

RESEARCH ARTICLE

GIANT RETROPERITONEAL LIPOSARCOMA: CASES REPORT.

Mohamed Aarab, Khalid Rabbani, Youssef Narjis, Abdelouahed Louzi, Ridouan Benomar Benelkhaiat and Benasser Finech.

Departement of general surgery, CHU Mohamed VI, Marrakech.

Manuscript Info Abstract Manuscript History Retro-peritoneal liposarcoma is a rare tumor which preoperative

Received: 12 November 2018 Final Accepted: 14 December 2018 Published: January 2019

*Key words:-*Retro-peritoneum; Liposarcoma; Treatment. diagnosis and stagging are essential for planning its management. **Methods and results:** Case 1: A 58-year-old woman complaining of abdominal distension. Computed tomography revealed voluminous right abdominal mass. Bloc removal of the tumor was achieved. The

histological diagnosis was well-differenciated liposarcoma. Case 2: A 63-year-old man complaining of abdominal distension. Ultrasonography and Computed tomography revealed a huge tumor that involved all the right retroperitoneal space. At surgery, a right hemicolectomy and a right nephrectomy were performed for complete resection of the tumor. The final histopathological report showed welldifferentiated liposarcoma of the retro peritoneum.

Conclusion: Total surgical resection provides the patient best chance for cure. It may extend to the adjacent organ for an R0 resection.

Copy Right, IJAR, 2018,. All rights reserved.

.....

Introduction:-

Among the retroperitoneal sarcomas, the most common histotype is represented by liposarcoma, which ranges from 20% to 45% of all cases [1]. The liposarcoma may have weight and dimension variable; those over 20 kg are called "giant liposarcomas" and are extremely rare [2].We report in this article 2 cases of giant retroperitoneal liposarcoma.

Case Report N.1

A 58 years old woman presented progressive volumetric increase of the abdomen (fig 1). The computed tomography (CT) of the abdomen demonstrated the presence of a voluminous mass that occupy all the right part of abdominal cavity, dislocating organs to the left (300*114*240mm) (fig 2). Therefore the patient was submitted to an explorative laparotomy which revealed the presence of a bulky lesion with multinodular appearance, originating from the right retroperitoneal region. The lesion had produced a remarkable dislocation of intra- and retro-peritoneal organs to the left side with infiltration of the right kidney. We proceeded to release the neoplasm from the adhesions by retroperitoneal contiguous organs including the vena cava and common iliac vessels, with its subsequent removal en bloc with the right kidney (fig 3). The histological diagnosis was Well-differentiated liposarcoma. The postoperative course was uneventful and the patient was discharged on the 5 th postoperative day.

Case Report N.2

A 63 years old man presented 9 months ago progressive volumetric increase of the abdomen (figure 4). The computed tomography (CT) of the abdomen demonstrated the presence of a voluminous mass (520*240*130 mm)

Corresponding Author:-Mohamed Aarab. Address:-Departement of general surgery, CHU Mohamed VI, Marrakech. that occupy all the right part of abdominal cavity, dislocating organs to the left, contracting close contact with right iliac vessel. The patient was submited to an explorative laparotomy which revealed the presence of a voluminous lesion with a multinodular appearance, originating from the right retroperitoneal region. The lesion had produced a remarkable dislocation of intra- and retro-peritoneal organs to the left side with infiltration of the right kidney. We proceeded to remove that mass en bloc with right hemicolectomy, right kidney, and its right intrascrotal extension (figure 5). The histological diagnosis was Well-differentiated liposarcoma. The postoperative course was regular and the patient was discharged on the 7th day.

Discussion:-

The retroperitoneal liposarcomas are generally neoplasms with a low or intermediate grade of malignancy. Histologically, liposarcomas are devided into 4 types: (1) undifferentiated, (2) pleomorphic, (3) well differentiated, (4) myxoid/round cell. The undifferentiated and pleomorphic type are neoplasm with high grade of malignancy accompanied by remarkable biological aggressiveness and metastatic potential while well-differentiated and myxoid/round cell forms are tumours with a low grade of malignancy, associated with a more favourable prognosis [3]. Liposarcomas remain for a long time asymptomatic. Symptoms occur when adjacent organs or structures are compressed. On CT imaging lesion usually appears as a homogeneous with the same density of adipose tissue, well encapsulated, with the presence of thick septa. These caracteristics are missing in the undifferentiated sarcomas (heterogeneous, no lipogenic mass [4,5]. Actually, the complete surgical (R0) resection represents the only possibility of radical treatment [6]. The resection of neighbour organs is usually required to facilitate dissection, but can be essential to get a radical macroscopic removal, that significantly influence the prognosis [7]. In fact, 50 -100% of liposarcomas recur from residual tissue, which is the primary cause of death [8]. Actually the chemotherapy treatment used in the adjuvant or neoadjuvant setting have no benefit in the clinical course of the disease [9]. Some retrospective studies have underlined the benefits of the adjuvant radiotherapy, with better control of local recurrence but without increases in long-term survival [10]. The prognostic factors statistically associated with survival were found to be the histotype and the type of resection performed (complete vs. partial). 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 [11].

Conclusion:-

Giant retroperitoneal sarcoma are rare. A complete surgical resection with removal of the contiguous intra and retroperitoneal organs when infiltrated represents the only therapeutic option to obtain a negative margin and therefore an oncological radicality. More studies are needed to prove the efficiency of chemotherapy and adjuvant radiotherapy for local control and the increase of long-term survival.



Figure 1:-clinical view shows enormous abdominal mass (case 1)



Figure 2.:-voluminous mass that occupy all the right part of abdominal cavity, dislocating organs to the left (300*114*240mm)



Figure 3:-Surgical specimen of retro-peritoneal liposarcoma containing right kidney(15kg)



Figure 4:-clinical view of enormous abdominal mass (case 2)



Figure 5:-Surgical specimen of retro-peritoneal liposarcoma containing right

References:-

- 1. Lewis J.J., Leung D., Woodruff J.M., Brennan M.F. Retroperitoneal soft-tissue sarcoma: analysis of 500 patients treated and followed at a single institution. Ann. Surg. 1998; 228(3):355–365.
- 2. Hashimoto Y., Hatakeyama S., Tachiwada T. Surgical treatment of a giant liposarcoma in a Japanese man. Adv. Urol. 2010; 2010 Article ID 943073 3 pages.
- 3. Fletcher C., Unni K., Mertens F. Pathology and genetics of tumors of soft tissue and bone. In: Kleihues P., editor. World Health Organization Classification of Tumors. Lyon: International Agency for Research on Cancer Press; 2002. p. 427.
- 4. Crago A.M., Singer S. Clinical and molecular approaches to well differentiated and dedifferentiated liposarcoma. Curr. Opin. Oncol. 2011; 23(4):373–378.
- 5. Dalal K.M., Kattan M.W., Antonescu C.R., Brennan M.F., Singer S. Subtype specific prognostic nomogram for patients with primary liposarcoma of the retroperitoneum, extremity, or trunk. Ann. Surg. 2006; 244(3):381–391.
- 6. Singer S., Antonescu C.R., Riedel E., Brennan M.F. Histologic subtype and margin of resection predict pattern of recurrence and survival for retroperitoneal liposarcoma. Ann. Surg. 2003; 238(3):358–370.
- Neuhaus S.J., Barry P., Clark M.A. Surgical management of primary and recurrent retroperitoneal liposarcoma. Br. J. Surg. 2005; 92(2):246–252.
- 8. Leão P., Vilaça S., Oliveira M., Falcão J. Giant recurrent retroperitoneal liposarcoma initially presenting as inguinal hernia: Review of literature. Int. J. Surg. Case Rep. 2012; 3(November 22 (3)):103–106. Epub 2011.
- 9. Eilber F.C., Eilber F.R., Eckardt J. The impact of chemotherapy on the survival of patients with high-grade primary extremity liposarcoma. Ann. Surg. 2004; 240(4):687–695. Discussion 695–687.
- Pawlik T.M., Pisters P.W., Mikula L. 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(February 24):508–517. Epub 2006.
- 11. Singer S., Antonescu C.R., Riedel E., Brennan M.F. Histologic subtype and margin of resection predict pattern of recurrence and survival for retroperitoneal liposarcoma. Ann. Surg. 2003; 238(3):358–370.