Received: 21.10.2010 **Accepted: 9.2.2011**

Case Report

Huge retroperitoneal liposarcoma

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Abstract

Liposarcoma are one of the common soft tissue sarcomas of adulthood which are remarkable because of their frequently large size. We report a case with an extremely large well-differentiated retroperitoneal liposarcoma that weighted 32 kilograms. The patient had relapse about one year later and two recurrent tumors were successfully excised.

KEYWORDS: Liposarcoma, Retroperitoneal Space.

JRMS 2011; 16(4): 565-567

Liposarcoma is a malignant tumor of mesenchymal origin in which the bulk of tumor differentiates into adipose tissue. The major sites of liposarcoma are the extremities, retroperitoneum and inguinal region. Liposarcomas are remarkable because of their frequently large size and they are among the largest tumors[1]. Liposarcoma is regarded as a tumor in adult, and is rarely found in areas in which most of body fat is usually stored. Complete resection is mandatory for cure.[1-13] Histological subtypes, not location, is predictive of long-term survival.We report a case of a well-differentiated liposarcoma that weighted 32 Kg.

Case report

A 54- year-old Iranian man presented with progressive enlargement of abdomen since 5 years ago. About three years after beginning of his symptoms, he underwent laparatomy in a hospital in Tehran but only biopsy was taken, without removal of the tumor. Two years later he was referred to us and was admitted in Emam Khomeini hospital of Koohdasht in Lorestan province. He had severe weight loss, but the amount of it is unknown, with an emaciated picture and he was not able to walk due to muscle wasting and heavy abdomen. He had good appetite, with significant constipation. The abdomen was extremely swollen, tense and dilated veins were apparent over his abdomen. His Karnofsky score and ECOG grade were 40 and 3, respectively. An ultrasound of his abdomen showed it was filled with a slightly hyperechogenic mass, there was mild bilateral hydronephrosis. CT scan was not done due to lack of consent from the patient. Peripheral blood tests revealed anemia (Hct: 30%) Chest X-ray showed significant upward diaphragmatic displacement with basilar atelectasis.

Under General Anesthesia previous laparatomy scar was opened. There were large caliber blood vessels on the surface of the tumor with moderate adhesions, but gross invasion of tumor to adjacent organs was not seen. The tumor was encapsulated and lobulated. The origin of the tumor was from retroperitoneum, and by meticulous dissection it was separated from aorta, kidneys, and ureters and was removed en bloc.

The dimension of tumor was 58x45x36 cm and its weight about 32 kg. There was no gross tumor residual left in the abdomen. The abdominal wall has been stretched excessively and due to decreased intra-abdominal pres-

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sure, post operative atelectasis ocurred which was treated appropriately. After 4 months the weight of the patient increased from 34 kg to 64kg and he returned to his regular activities.

The pathological report was well-differentiated liposarcoma. No post operative chemotherapy or radiotherapy has been done due to unavailability of these modalities. The patient had developed respiratory distress due to significant atelectasis, but with special care respiratory symptoms were releaved.

After 1 year of follow-up, in abdominal and pelvic CT scan two sites of recurrence were detected in right pelvic and over right kidney, which were completely removed via re-laparotomy.

The patient was followed for another 2 years and he had no recurrence during tht time with a good health state but after that there is no information about him.

Discussion

Liposarcomas are one of the most common soft tissue sarcomas and frequently occur in the extremities and the retroperitoneum of adults. They are well known for their large size. In the published literature, an 18 kg, 28.6 and 42 kg liposarcoma have been reported. The present case was 32 kg, making it one of the largest liposarcoma reported thus far.

Liposarcomas are histologically defined as being tumors composed of lipoblasts. They are currently classified into five groups: myxoid liposarcomas, well differentiated liposarcomas, round cell (poorly differentiated myxoid liposarcomas), pleomorphic liposarcomas and de-differentiated liposarcomas. Among the liposarcomas, myxoid liposarcomas are the most common type, found in approximately 50% of cases, followed by well-differentiated liposarcomas that account for approximately 25% of cases. The clinical characteristics are closely related to histological type.

Although recurrence is common in deep-seated liposarcomas of all types, well- differentiated liposarcomas and myxoid liposarcomas have a good prognosis and their rates of metastasis are low compared to the other types of liposarcomas.

The case we experienced had a huge size and most of tumor was occupied by well-dedifferentiated liposarcoma.

Although there is little precise information as to the effectiveness of various therapies, radical excision is the treatment of choice for liposarcomas. Postoperative radiation is a valuable adjuvant to surgical therapy, especially for the myxoid type. The efficacy of the chemotherapy is still controversial. The actuarial 5- and 10-year survivals for patients who underwent gross total resection were 51% and 36%, respectively. Thirty-three patients (43%) developed locoregional recurrence, and 20 patients (26%) developed distant metastases at a median time of 12 months.[15]

In our case, because of its huge size no pre operation radiotherapy or chemotherapy were effective, but post op adjuvant therapy might be indicated. These treatment modalities were not available in the city. In such cases the physician must be aware of post operative complication, especially respiratory distress. Due to extreme stretching and laxity of abdominal muscles, forceful cough and expiration is not possible and retained secretion and atelectasis lead to respiratory complications.

Conflict of Interests

Authors have no conflict of interests.

Authors' Contributions

Both authors have carried out the study and wrote the draft of manuscript. Both authors read and approved the final manuscript.

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