissemination, which is a very unusual metastatic site.

CASE REPORT

A 65-year-old man with no past medical history presented with a mass on his right buttock. Further work-up revealed multiple metastases; CT chest showed a mass possibly invading into the thoracic aorta; CT abdomen for an abdominal mass showed a huge jejunal mass (Fig. 1); and MRI pelvis showed an intramedullary bone metastasis with cortical destruction and extraosseous soft tissue mass formation at the proximal shaft of the left femur. He underwent a wide excision of the mass, of which pathology was reported to be MFH. The percutaneous fine needle aspiration biopsies of the lesions in the lung

Fig. 1. CT of the abdomen showing a huge mass (arrow) in the small intestine and adjacent to the mesentery.

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Fig. 2. A huge metastatic tumor in the small bowel (A), whose cut surface (B) showed pale fibrous or fleshy solid areas mixed with zones of hemorrhage.

Fig. 3. Histopathology of metastatic tumor cells in the small intestine (A) and femur (B) revealed spindle cell neoplasm (H&E stain, ×400).

Fig. 4. Recurrent tumors were evident in the abdominal cavity after resecting the intestinal metastatic tumor.

and abdomen were reported to be the same pathology to that of the buttock mass. Therefore, he underwent resection and end-to-end anastomosis of the jejunum for a jejunal metastatic tumor to prevent tumor bleeding or obstruction. The operative findings showed only the huge jejunal mass with multiple intratumor hemorrhages, but there was no evidence of malignant ascites or peritoneal dissemination (Fig. 2). Thereafter he received mass excision of the metastatic tumor of the left femur, followed by closed reduction and internal fixation (Fig. 3). Following palliative radiotherapy was applied to the metastatic lung tumor with 51 Gy for 18 days and to the remnant metastatic tumor of the left femur with 30 Gy for 10

days. However, 1 month after the completion of the aggressive local treatments, he complained of abdominal discomfort and distension. His new CT abdomen showed the intraperitoneal metastatic tumors in his abdominal cavity (Fig. 4). As no obvious obstructive symptoms related to peritoneal dissemination, such as vomiting or obstipation, were observed, any additional treatment for the intraperitoneal metastatic tumors was not necessary. However, only best supportive care was given due to a rapid decline of his performance status. After all, he died of progressive disease 5 months after initial diagnosis.

DISCUSSION

The treatment of malignant fibrous histiocytoma (MFH) remains uncertain. Radical excision and postoperative radiotherapy are thought to control local recurrence but are limited to localized tumor.³ When distant metastasis is seen, surgical resection with curative intent is only possible for patients with limited pulmonary metastases who are also undergoing or have undergone complete resection of the primary tumor.⁴ The systemic chemotherapy is main treatment for metastatic disease but the prognosis is still unsatisfactory. Actually, however, surgical resections of metastatic tumors may improve quality of life and manage complications related to metastasis although they did not prove the survival benefit. The patient in this case received inevitable yet aggressive local treatments for rare complications caused by the metastatic tumors in the small intestine,⁵⁻⁷ and in the bone. He also received radiotherapy to chest to prevent a metastatic tumor from invading into aorta. However, even though aggressive local therapies controlled the complications related to metastatic tumors, he showed a huge intraperitoneal metastatic tumors in abdominal cavity, an extremely unusual site for metastases, and died of the pro-

gressive disease only 5 months after initial diagnosis. The rapidity of tumor growth and the unusual metastases might reflect the aggressiveness of the tumors, suggesting that effective systemic treatment, if any, should have been given earlier.

To the best of our knowledge, we here report the first case of MFH of the buttock with peritoneal dissemination, an extremely rare metastatic site from a rare tumor. Both the rapidity of tumor growth and unusualness of tumor metastases might reflect the aggressiveness of the tumors.

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