A myxoid liposarcoma in the lower leg, with a large intra-abdominal metastasis

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Abstract We report a patient with a large intra-abdominal metastasis of myxoid liposarcoma. The patient first noticed an asymptomatic mass in her left leg in 1985, when she was 20 years old. The mass was left untouched until she realized its rapid growth and consulted a local doctor in 1994. After needle biopsy, she was histologically diagnosed as having a myxoid liposarcoma. She disagreed with the recommendation for an amputation below the knee, made at another hospital. A marginal resection was performed as an alternative treatment. She subsequently underwent three more marginal resections and four intra-lesional resections for repeated local recurrences. In 1997, an abdominal computed tomography scan revealed the presence of multiple intra-abdominal metastases, and the lesions were judged to be inoperable. Ileus and respiratory distress, caused by compression by the abdominal mass, gradually worsened, and she died in 1999, at the age of 34. The girth of her abdomen was 135 cm at the time of death.

Key words Myxoid liposarcoma · Intra-abdominal metastasis

Case report

In 1985, a 20-year-old woman who was otherwise healthy first noticed an asymptomatic mass in her left leg. The mass was left untouched until she realized its rapid growth and consulted a local doctor in 1994. After needle biopsy, she was histologically diagnosed as having a myxoid liposarcoma. She was referred to another hospital and amputation below the knee was recommended. However, as she disagreed with the suggestion for an amputation, a marginal resection was performed as an alternative treatment. Six months after the first operation, local recurrence became evident. She refused amputation and again underwent a marginal resection. Subsequently, between 1996 and 1998, she underwent two more marginal resections and two intra-lesional resections for repeated local recurrences.

In 1997, she experienced abdominal distension and discomfort, and an abdominal computed tomography scan revealed the presence of multiple intra-abdominal metastases. The lesions were judged to be inoperable, because they may have been adhering to important organs in the abdomen, and her prognosis for survival would have been shortened by an operation.

On March 31, 1999, she was referred to our hospital. The lesion in her left leg presented as a large deformed mass with ulcer formation and bleeding (Fig. 1). The girth of her abdomen was 123 cm. An abdominal computed tomography scan indicated a large intra-abdominal metastatic mass, with a diameter of 37 cm, compressing the intestines (Fig. 2). Chest X-ray revealed that the lung space was decreased because of upward tumor growth (Fig. 3). Intra-lesional resection of the leg tumor was done twice at our hospital, to reduce the size of the tumor and to close the bleeding wound. At each resection, a large amount of tumor (2.5 and 1.8 kg, respectively) was removed. Histological examination showed the presence of lipoblasts in...
varying stages of differentiation in a myxoid background (Fig. 4). Ileus and respiratory distress, caused by compression by the abdominal mass, gradually worsened, and she died on September 1, 1999, at the age of 34. The girth of her abdomen was 135cm at the time of death. A postmortem examination was not carried out. In spite of the local recurrences of the tumor on her left leg, and the large metastatic abdominal lesion, lung metastasis was never detected throughout the course of her illness.

Discussion

Liposarcoma is one of the most common histologic types of adult soft-tissue sarcomas, with a peak incidence at ages 40 to 60 years, accounting for 9.8% to 16% of all cases of soft-tissue sarcomas. Histologically, five subtypes of liposarcoma have been identified; well differentiated, myxoid, round cell, dedifferentiated, and pleomorphic. The myxoid subtype, as in our patient, is the most prevalent of the five subtypes, representing 45% to 55% of these subtypes. Liposarcoma, in comparison with other soft-tissue sarcomas, has a different pattern of metastatic spread, with a tendency toward extrapulmonary sites, as our patient.

This tumor is usually manifested as a large increase in size in the thigh that is asymptomatic, or as a retroperitoneal mass. Although most primary liposarcomas measure between 5 and 10cm in greatest diameter, some reach a very large size, and examples measuring 15cm or more in diameter are not