

# Case Presentation on Rare Tumor Retroperitoneal Liposarcoma

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**Abstract:** *Retroperitoneal sarcomas are rare malignant tumors originating from mesenchymal cells, commonly found in muscles, fat, and connective tissues. This case study presents a 65 - year - old female with a large retroperitoneal liposarcoma, diagnosed following symptoms of abdominal distension, weight loss, and appetite loss. Imaging revealed a significant mass impacting surrounding organs, necessitating surgical intervention. The tumor was successfully resected, including the removal of the left kidney and an ovarian cyst. Histopathology confirmed dedifferentiated liposarcoma. The patients postoperative recovery was uneventful, and she was discharged without adjuvant therapy, remaining under surveillance. This case underscores the importance of complete surgical resection for retroperitoneal sarcomas, as adjuvant radiotherapy primarily aids in reducing local recurrence without improving overall survival.*

**Keywords:** Retroperitoneal sarcoma, liposarcoma, surgical resection, case study, abdominal mass

## 1. Introduction

Retroperitoneal sarcomas are malignant tumors arising from mesenchymal cells, which are usually located in muscle, fat, and connective tissues. One - third of malignant tumours located in the retroperitoneum are sarcomas, and approximately 15% of soft tissue sarcomas arise in the retroperitoneum. According to the WHO soft - tissue liposarcomas are categorized into five distinct histological subtypes: well - differentiated, dedifferentiated, myxoid, pleomorphic and mixed type. Retroperitoneal sarcomas have varying clinical courses depending on their histological subtype and grade. Liposarcoma is regarded as a tumour in adult, and is rarely found in areas in which most of body fat is usually stored.

## 2. Case Presentation

44 year old female patient 65 - year old presented with complaints of painless progressive distension of abdomen for the last 3 - 4 month was insidious in onset associated with significant weight loss and loss of appetite over the period of time. she was not able to walk due to muscle wasting and heavy abdomen. no history of hemoptysis, malena, jaundice and any altered bowel/bladder habits. Past History was not suggestive of any chronic illness. her abdomen was distended; flanks were full, soft, and nontender. A palpable retroperitoneal lump of size approximately 26 × 20 cm occupying left hypochondrium, left lumbar, and left iliac. Routine blood investigations revealed anemia with hemoglobin of 6.0 gm%, Ultrasonography of abdomen+pelvis demonstrated approx 26×18 cm<sup>2</sup> size

hypoechoic lesion with internal vascularity with cystic mass (neoplastic?) extending from left renal fossa to rif causing mass effect on adjacent bowel loops also ovarian cyst found. Contrast Enhanced Computed Tomography of abdomen revealed a large retroperitoneal mass lesion crossing the midline extending from left subdiaphragmatic region to pelvic area causing displacement of left kidney into rhc, ureter, stomach, pancreas, left renal artery, splenicartery, splenic vein, inferior mesenteric artery, and descending colon. most likely liposarcoma. CT angiography of abdomen revealed displacement of aorta and inferior vena cava without significant compression Resection of the tumour was planned, but before that patient was adequately built up with blood transfusion and parenteral nutrition. An exploratory laparotomy was done under general anesthesia with midline incision. On exploration of the abdomen, a large mass was seen occupying entire left side of the abdominal cavity There were large caliber blood vessels on the surface of the tumour with moderate adhesions, but gross invasion to adjacent organs was not seen. The tumour was encapsulated and lobulated. The tumour was of retroperitoneal origin, and by meticulous dissection it was separated from IVC, aorta, kidneys, and ureters and was removed. after that left kidney also remove and ovarian cyst The resected out specimen weighed 2.5 kilograms. There was no gross tumor residual left in the abdomen. According to the histopathological report it was a dedifferentiated liposarcoma. Postoperative course was largely uneventful and the patient was discharged on the 5th postoperative day. Post operative chemotherapy and radiotherapy was not given considering the age of the patient and tumor extent. Patient has been kept on observation and interval follow – up for surveillance







### 3. Discussion

Liposarcoma is the most frequent histological type of retroperitoneal sarcoma, corresponding to 41% of these types of tumours. Liposarcoma occurs most commonly in the extremities (52%), retroperitoneum (19%), and inguinal region (12%) Between 54–65 year of age There is an equal male/female ratio. Retroperitoneal sarcomas present 80% of the time as an asymptomatic abdominal mass. Symptoms can also be related to mass effect or local invasion and torsion, which may lead to pain, gastrointestinal obstruction, feelings of early satiety and weight loss. In addition, neurologic and muscular skeletal symptoms are referred to the lower extremities Histopathologic variety is main prognostic. Well differentiated liposarcoma represents around 30% of the cases and has the best prognosis. the pleomorphic, round cell and undifferentiated types display the worst prognosis. CT scan provides an excellent understanding of the relationship between nearby structures and is critical to preoperative planning. CT angiography whole abdomen determine the relation of the major vessels to the tumour and the main feeder vessels to the tumor. The differential diagnosis includes a primary neoplasm arising from a retroperitoneal visceral structure (e. g. pancreas, adrenal glands, kidneys, and duodenum), are retroperitoneal sarcoma, a lymphoma, or a metastatic lesion. The optimal treatment for patients with localized, re - sectable retroperitoneal sarcomas is surgery with gross negative margins. Complete surgical resection frequently requires en - bloc resection of adjacent viscera. kidney the most frequently resected Organ (36%) followed by segmental resection of the large bowel, spleen, and pancreas. The addition of adjuvant radiation therapy to surgical resection reduced risk of local recurrence and a longer recurrence free interval. However not improve overall survival.

### 4. Conclusions

The review of the literature emphasizes that the management of retroperitoneal sarcomas consists of complete resection of

the tumour followed by adjuvant radiotherapy reduce local recurrence but does not affect overall survival, and combined with surveillance for early detection of recurrence or metastases.

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