CASE REPORT

PRIMARY EXTRAGONAL MIXED MESENCHYMAL RETROPERITONEAL TUMOURS IN POST PARTUM WOMEN PRESENTING AS 22 WEEKS OF GESTATION


HOW TO CITE THIS ARTICLE:

ABSTRACT: Primary retroperitoneal benign mixed mesenchymal tumours are a rare entity in adults. We describe a female unbooked (she never underwent anyantenatal check up) case. 21 year old primi of 7th post operative day (caesarean section) was referred from the department of Obstetrics for abdominal distension, pain, vomiting, fever with chills and rigors of two days duration. Initially it was suspected as left over mops during operative procedure or rolled up omentum. Radiological study disclosed a retroperitoneal teratoma. Exploratory laparotomy revealed multiple mixed mesenchymal retroperitoneal tumours. Other solid, hollow viscous organs, uterus, tubo ovarian complex are normal without any underlying primary or secondary pathologies. Tumours were excised and sent for histopathological examination. Histopathology revealed Benign mixed mesenchymal tumours showing Fibromatous, Fibrohistocytic, Neural, Lipomatous, metastatic ossification.

KEY WORDS: Primary Extragonadal tumours, Mixed multiple mesenchymal tumours

CASE REPORT: A case of Benign mixed multiple mesenchymal retroperitoneal tumours in primi, 7th day post Caesarean section is presented A benign mixed multiple mesenchymal tumours retroperitoneally has no specific presentation features and it can mimic conditions like left over mops, rolled up omentum. There are only very few cases where a specific pre operative diagnosis were made. The number of Benign mixed multiple mesenchymal retroperitoneal tumours reported recently are very less. This is because symptoms free tumours are occasionally found in radiological findings.

CLINICAL EXAMINATION: The present case is 21 year old primi, 7th post operative day of caesarean section, referred from the department of Obstetrics with complaints of abdominal distension, pain, vomiting, fever with chills and rigors of two days duration. Clinical examination revealed lower abdominal distension with 16x13 oval mass at right Hypochondrium. Another mass of 10x8cm at Epigastrium and left hypochondrium. The lumps are not moving with respiration, not falling forward on knee elbow position. Renal angles are normal and umbilicus in midline everted. Visible lower abdominal Pfannensteil (transverse) scar is present with stitches in situ, no shifting dullness, and normal bowel sounds heard. Left supraclavicular fossa was normal. Per vaginal and per rectal examination was normal.

INVESTIGATIONS: Ultrasound abdomen and pelvis revealed large hyper echoic well defined lesion adjacent to liver in right lumbar region measuring 15 x 10cms, suggestive of fatty echo patterns. A
well defined solid lesion with calcifications was extensively noted adjacent to fatty lesion measuring 8.7 x 9.2 cm. A well defined solid lesion with calcification was noted in right iliac region measuring 8.6 x 10 cm. Rest of the visualized visceral organs were normal. Uterus puerperal state, endometrium 5 mm thickness, ovaries not visualized.

MRI: study revealed an irregularly defined heterogeneous mass in right hypochondrial region posterior to kidney & inferior to the liver with macroscopic fat & calcification. Similar lesion in the left lumbar & epigastric regions. Tumors are likely to be Germ cell by nature such as “Teratoma / Dermoid” with metastatic deposits. Blood examination confirmed leucocytosis, elevated blood urea and serum creatinine levels. HIV and HBsAg were tested - negative.

Intraoperative findings: Laparotomy revealed
- Intra peritoneal minimal fluid collection.
- A 17 x 11 x 8 cm large yellowish white solid well circumscribed retroperitoneal mass present at right hypochondrium to right lumbar region.
- 11 x 8 x 8 cm large grayish white ovoid solid well circumscribed retroperitoneal mass present at left hypochondrium.
- 10 x 7 x 6.5 cm irregular nodular gray white solid retroperitoneal mass present at epigastric region
- 8 x 5 x 6 cm grayish white solid mass present at epigastric region.
- 3 x 3 cm small gray white ovoid mass present at right para colic region.
- Liver, kidney, spleen, ovaries, and uterus and vital organs are normal.

Management: Excision of all masses and sent for Histopathological examination.

Histopathology: The histopathology reported as Benign mixed mesenchymal tumours showing fibromatous, fibrohistiocytic, neural and lipomatous areas with metaplastic ossifications.

Follow-up: Post operative status and general condition of the patient showed improvement. After repeated follow ups at weekly intervals for first two weeks and at monthly intervals for next 3 months, the patient recovered completely.

DISCUSSION: Lipomas are the most common benign tumours of the adipose tissue among adults. According to histopathological findings, they are sub classified into conventional lipoma, fibrolipoma, angiolipoma, fusiform cell lipoma, myolipoma and pleomorphic lipoma. Retroperitoneal lipomas are extremely rare, slowly growing benign tumours of adipose tissue. Microscopically, lipomas consist of multivacuolated cells, small esonophilic cells, and univacuolated adipocytes. Although retroperitoneal lipomas are relatively more common in adults, they can occur in infants and small children. They may affect both sexes, but there is a great predisposition for females. Teratomas are congenital tumours that contain derivatives of all three germ layers. They generally arise in the gonads, but several cases were found in extragonadal sites such as the sacrococcygeal region, mediastinum, neck and retroperitoneum. Overall retroperitoneal teratomas constitute less than 10% of all primary retroperitoneal tumours. They are rare in adults. Less than 20% of these patients develop tumours over the age of 30 years. They usually occur more in children. Approximately half of the cases are found in the first decade of life. The incidence of
retroperitoneal teratoma in females is twice that in males.\(^{(6)}\) Teratomas arise from germ cells that fail to mature normally in the gonadal locations. These totipotent cells can differentiate into tissue components representing derivatives of mesoderm, ectoderm and endoderm.\(^{(7)}\) The distribution of teratomas are described in order of decreasing frequency: in the ovaries, the testes, the anterior mediastinum, the retroperitoneal space, the presacral and coccygeal areas, pineal and other intracranial sites, the neck and abdominal viscera other than the gonads.\(^{(8)}\) Retroperitoneal teratomas are usually asymptomatic. When compression of the surrounding structures occurs, patients may have abdominal distension and pain nausea and vomiting.\(^{(6)}\) The differential diagnosis of retroperitoneal teratomas include ovarian tumours, renal cysts, adrenal tumours, retroperitoneal fibromas, sarcomas, haemangiomas, xanthogranulomas, enlarged lymph nodes and perirenal abscesses.\(^{(6)}\) The prognosis is excellent for benign retroperitoneal teratomas and is usually asymptomatic. Classic lipomas have CT and MRI signal characteristics similar to subcutaneous fat (between -65 and -120 Hounsfield units). Magnetic resonance imaging will reveal an intense signal on T1-weighted images.\(^{(8)}\) Previous use of angiography for lipomas showed the tumours to be hypovascular.\(^{(8)}\)

**CONCLUSION:** Most of the tumors are benign and are probably present at birth. Primary retroperitoneal tumours are rare. Incidences are 0.3 to 3%. These tumors are derived from germ cells failed to normal gonadal location. Germ cell tumour is a totipotent cell, Undergoing variable differentiation into tissue component that represents derivatives of ectoderm, mesoderm, endoderm. Symptoms secondary to retroperitoneal neoplasms are vague and late. The present case is a rare phenomenon which revealed a benign extragonadal mixed multiple retroperitoneal tumours.

**REFERENCES:**

CASE REPORT

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Photograph – 1: MRI coronal section showing hyper and hypo echoic lesions in right hypochondrium and epigastric region

Photograph – 2: Excised tumours showing multiple mixed mesenchymaltumours.

Photograph – 3: Cut section of the multiple mixed mesenchymaltumours

Photograph – 4: H & E Histopathological pictures

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