



A CLINICAL CASE OF RETROPERITONEAL LIPOSARCOMA

General Surgery

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KEYWORDS

INTRODUCTION

Retroperitoneal sarcoma (RPS) accounts for 15% of all sarcomas commonly presenting as abdominal mass (90%), weight loss (20%), neurologic (20%), urinary (10%), pain & discomfort, bowel obstruction, paraneoplastic syndrome (hypoglycemia). 70% presents with tumour more than 20cm & 20% present with metastasis. Liposarcoma is the most common retroperitoneal sarcoma. It can be well differentiated, dedifferentiated, myxoid, round cell and pleomorphic type.

Case presentation:

A 76 year old male presented with complaints of mass over right side of abdomen since 1 month. Insidious onset, progressive in size, episodes of dragging type of pain with no radiation, no history of jaundice, vomiting, constipation, diarrhoea, micturition abnormalities. No H/O of past surgeries. Known case of hypertensive since 10 years on medication. Patient takes mixed diet, loss of appetite present, no weight loss. Known smoker since 10 years (2 cigarettes/day). Stopped 1 year back with no significant family history.

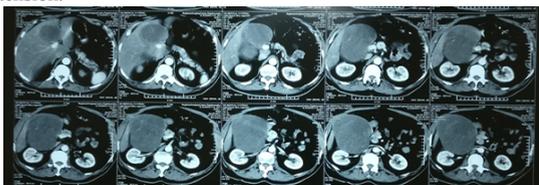


CLINICAL EXAMINATION:

inspection: Abdomen- distended, fullness over right hypochondrium and lumbar region, no visible peristalsis, swelling doesn't move with respiration. On palpation there is no local rise of temperature, non tender, swelling of size 15*10cm, ill defined, smooth, firm in consistency, non mobile, doesn't fall forward with knee elbow position. Resonant on percussion with no bruit heard on auscultation.

Specific investigations: HRCT chest done to rule out metastasis. α -feto protein and human chorionic gonadotropin, blood urea and serum creatinine are within normal limits.

MRI Abdomen: T1 mildly hypointense, T2 hyperintense, large lobulated snowman shaped mass measuring 18.7*12.4*13.2cm (CC*TR*AP) with internal septations, few areas of cystic necrosis & cluster of tiny multiple calculi along the inferior aspect is seen in subhepatic region occupying gallbladder fossa with significant inferior extension.



ENDOSCOPY: Antrum – Extrinsic mass present with distended pyloric orifice. D1 and D2 normal with compression of D1/D2 junction.

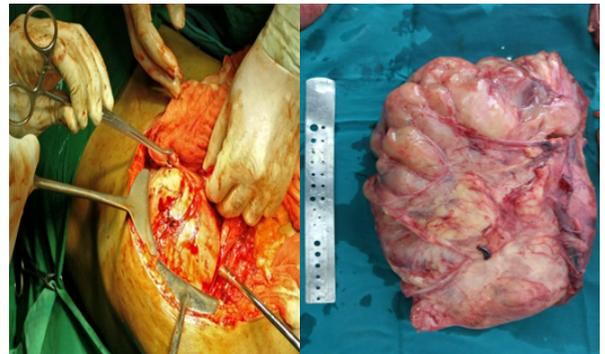
ULTRASOUND GUIDED FNAC: smears studied show blood cellular elements and fibrin threads

SURGERY: wide local excision

ANAESTHESIA: General anaesthesia + epidural anaesthesia

INCISION: Midline incision

INTRA OPERATIVE FINDINGS: No ascites, No peritoneal deposits. Large solid retroperitoneal mass with adhesions to liver, gallbladder, D1, D2, proximal transverse colon and serosa of hepatic flexure. Mass pushing hepatic flexure and transverse colon downwards and to left. Liver, spleen, pancreas, kidney, colon were normal. No encroachment onto aorta, inferior vena cava and ureter.



GROSS DESCRIPTION:

Nodular, firm, grey white mass measuring 22*11*11 cm. cut section shows irregular, soft to firm, greyish white, yellowish and myxoid areas.

MICROSCOPY: Capsulated mass with diffusely arranged sheets of spindle cells. Marked cytological atypia, nuclei elongated and pleomorphic with irregular margins and coarse chromatin, bizarre cells and tumour giant cells seen. Increased mitotic activity 10-12/HPF. Intervening stroma is scanty and vascular. Areas of myxoid degeneration, moderate ischemic necrosis, small calcified bone fragments with peripheral lipoblasts. **IMPRESSION:** High grade pleomorphic liposarcoma.

DISCUSSION

RPS accounts for 15% of all sarcomas. Dutch/Memorial Sloan Kettering cancer centre classification system of RPS (post surgical)

STAGE 1: low grade, complete resection, no metastases

STAGE 2: high grade, complete resection, no metastases

STAGE 3: any grade, incomplete resection, no metastases

STAGE4: any grade, any resection, distant metastases

Size, grade, lymphnode spread, distant metastases are the important prognostic factors of which histological grading is the most important prognostic factor Surgery (monobloc complete surgical resection with adequate negative margin) is the choice of therapy. Post operative chemotherapy (MAID or AIM regimen) and radiotherapy is given depending upon grading of tumour and patient selection in terms of local recurrence.

Radiotherapy (RT) can be preoperative , intraoperative(IORT) and post operative. Pre operative RT given in well demarcated gross tumour, radiosensitive viscera displaced away by tumour itself without adhesions, absence of potential contamination of abdominal cavity, better oxygenated tumour. IORT given as single large dose (20Gy) after displacing sensitive viscera.

Intensity modulated RT(IMRT) gives 45Gy to gross tumour with 1.5 cm margin with integrated booster doses of of 65Gy at 2.5 Gy per fraction to margins at high risk. IMRT has local toxicity. Post operative RT has more disadvantages and toxicity BUT allows patient selection in terms of local recurrence Adjuvant chemotherapy(CT) more useful in synovial and myxoid types of liposarcoma. Palliative CT given in unresectable/ metastatic retroperitoneal sarcomas. Local recurrence seen in 50% cases usually seen in high grade liposarcoma.

CONCLUSION:

This case is treated by complete surgical resection with dissection outside the pseudocapsule & adequate negative margins with minimal intraoperative blood loss and post operative period was uneventful. Post surgery the patient was sent for chemotherapy.