LAPAROSCOPIC EXCISION OF A RETROPERITONEAL MALIGN MESENCHYMAL TUMOUR AND LYMPHADENECTOMY: CASE REPORT

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ABSTRACT
A 65-year old female referred to our clinic with an incidentally diagnosed 7.5 cm retroperitoneal mass in abdominal ultrasound. The patient did not have any urological symptoms. After assessing with abdominal computerised tomography (CT) and magnetic resonance imaging (MRI) laparoscopic retroperitoneal tumour excision was planned. Pathologic examination revealed a high grade mesenchymal tumour with reactive lymph nodes. Patient was consulted to oncology clinic, and she did not receive chemotherapy or radiotherapy. There were not any perioperative or postoperative complications. Patient was discharged on postoperative day 1.

Key Words: Laparoscopic excision, Retroperitoneal, Malign mesenchymal tumour

INTRODUCTION
Malign mesenchymomas are very rare tumors and they usually contain one or more subtype of sarcomas, such as liposarcomas, osteosarcoma, chondrosarcoma leiomyosarcoma and fibromyosarcoma.1,2,3 These are aggressive tumors with poor prognosis.3 Surgery is the most common treatment method, however there is very limited data on these type of tumors in literature.1,2,3 Although we were unable to find any data on laparoscopic or robotic excisions of malignant mesenchymomas in literature, robotic or laparoscopic interventions for other types of rare tumors were found.4,5 For various type of tumours (even for metastatic ones), these minimal invasive techniques are used worldwide with acceptable outcomes.4,5

In this article we present our experience of laparoscopic retroperitoneal tumour excision. The lesion was incidentally diagnosed in an abdominal ultrasound.

PATIENT CHARACTERISTICS
The patient was a 65 year old female. She did not have any urological symptoms. An abdominal ultrasound showed an 8 cm left infrarenal solid mass incidentally. CT and MRI confirmed the ultrasound. The borders between the tumour and kidney’s lower pole and between the tumour and psoas muscle was not clear; therefore there was a suspicion of invasion. (Figure 1A-B).

PATHOLOGY REPORT
The mass was diagnosed as high grade malign mesenchymal tumour, and the lymph nodes were reported to be reactive; not metastatic. In multiple samples of the specimen no well differentiated liposarcomas were found. Even though a series of
immunohistochemistry tests were applied the tumour was not exactly identified. For precise diagnosis MDM-2 FISH testing was suggested by the pathologist but the patient discontinued follow-up and the test could not be done.

DESCRIPTION OF THE SURGERY

Under general anaesthesia patient was given left flank position (Figure 2). Proper sanitizing and covering of the patient was provided (Figure 3).

Veress needle was punctured 3 cm superior and 4 cm medial of spina iliaca anterior superior and pneumoperitoneum was provided at 16 mm Hg pressure. First 11 mm port was placed at this point. The patient was obese so the camera port was placed 7-8 cm lateral to the left side of umbilicus under direct vision. On the midclavicular line 2-3 cm inferior to the arcus costarum 3rd 11 mm port was placed (Figure 4).

Peritoneum was incised at Toldt Line and colon was medialised. Left kidney was defined. Inferior to the left kidney’s lower pole, the 8 cm tumour was located. Tumour was dissected and removed from the lower pole of kidney. (Figure 5.)
The left ureter was defined on anterior of psoas muscle. Ureter was dissected and relieved from surrounding tissues. (Figure 6).

The psoas muscle had been invaded by the tumour. They were separated by using laparoscopic vessel sealing device. (Figure 7).

There were adhesions between the lateral side of the tumour and left lateral abdominal wall. The tumour was completely freed and excised. There was a couple of 2x1 cm sized lymph nodes on the anterior side of psoas muscle and the inferior side of the mass. Lymph nodes were excised and extracted through the 11 mm trocars. Hemostasis was provided and an absorbable hemostat was placed on the psoas muscle. The tumour was placed in a specimen bag (Figure 8). The inferior port’s incision was enlarged and the specimen bag was extracted from this incision.
TAKE HOME MESSAGES

1. Transperitoneal laparoscopic approach may be used for accessing retroperitoneal area and excising retroperitoneal tumours.

2. Laparoscopic retroperitoneal tumor excision is safe and feasible.

3. Literature shows that various types of tumours may be extracted by using minimal invasive surgical techniques.

4. Early recovery and less length of stay may be possible with this technique.

REFERENCES


