



## Resection of a Rare Hepatic Myxoid Liposarcoma: Case Report

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### Abstract

**Background:** Hepatic sarcoma is a rare malignant hepatic tumor with poor prognosis. Complete resection is the only curative therapy.

**Case Presentation:** We report a case of a 59-year-old male patient, who presented with nine months history of non-specific right hypochondriac pain and increased abdominal size. He was diagnosed with hepatic tumor. Tumor marker levels were within normal limits. Exploratory laparotomy revealed a 40x26x12 cm Hepatic mass. Partial right hepatectomy was performed (Segments VI&VII) along with right nephrectomy.

**Conclusion:** The early Diagnosis and Complete resection of Hepatic sarcoma in selected patients is the only hope for prolonged survival.

**Keywords:** Myxoidliposarcoma; Partial hepatectomy; Nephrectomy

### Introduction

Sarcomas are rare malignant tumors arising from mesenchymal cells. Hepatic Sarcomas represent 0.1% to 2% of primary hepatic cancer [1,2]. The liposarcoma, which is a kind of these sarcomas, was classified according to WHO to differentiated, myxoid, round cell, pleomorphic, mixed-type, liposarcoma, not otherwise specified [3]. We present a case of hepatic myxoid liposarcoma in a previously healthy 59 year-old man, He was admitted to our hospital with a palpable mass in the abdomen.

### Case Presentation

A 59-year-old male was presented with a palpable abdominal Mass. The patient complained of increased abdominal size with weight loss (10 Kg) for the last 9 months. Previous to this he was fit and well. He had no Hepatic risk factors such as alcoholism, drug abuse or viral infection. Physical examination revealed distended, firm, and tender abdomen with palpable large mass occupied the right upper quadrant of abdomen, (Figure 1). There were no ascites, edema, or splenomegaly. He had normal blood cell counts. Standard serum liver tests including albumin, prothrombin time, and  $\alpha$ -fetoprotein, were within the reference range. Abdominal ultrasound showed a 40x26x12 cm hepatic heterogeneous mass with necrosis and hemorrhage. Enhanced Multi-Slice Computed Tomography (MSCT) of chest, abdomen and pelvis revealed a huge cystic lesion involving the right lobe of the liver and extending from the diaphragm to the pelvis compressing on the intestine, right kidney and inferior vena cava (Figure 2). The clinical, laboratory and radiological findings supported the diagnosis of hepatic sarcoma. No other abnormality was detected in other abdominal viscera or the chest. The patient underwent an explorative laparotomy, which revealed a 40x26x12

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Figure 1: Abdomen of the patient.



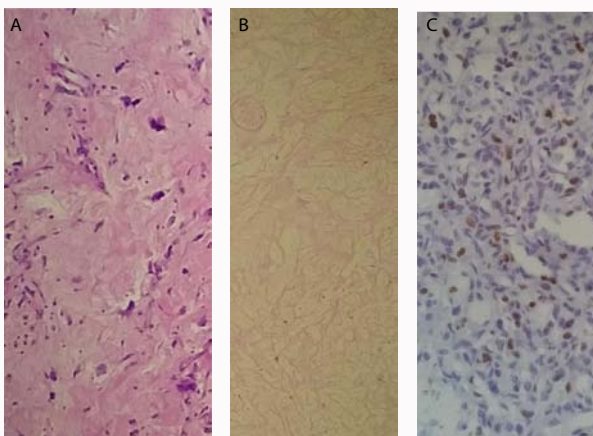
**Figure 2:** Abdomen MCT shows a large tumor.



**Figure 3:** Intraoperative view after tumor resection shows the VCI (forceps).

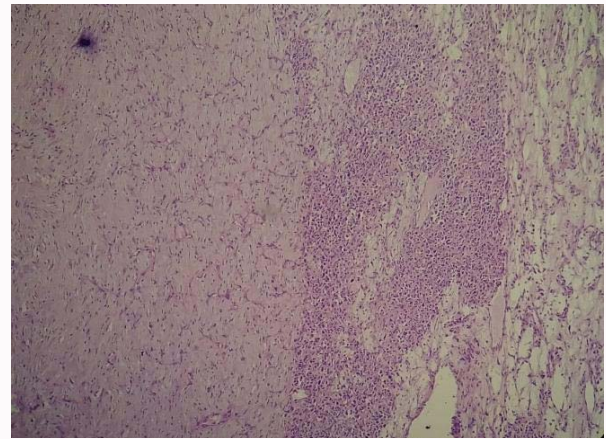


**Figure 4:** Shows the large mass measuring 40x26x12 cm, having smooth outer surface, covered by an incomplete thin capsule, with right kidney and LSg VI&VII.



**Figure 5:** a: nuclear pleomorphism and atypia; b: tumor necrosis; c: high MIB1 nuclear rate.

cm cystic lobulated hepatic mass occupying the right abdomen and extending from the diaphragm to the pelvis and compressing on the right colon, duodenum, small intestine, inferior vena cava and right kidney (Figure 3). Tumor resection with right nephrectomy



**Figure 6:** Myxoid area with chicken-wire vascular pattern (left side), area of hypercellularity (middle), and loose edematous area (right). (H&E x100).

and lateral partial right hepatectomy (LSg VI&VII) was performed. The macroscopic examination of specimen showed multilobular mass (Figure 4). The postoperative period was uneventful. The patient received no adjuvant chemotherapy and he was discharged home on the 7<sup>th</sup> postoperative day. The patient has been followed for the last three months in the outpatient clinic and so far there is no evidence clinically or radio logically for any recurrence. Microscopic examination revealed that the tumor is mostly composed of edematous myxoid stroma that includes scattered large atypical cells having pleomorphic nuclei with coarse chromatin. A prominent vasculature is seen in the background, which composed of thin-walled crossed small vessels, giving chicken-wire appearance; with numerous large vessels with thick muscular walls (Figure 5). Areas of hypercellularity, adipocytic differentiation, and necrosis are also seen (Figure 6). A thin rim of compressed hepatic tissue is present at the periphery. The histologic diagnosis was hepatic myxoid liposarcoma.

## Discussion

Although liposarcoma is one of the most common soft tissue sarcomas in adults, primary hepatic liposarcoma is very rare. Wolloch, who described the first hepatic sarcoma in 1973 [4] reviewed 16 cases of malignant hepatic tumors, including one patient with myxoid liposarcoma who had undergone right hepatic lobectomy. This patient died 46 days postoperatively. Kim et al. [5] described a 14 X 10 X 5-cm liposarcoma of the right lobe of the liver. The patient subsequently underwent a hepatic resection and remained tumor free for 10 months. According to this literature, most patients presented with nonspecific symptoms, such as abdominal discomfort, pain, abdomen mass or weight loss [4-14]. Most of the symptoms are caused either by displacement or compression of nerves, vessels, biliary tract, and intestinal structure. Our case had abdominal mass with weight loss. Because of their various histological compositions, including areas of necrosis and hemorrhage, sarcomas present inconsistently in computed tomographic scan as well as in magnetic resonance and ultrasonography. In spite of constantly improving imaging techniques, it is still a challenge to differentiate sarcomas from other liver diseases like hepatic cysts, hemangiomas, or metastases [15,18]. Common tumor markers (such as Alfa- fetoprotein AFP, carcinoembryonic antigen CEA, cancer antigen 19-9 CA 19-9) are not elevated in patients with sarcoma. Primary liver liposarcoma should be considered in the differential diagnosis, especially in those patients who are potential candidates for hepatic resection. Liposarcoma is an

**Table 1:** Characteristics of Previously Reported Cases of Primary Liposarcoma of the Liver in adults.

N	Case source	Age (yrs)	Sex	Location	Size cm	Management	Result
1	Wolloch et al. [4]	22	F	Right lobe	NM	Right lobectomy	Survival 46 d
2	Kim and Reyes [5]	86	M	Capsule	NM	Supportive treatment	NM
3	Kim et la. [6]	30	F	Right lobe	14x10x6	Right lobectomy	Tumor free for 10 months
4	Golebiowski et al. [7]	45	M	Right lobe	10x10	Right hepatectomy	Survival 5 months
5	Aribal et al. [8]	48	F	Hilum	11x12x14	Chemotherapy	NM
6	Nelson et al. [9]	54	F	Left lobe & right lobe	27x15x15	Explorative laparotomy with biopsy	Postoperative bleeding and death
7	Kuo LM [10]	61	F	Right lobe	11x11x13	Right lobectomy	Survival 27 months
8	Gajda et al. [11]	48	F	Left lobe	13	Left lobectomy	Tumor free for 2 year
9	Nakhai and Motabar et al. [12]	21	F	Right lobe	18x18	Right lobectomy	Death 9 months after surgery
	Fariba Binesh et al. [13]	83	F	Left lobe	34x26	Tumor resection	Survival 19 months
10	P. R. Thippeswamy Naik et al. [14]	42	F	Left lobe	18x14x13	extended left lateral hepatectomy with resection of the part of left hemi diaphragm and upper part of spleen	Alive up to Jan 2013??
11	Our case	59	M	Right lobe	40x26x12	Tumor resection with Lsg VI&VII hepatectomy and right nephrectomy	Still alive without recurrence after 3 months

absolute contraindication for hepatic transplantation. Curative and aggressive hepatectomies for this group of patients are still the best policy to achieve a long-term survival [4-14,16,17,19].

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