

CASE REPORT

GAINT RETROPERITONEAL LIPOSARCOMA: A RARE CASE REPORT

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INTRODUCTION: Retroperitoneal liposarcoma is a rare malignancy arises from perirenal fat comprises of 0.02 to 0.2% of all malignancies and 10-20% of all soft tissue sarcomas.^[1,2,3] Usual age presentation is 5-6th decade of age with slight male predominance.^[4] These tumors are usually large, in 20% of patients the tumor is more than 10cms size.^[5,6] The liposarcoma may have weight and dimension variable; those over 20 kg are called "giant liposarcomas" and are extremely rare.^[1,5] Complete surgical resection [R0] is the only way for survival advantage.^[7,8,9] We report a case of huge retroperitoneal liposarcoma, which of size of 30><25><20cms and 8kg weight. Few cases have been reported of this size in literature.^[4, 10]

CLINICAL DETAILS: A 60 yrs old female presented with progressive distension of abdomen since 2 yrs. On examination firm, lobulated mass felt all quadrants of abdomen, there is dull note on percussion. On knee elbow position the mass not falling forward, lower border of mass not felt. All routine blood investigations are within normal limits. US abdomen reveals single hyper echoic mass found occupying all parts of abdomen. A CECT abdomen shows a 30><25><20cms heterogenous soft tissue dense mass filling the whole part of abdomen and pelvis, pushing the right kidney anteromedially and bowels laterally left of abdomen.

An US guided core biopsy revealed a well differentiated liposarcoma.

Patient was subjected for surgery, on laparotomy there was massive fatty tumor occupying all parts of abdomen pushing the small bowels to left side and engulfing right kidney but not infiltrated. A meticulous dissection performed and most of the mass excised after carefully separating from the adherent bowels and right kidney, which was preserved. Post op period was uneventful. Patient was discharged on 7th post op day.

Patient was followed up to 2yrs with regular 6 monthly interval, CECT abdomen was our choice of imaging for follow up. There was no evidence of recurrence.

The post-operative biopsy report came as a well differentiated liposarcoma, with sclerosing variant, margins were negative.

DISCUSSION: Liposarcoma is derivative of primitive or embryonal lipoblastic cells, arising from perirenal fat is very uncommon.^[1,2,3] They grow slowly and silently with unimpending growth and attains enormous size, symptoms are due to pressure effects and complications are late.^[11,12,9] Haematogenous spread is rare, lung is the most common organ for metastasis.^[11,12,9]

There are three histological types described^[13,14,15]

Atypical

Myxoid [most common]

Pleomorphic

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Atypical - well differentiated and dedifferentiated.

Well differentiated -- sclerosing, spindle cell, adipocytic, and inflammatory, low grade – local infiltrative and low metastatic potential.

Undifferentiated and pleomorphic are high grade, with biological aggressiveness and metastatic potential.^[11,12,9]

CECT abdomen is the investigation of choice, but sometimes MRI would help in doubtful diagnosis and in assessing recurrences, along with satellite deposits. Percutaneous biopsy does not yield accurate diagnosis especially in dedifferentiated.^[5,6,16,17,18] The resection of a retroperitoneal sarcoma of remarkable size is a challenge for the surgeon owing to the anatomical site, to the absence of an anatomically evident vascular-lymphatic peduncle that makes it hard to obtain safe margin and to the adhesions with the contiguous organs and with the great vessels. Therefore the retroperitoneal liposarcoma shows a high rate of local recurrence after surgical excision. Actually, the complete surgical (R0) resection represents the only possibility of radical treatment, in fact as reported in a study^[15] carried out on 177 patients with retroperitoneal liposarcoma operated with curative intent, the percentage of patients disease free at 3 and 5 years was 73% and 60% respectively.^[9,10,11,12]

Surgery with wide excision is the treatment of choice. If the excision is incomplete, to palliate, tumor can be debulked.^[7,8] Recurrences are common, re-excision sometimes considered, but will not have survival advantage.^[10] Chemotherapy is not effective, but radiotherapy has limited role as postop treatment but again there is no survival advantage.^[9, 19] Radiotherapy would cause more damage to abdominal viscera after surgical debulking. As any other soft tissue sarcoma the prognosis depends upon margin status and histological grade. Mortality is due to recurrence and repeated surgery, bowel resections and its morbidity.^[9,19]

Actually the overall survival at 5-years reported in literature for the various histological subtypes well differentiated, myxoid/round cell, undifferentiated and pleomorphic, ranging from 90%, 60 to 90%, 75% and 30 to 50%, respectively.^[9] the overall 5yrs survival is 54%.

Follow up usually with CT abdomen and pelvis with CXR]. Following surgical resection, the 50 - 100% of liposarcomas recur from residual tissue, which is the primary cause of death.^[10]

High grade – every 4 months for first 3yrs and there after every 6 months for next 2 yrs.

Low grade – every 6 months for 5-6yrs and every one year for next 2-3 yrs.

CONCLUSIONS: Retroperitoneal liposarcomas are rare malignancies, CECT abdomen is the investigation of choice. Surgery is the main modality of treatment, tumor grade and resectional status are important for prognosis. Chemo and radiotherapy has limited role and mortality is due to recurrences. Patient is kept under regular follow up.

REFERENCES:

1. Lewis, J.J., Leung, D., Woodruff, J.M., and Brennan, M.F. Retroperitoneal soft-tissue sarcoma: analysis of 500 patients treated and followed at a single institution. Ann. Surg. 1998; 228: 355–365

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2. Martínez León, M.I., Martos Forniels, J.A., Arranz Salas, I.M., and Díaz Martí, T. Liposarcoma of the perirenal cell. *Arch. Esp. Urol.* 2003 Nov; 56: 1050–1054.
3. García Marín, A., Martín Gil, J., Sánchez Rodríguez, T., Pérez Díaz, M.D., and Turégano Fuentes, F. Giant mixed-type perirenal fat liposarcoma. *Rev. Esp. Enferm. Dig.* 2010 Mar; 102: 221–222.
4. Leão, P., Vilaça, S., Oliveira, M., and Falcão, J. Giant recurrent retroperitoneal liposarcoma initially presenting as inguinal hernia: Review of literature. *Int. J. Surg. Case Rep.* 2012; 3: 103–106.
5. Hashimoto, Y., Hatakeyama, S., Tachiwada, T. et al. Surgical treatment of a giant liposarcoma in a Japanese man. *Adv. Urol.* 2010; 2010, DOI: (Article ID 943073 3 pages]
6. McCallum, O.J., Burke, J.J. 2nd, Childs, A.J. et al. Retroperitoneal liposarcoma weighing over one hundred pound with review of the literature. *Gynecol. Oncol.* 2006; 103: 1152–1154 (Epub 2006).
7. Neuhaus, S.J., Barry, P., Clark, M.A. et al. Surgical management of primary and recurrent retroperitoneal liposarcoma. *Br. J. Surg.* 2005; 92: 246–252.
8. Bonvalot, S., Miceli, R., Berselli, M. et al. Aggressive surgery in retroperitoneal soft tissue sarcoma carried out at high-volume centers is safe and is associated with improved local control. *Ann. Surg. Oncol.* 2010; 17: 1507–1514.
9. Eilber, F.C., Eilber, F.R., Eckardt, J. et al. The impact of chemotherapy on the survival of patients with high-grade primary extremity liposarcoma. *Ann. Surg.* 2004; 240: 687–695 (discussion 695–687).
10. T. M., Pisters, P.W., Mikula, L. et al. Long-term results of two prospective trials of preoperative external beam radiotherapy for localized intermediate- or high-grade retroperitoneal soft tissue sarcoma. *Ann. Surg. Oncol.* 2006; 4: 508–517 (Epub 2006).
11. Dalal, K.M., Kattan, M.W., Antonescu, C.R., Brennan, M.F., and Singer, S. Subtype specific prognostic nomogram for patients with primary liposarcoma of the retroperitoneum, extremity, or trunk. *Ann. Surg.* 2006; 244: 381–391.
12. Tseng, W.W., Madewell, J.E., Wei, W., Somaiah, N., Lazar, A.J., Ghadimi, M.P., Hoffman, A., Pisters, P.W., Lev, D.C., and Pollock, R.E. Locoregional disease patterns in well-differentiated and dedifferentiated retroperitoneal liposarcoma: implications for the extent of resection?. *Ann. Surg. Oncol.* 2014; 21: 2136–2143.
13. Crago, A.M. and Singer, S. Clinical and molecular approaches to well differentiated and dedifferentiated liposarcoma. *Curr. Opin. Oncol.* 2011; 23: 373–378.
14. Fletcher, C., Unni, K., and Mertens, F. Pathology and genetics of tumors of soft tissue and bone. in: P. Kleihues (Ed.) *World Health Organization Classification of Tumors*. Lyon: International Agency for Research on Cancer Press; 2002: 427.
15. Singer, S., Antonescu, C.R., Riedel, E., and Brennan, M.F. Histologic subtype and margin of resection predict pattern of recurrence and survival for retroperitoneal liposarcoma. *Ann. Surg.* 2003; 238: 358–370.
16. Yol, S., Tavli, S., Tavli, L. et al. Retroperitoneal and scrotal giant liposarcoma: report of a case. *Surg. Today.* 1998; 28: 339–342.

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17. Herrera-Gomez, A., Ortega-Gutierrez, C., Betancourt, A.M., and Luna-Ortiz, K. Giant retroperitoneal liposarcoma. World J. Surg. Oncol. 2008; 6: 115.
18. Murphey, M.D., Arcara, L.K., and Fanburg-Smith, J. From the archives of the AFIP: imaging of musculoskeletal liposarcoma with radiologic–pathologic correlation. Radiographics. 2005; 25: 1371–1395.
19. Grasso, E., Marino, F., Bottalico, M., and Simone, M. A case of myxoid liposarcoma of the retroperitoneum: a challenging tumour for diagnosis and treatment. Case Rep. Surg. 2014; 2014.

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