



# Leiomyosarcoma of The Inferior Vena Cava A Case Report .

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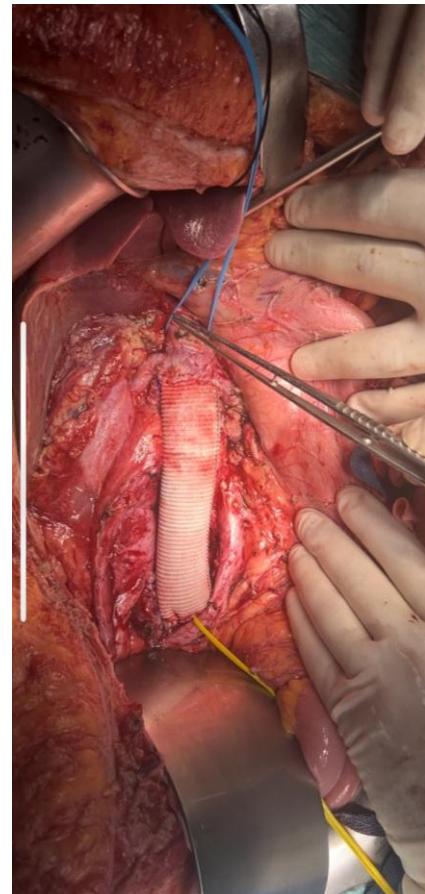


## INTRODUCTION

Leiomyosarcoma of the inferior vena cava (IVC) is a malignant tumor that develops from middle layer smooth muscle cells. It is the most common tumor of the venous system, most frequently affecting the IVC and representing 5% to 10% of all soft parts sarcomas<sup>(1,2)</sup>. In the retroperitoneum, leiomyosarcomas and liposarcomas are the most common types of sarcomas<sup>(3)</sup>. Mild, nonspecific abdominal pain is the most prevalent symptom, preceding the diagnosis in months or even years<sup>(4)</sup>. Its incidence peak is in the sixth decade of life, with predominance in women<sup>(4,5)</sup>. The mean size of the tumor at the moment of the diagnosis is 10.8 cm<sup>(4)</sup>. Complete surgical resection with negative margins represents the only chance for long term survival of the patient<sup>(1,6)</sup>. Random clinical trials utilizing chemotherapy and radiotherapy have not demonstrated any benefit to patients' survival<sup>(6)</sup>.

## CASE REPORT

A 45 years old female patient presented to us with complaints of mild epigastric pain , abdominal distention and bulging of upper part of abdomen for the last 2 years . At physical examination , there was a palpable , hard , non tender , round mass with irregular margins that does not move with respiration . She had already underwent biopsy of the mass which turned out to be leiomyosarcoma which was radiologically arising from liver segment VI and in close proximity with head of pancreas without any cleavage plane & it was displacing IVC in its infra-renal portion . She received 2 cycles of chemotherapy but discontinued due to non-compliance . She had history of DVT of left lower limb 1 year ago. She was referred to HPB & liver transplant unit Shaikh Zayed Hospital where she was discussed in MDT and surgery was advised . Intra-operatively the mass was rather arising from infra-renal portion of the IVC till the bifurcation of iliac veins encasing IVC completely. Mass was excised along with IVC and reconstructed using PTFE graft. Post- operatively patient did well and was discharged on 12th post-op day. Histopathology turned out to be Primary Leiomyosarcoma of the IVC and resection margins were free of tumor .



## DISCUSSION

Leiomyosarcoma of the IVC is an uncommon tumor with poor prognosis; but with an aggressive surgical approach in association with the absence of metastasis a long-term survival or even cure can be expected<sup>(3,4,6)</sup>. Tumor size is one of the main prognostic factors and five-year survival is observed in 30% to 53% of patients submitted to resection with free margins<sup>(6)</sup>. It may be difficult to differentiate between a sarcoma of IVC and another soft parts sarcoma of the retroperitoneum involving the IVC<sup>(6)</sup>. The true sarcoma of IVC originates from smooth muscle cells of the vessel and its growth pattern may be either intra- or extraluminal, with possibility of invasion of adjacent structures<sup>(6)</sup>. In cases of tumors with intraluminal growth, the vessel lumen is dilated and filled by the mass<sup>(6)</sup>. The abdominal cavity has room for the growth of a tumor without causing symptoms or recognizable signs at early stages of the disease<sup>(5)</sup>.

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