



Resection of a Giant Liposarcoma That Fills the Whole Retroperitoneal Area

Gizem KILINÇ,¹ Gülen GÜL,² Korhan TUNCER,¹ Ayberk DURSUN,¹ Semra DEMİRLİ ATICI,¹
 İsmail SERT³

¹Department of General Surgery, University of Health Sciences, Izmir Tepecik Training and Research Hospital, Izmir-Turkey

²Department of Pathology, University of Health Sciences, Izmir Tepecik Training and Research Hospital, Izmir-Turkey

³Department of General Surgery, Izmir Egepol Hospital, Izmir-Turkey

Dear Editor,

Retroperitoneal sarcomas are almost 15% of all soft tissue sarcomas.[1] Liposarcoma is the most common type of retroperitoneal sarcomas with a rate of 50%. [2,3] There are four histological subtypes of retroperitoneal liposarcomas; well-differentiated liposarcoma (WDLS), dedifferentiated liposarcoma (DDLs), pleomorphic liposarcoma, and myxoid/round cell liposarcoma.[4] Liposarcomas commonly present with symptoms of abdominal pain and mass, they could be in very large sizes at the time of diagnosis.[5] Whereas WDLS presents with locally recurrences without metastasis, DDLs presents with metastasis with a 30% recurrence rate.

A 59-year-old male applied to outpatient clinics with the distension in the abdomen which was ongoing for 1 month. The patient had no comorbidities and history of abdominal surgery. In physical examination, patient's abdomen was distended and a huge soft and mobile solid mass was detected in palpation. All laboratory tests including tumor markers were normal. A giant lipomatous lesion (almost 50 cm diameter) reaching the all borders of the retroperitoneal area but not invading any major vascular structures in the abdominal cavity was revealed in abdominal computed tomography (CT) and magnetic resonance images (MRI). A whole body scan was performed to rule out distant organ metastasis, as well. The operation was done under general anesthesia in supine position. After median incision in exploration a huge retroperitoneal mass reaching under liver, spleen, and pelvis and moving all intestinal and colonic segments to the left side of the abdominal cavity. The tumor was excised with its capsule by ligating all branches that supplies the blood

perfusion of this tumor arising from vena cava inferior and abdominal aorta. A hyperplastic para-aortic lymph node which was detected during dissections was also excised. Macroscopically, a tumor weighing 5200 g and 50×40×10 cm in size was observed, consisting almost entirely of adipose tissue with an outer surface of which was encapsulated. Microscopically tumor consisting of mature adipocytes of distinct variation in cell size and shape of the material examined with many samples and sections. Among these lipocytes atypical cells with hyperchromatic atypical nuclei were noted. There are only a few lipoblasts. Significant fibrous septa, overt atypia, necrosis, and mitotic activity were not observed. No specific staining was observed in MDM2 immunohistochemistry applied to different blocks. The case was reported as "Atypical Lipomatous Tumor/WDLS" with the morphological findings observed in the retroperitoneally located mass reaching 50 cm in size. All lymph nodes that excised were reactive. On follow-up day 7, patient was discharged without any post-operative complications.

In retroperitoneal liposarcomas, survival of the patient depends on the histological subtype of the tumor. [3] CT and MRI can be used in the diagnosis. Large lesion size, presence of thick septa, presence of nodular and/or globular or non-adipose mass-like areas, and decreased percentage of fat composition can be considered as the signs of the malignancy in retroperitoneal liposarcomas in CT scan images. Our case is different with its huge size from the literature. Surgical resection of the liposarcoma is still the gold standard method for the treatment.[2] R0 resection is important as it provides an overall 5-year survival rate of 50-70%.

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Dr. İsmail SERT
İzmir Egepol Hastanesi,
Genel Cerrahi Kliniği,
İzmir-Turkey
E-mail: drismailsertege@yahoo.com

References

1. Pisters PW, Weiss M, Maki R. Soft-tissue sarcomas. In: Haller DG, Wagman LD, Camphausen C, Hoskins WJ, editors. *Cancer Management: A Multidisciplinary Approach Medical, Surgical, and Radiation Oncology*. 4th ed. Norwalk, CT: UBM Medica LLC; 2011.
2. Trans-Atlantic RP, Working Group. Management of recurrent retroperitoneal sarcoma (RPS) in the adult: A consensus approach from the Trans-Atlantic RPS working group. *Ann Surg Oncol* 2016;23:3531-40.
3. Crago AM, Singer S. Clinical and molecular approaches to well differentiated and dedifferentiated liposarcoma. *Curr Opin Oncol* 2011;23:373-8.
4. Pisapia A, Crolla E, Saggioccolo RA, Perrella A, Molino C. Preoperative diagnosis and surgical treatment for giant retroperitoneal liposarcoma: A case report. *Int J Surg Case Rep* 2019;57:179-82.
5. Porpiglia AS, Reddy SS, Farma JM. Retroperitoneal sarcomas. *Surg Clin N Am* 2016;96:993-1001.