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A RARE CASE OF GIANT RETROPERITONEAL SARCOMA – A CASE REPORT

General Surgery

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ABSTRACT

Retroperitoneal sarcomas are rare and account for 1-2 % of all malignancies.[6] Although sarcomas can develop anywhere in the body, about 10 – 20 % occur in the retroperitoneum. [6]These tumours tend to grow slowly over time and hence patients, most often report late to the hospital. Moreover, early diagnosis is difficult since these tumours do not have any specific symptoms and most of them are diagnosed late when they have attained an enormous size.[2]A 45-year-old male patient came with history of mass per abdomen associated with abdominal pain for 3 weeks, was admitted in our hospital. On further clinical and radiological evaluation patient was diagnosed to have retroperitoneal tumor.

KEYWORDS

CASE REPORT -

A 45-year-old male presented with complaints of mass per abdomen and abdominal pain for 3 weeks. Patient was apparently normal 3 weeks back and then he noticed a mass in the right side of his abdomen, associated with continuous, dragging and non-radiating type of pain. On examination, a firm mass of size 20 x 20 cm was palpable which was occupying right hypochondrium, right lumbar and right iliac fossa. Rest of the systemic examination was normal. A provisional diagnosis of retroperitoneal tumour was made.

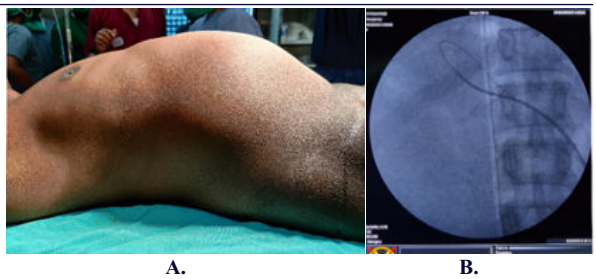
Lab investigations were as follows: haemoglobin-14.1gm%, Total leucocyte count-7500cu mm of blood, polymorphs-71.9%, lymphocytes-19%, random blood sugar- 90mg/dl, liver and renal profile-WNL;

Ultrasonography of abdomen revealed:

- A large heterodense solid mass of size > 16x14 cm present in the right renal fossa and epigastric region displacing the right kidney superiorly.
- Origin of mass is uncertain probably a retroperitoneal tumour or GIT tumour or Renal cell carcinoma.

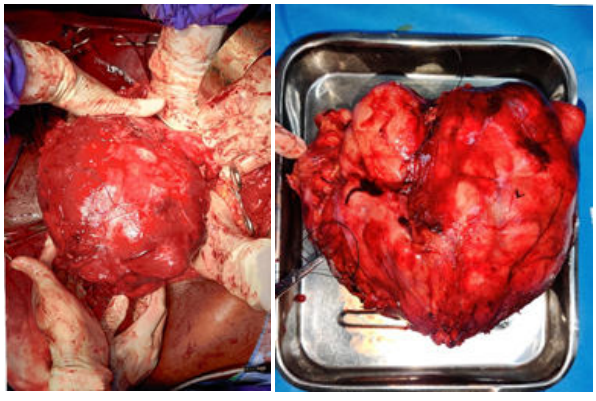
Contrast Enhanced Computed Tomography of abdomen revealed a large well defined irregularly shaped hypodense retroperitoneal heterogeneously enhancing mass lesion present in right infrarenal space, right lumbar region, right iliac fossa. The lesion measuring 18.4cm anteroposteriorly, 21.5cm transversely and 18cm craniocaudally. Central non-enhancing regions in the post contrast imaging suggestive of necrosis. Caecum and ascending colon displaced anteriorly. Superiorly the lesion causing displacement of right kidney superiorly and medially. Medially the lesion displacing superior mesenteric vessels to left side. Posteriorly the lesion causing mild mass effect on infrahepatic IVC but no invasion. The portal vein, splenic and superior mesenteric vessels appear normal. No retroperitoneal or mesenteric lymphadenopathy seen. Bilateral kidneys (except for the mass effect), ureters and bladder appear normal. The lesion is most likely in favour of retroperitoneal sarcoma.

Patient was planned for laparotomy and resection of the retroperitoneal mass. Preoperatively DJ stenting of the right ureter was done. On laparotomy, a large retroperitoneal tumour, displacing the kidney, ureter, IVC and small bowel medially was seen. There was splaying of caecum, appendix, ileocecal junction and ascending colon anteriorly. No lymphadenopathy was found. En bloc resection of the tumour was done. Kidney and ureters were preserved. Right Nephropexy was done. Abdominal drain was placed in the tumour bed.



A. B.

Showing preoperative images of the abdomen
Of patient in A. From above
B. Preoperative DJ stenting of right ureter.



C. D.

C. Intraoperative image of resected tumor.
D. Postoperative specimen of resected tumor.

Postoperative course was uneventful. Patient was discharged on POD 6.

DISCUSSION -

Retroperitoneal sarcomas most commonly present as asymptomatic mass per abdomen in 80% of cases [1]. 20% of cases manifest with nonspecific symptoms like vague abdominal pain, early satiety, weight loss and may present with lower extremity pain or swelling. Some cases may present with intestinal obstruction, obstructive uropathy, bleeding, neurological manifestations [1].

CECT abdomen is very useful in preoperative planning as it gives information about relation of tumour to adjacent structures and

vascular invasion [1]. Preoperative imaging defines unresectability, such as multiple peritoneal implants, extensive spine, extensive liver hilar involvement, extensive mesenteric root involvement and bilateral renal involvement. In such cases mortality and morbidity from surgery would be more than the benefit [5]. MRI is reserved to rule out muscular or vascular invasion, spine or nerve root involvement as well as to find satellite lesions or recurrences [2,5]. Prognosis depends on tumour grade, histological subtype, completeness of resection and multifocality of the disease [1]. The most important prognostic factor is complete resection with free margins. Identifying histological subtype is important as it can affect both prognosis and treatment options and the extent of surgical resection [4].

In conclusion retroperitoneal sarcomas are rare tumours due to their location they do not manifest with any specific symptoms and being diagnosed when they present in a large size and produce compressive symptoms [2]. Optimal treatment of resectable primary RPS is complete surgical resection with microscopically tumour free margins, which sometimes require resection of nearby structures. Commonly resected structures are kidney, large bowel and ureter [1]. Ideally, negative microscopic margins need to be obtained. However, due to enormous size of tumour, accurate pathological assessment of all the margins of the resected tumour is difficult. Hence complete resection which is often defined as macroscopically negative margins [5]. The recurrence rate is high if there are macroscopically positive margins. Therefore, surgery should achieve macroscopically negative margins and should attempt to minimize microscopically positive margins.

As these tumours usually attain huge size touching upon invading into adjacent organs and vital structures making the surgery challenging and difficult [8].

CONCLUSION -

Retroperitoneal sarcomas are rare tumours due to their location they do not manifest with any specific symptoms and being diagnosed when they present in a large size and produce compressive symptoms. As these tumours usually attain huge size touching upon invading into adjacent organs and vital structures making the surgery challenging and difficult. Surgery should achieve macroscopically negative margins and should attempt to minimize microscopically positive margins.

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