Retroperitoneal cystic teratoma masquerading a pancreatic Pseudo cyst: A Case Report

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ABSTRACT

Background: Primary retroperitoneal teratomas constitute about 1-11% of all primary retroperitoneal tumours. Retroperitoneal cysts (RPCs) are uncommon with an estimated incidence of 1/5750 to 1/250,000 and have versatile presentation.

Case History: A 34-year old male presented with insidious onset upper abdominal lump & occasional dull aching pain for 4 months. On examination, a large rounded ,non mobile cystic mass measuring 7cm in diameter was palpable in upper abdomen involving the epigastric and left hypochondrium. This case is very rare and very educational as it highlights an unusual presentation of male patient having benign retroperitoneal cyst which simulates pancreatic pseudocyst. **Conclusion:** Retroperitoneal teratoma is one of the rare entities. Due to wide space of origin toumour has nonspecific presentation & though very rare sometimes toumours may simulate with pancreatic pseudocyst due to similarity in clinical features . It needs multi-disciplinary approach for the accurate diagnosis and management.

Key Words: Dermoid cyst, pancreatic pseudocyst, retroperitoneal teratoma

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INTRODUCTION

Teratoma (Dermoid) are Germ cell tumours contain derivatives of all three germ layers (ectoderm, mesoderm and endoderm) are most commonly located within the gonads . Due to aberrant migration of germ cells from the yolk sac during fetal development[1]these toumours may found rarely in Retroperitoneum, Mediastinum Sacrococcygeal, CNS, Post anal. Retroperitoneal cysts (RPCs) are uncommon with an estimated incidence of 1/5750 to 1/250,000 [2]. Retroperitoneal teratomas often occur in infancy and childhood but are rare in adults. Presentation of these toumour is not

certain & approximately one third of patients, the cyst is found incidentally [3] .

Two thirds of patients present with an abdominal mass or chronic abdominal symptoms. Other symptoms include back pain, referred pain to the lower limbs, oedema of the lower limbs, weight loss or fever. Rarely retroperitoneal cystic teratoma, arising near pancreatic region may simulate a pancreatic pseudocyst as presentation likely to be same. CT scan & MRI also diagnose & differentiate these lesions[3], but surgery is the keystone in confirming the diagnosis.

Here, we have presented a case report of retroperitoneal dermoid cyst simulating with pancreatic pseudocyst in a 34 yrs male patient.

CASE REPORT

A 34-year old male presented with insidious onset upper abdominal lump & occasional dull aching pain for 4 months. He had no c/o weight loss, fever, pain or oedema in lower limb & no bowel or urinary complaints. He had no H/O of trauma or abdominal surgery in past but H/O spirit ingestion for last 3 years.

On examination, a large rounded ,non mobile cystic mass measuring 7cm in diameter was palpable in upper abdomen involving the epigastric and left hypochondrium & upper part of left lumber region and dull to percussion. A clinical diagnosis of pancreatic pseudocyst was made though he had no H/O acute pancreatitis . Routine blood tests including amylase, lipase and urinalysis were all within normal limits. However, ultrasound demonstrated a large, complex, densely mixed echogenic mass, suggestive of a fatty nature to the mass with sheet like calcifications and no ascites. Contrast CT of the abdomen revealed a large retroperitoneal mass seen in the region of greater sac with centrifugal displacement of adjacent small bowel loops. Stomach and pancreas displaced medially by the lesion. Minimal peripheral encasement is seen.

The cystic lesion measures approx.11× 10 cm in size. However, the presence of fat and bone inside the mass was highly indicative of a benign retroperitoneal cystic teratoma. Histology reveals Cystic mass shows an inner lining of squamous epithelium of the epidermis and subepithelial dermal appendages of sebaceous glands and hair follicles. The outer layer consists of thick fibrocollagenous tissue with multifocal

areas of lymphocytic infiltration. The cavity showed presence of lamellated type of keratinous material. These features consistent with benign cystic teratoma.

Patient then evaluated for testicular tumour which was not found. Post operative follow up was uneventful.

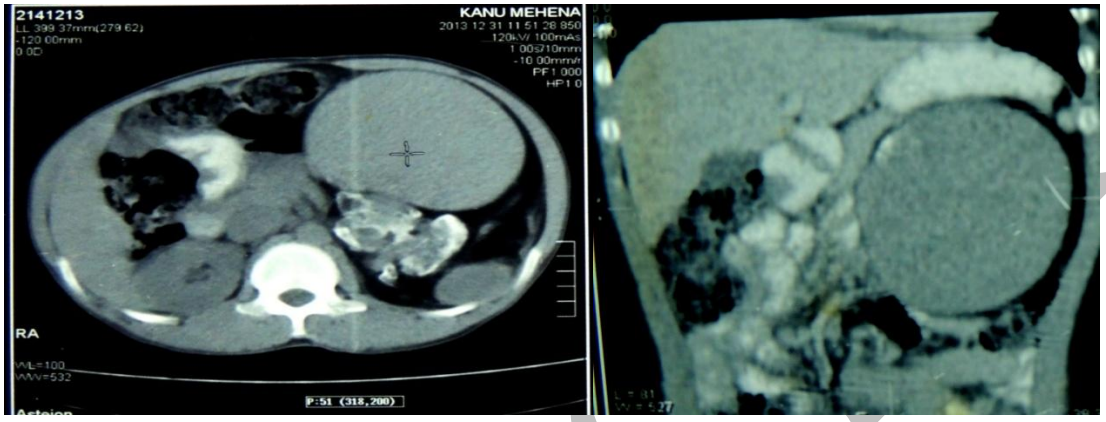

Figure 1: Contrast CT of the abdomen shows a large retroperitoneal mass in the region of greater sac

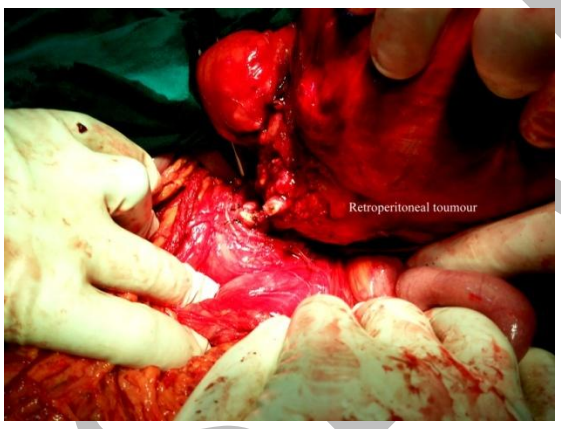

Figure (2a): Retro peritoneal mass on laparotomy

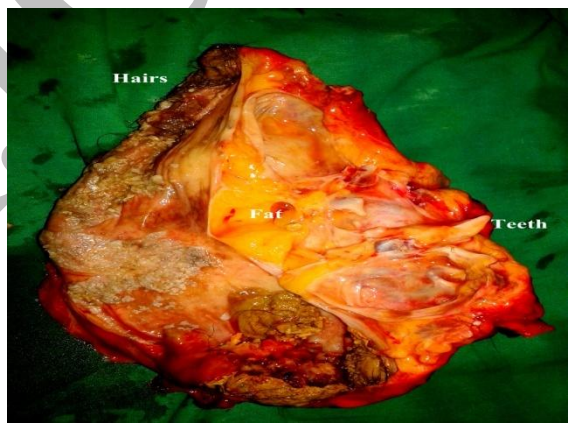

Figure 2b: Gross on cut it open

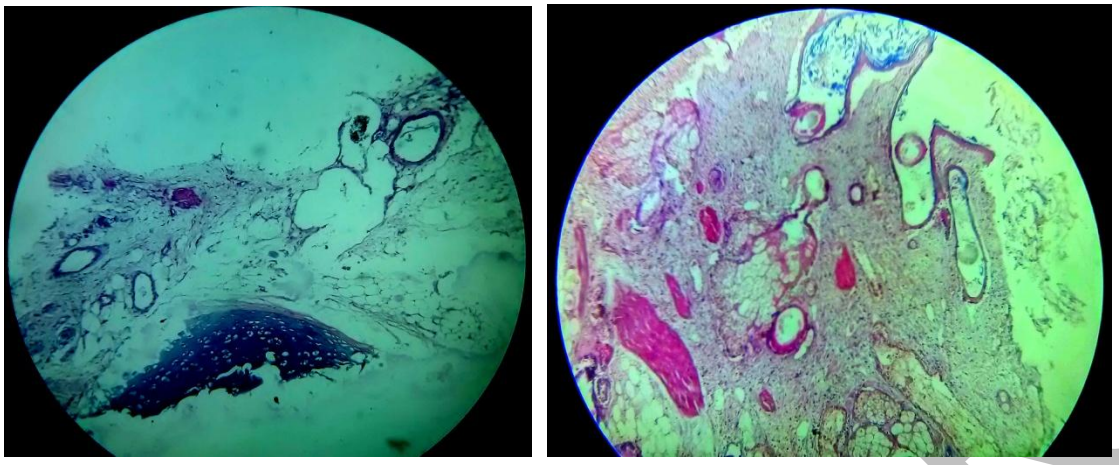

Figure 3: Histological findings of Specimen(Teratoma)

DISCUSSION

Willis [4] states "A teratoma is a true tumour or neoplasm composed of multiple tissues of kinds foreign to the part in which it arises". Overall, primary retroperitoneal teratomas constitute about 1-11% [5][6] of all primary retroperitoneal tumors. Less than 10-20% of retroperitoneal teratomas present in patients after 30 years of age [1]. Macroscopically there are two types. Cystic teratoma, usually benign, contains yellowish liquid material resembling hair, composed of fully developed tissue.

Solid teratoma, generally malignant, has a varied aspect, formed of fibrous, fatty, cartilaginous and bone tissue consists of immature embryonic tissue. Due to variability in wide site & space of origin this tumour has diversity in presentation. Sometime toumour arising from retroperitoneal tissue near pancreas may present with feature of pancreatic pseudocyst so that these are hardly differentiated through history & physical examination.

Though CT scan & USG are helpful for diagnosis of retoperitoneal teratoma, CT has several advantages over ultrasound. First, it gives more specific information on the fat, proteinaceous fluid and calcification components of the. The presence of fatty portions of the tumor in the horizontal interface with dependent fluid, which probably represents sebum, is virtually pathognomonic of a teratoma [7][8]. Second, CT appears superior to ultrasound at defining extent in to surrounding organs and for evaluating the cyst wall [7].

MRI, superior than, can distinguish fluid, fat, calcium and soft tissue elements & predict resectability and evaluate recurrence [9]. Angiography is beneficial for detecting the presence of hypervascularity, arterial encasement and organ invasion, features often suggesting malignancy [10].

CONCLUSION

Teratomas, germ cell toumours are most commonly found in gonads. Extragonadal sites are rare. Retroperitoneal teratoma is one of the rare entities. It needs multi-disciplinary approach for the accurate diagnosis and management. Due to wide space of origin toumour has nonspecific presentation & though very rare sometimes toumours may simulate with pancreatic pseudocyst due to similarity in clinical features. Ultrasound, Computed Tomography scan and MRI scan are the investigations needed and confirmed by histopathological report. Surgical excision is the treatment of choice. Prognosis of malignant teratoma is very poor.

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