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Original Research Paper

General Surgery

DUODENAL GIST -- A UNCOMMON SITE OF A COMMON TUMOUR – A CASE REPORT

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ABSTRACT **Introduction :** Gastrointestinal stromal tumour is an uncommon GIT tumour of mesenchymal origin most commonly arising from the stomach (60%) . Duodenum is an uncommon site accounting for only about 3-5% of cases.Owing to the complex anatomy of Duodeno-Pancreatic region. These tumours are often challenging in diagnosis.

KEYWORDS : Submucosal Tumour,Whipples surgery,Tyrosine kinase inhibitor

CASE REPORTS

A 67 year old female presented with C/o epigastric pain, with regurgitation for past 2 months associated with recurrent episodes of melena since 1month and long standing H/O GERD which was managed by PPI's for 6months.

No H/O of Weight loss,Loss of Appetiate,Ball rolling movements in Abdomen

No H/O of Dysurea, Constipation, Vomiting, Itching
No H/O of Any other swellings in Abdomen

No other Comorbidities

No H/O Previous Surgeries

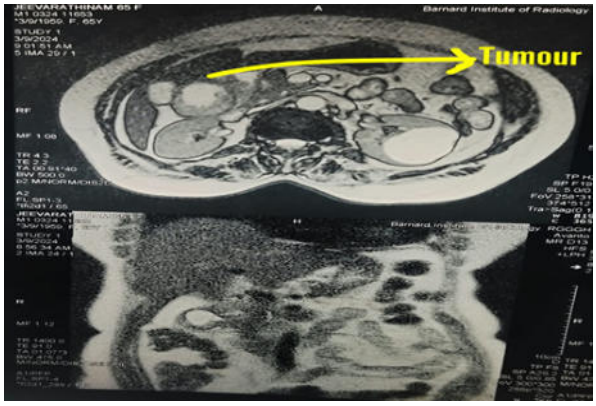
On Examination: P/A - Vague mass of 4 x 3 cm in Epigastrium Firm in consistency, Ill defined margin,Non Tender, Does not move with respiration.

On Leg Raising Test- Swelling not visible

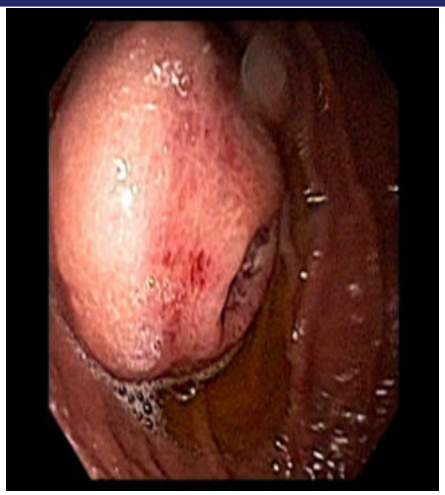
Per-Rectal Examination – Normal

USG Abdomen: Intra Abdominal Solid Organ Lesion in Epigastrium

CECT Abdomen :
Well defined soft tissue lesion of size 4 × 3 cm from D2 occupying Hepatoduodenal ligament – Both Exophytic and Endoluminal components with central necrosis on contrast enhancement.



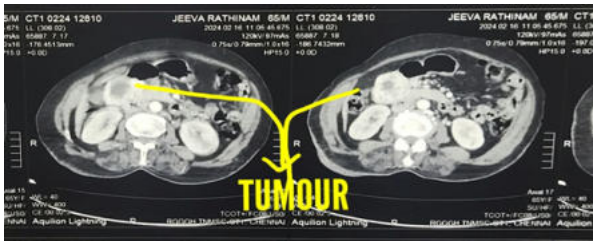
Upper GI Scopy: Mild Esophagitis, Sub mucosal ulcerative lesion of size 5 x 3 cm in D1 D2 junction with narrowing of D1 & D2.



MRCP : Well defined heterointense Lesion of size 4x5x3.7 cm with internal cystic area showing diffuse restriction within peripheral solid components arising from posterior wall of D1and D2 lying in lesser sac.

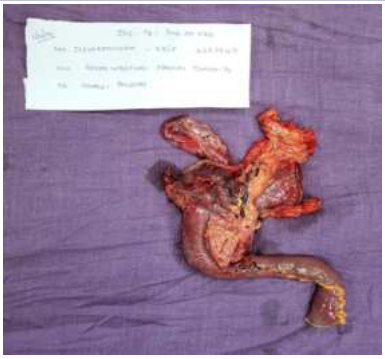
USG Guided Biopsy :

- Linear cones of fibro collagen tissue showing fascicle
- Sheets of oval to elongated cells with eosinophilic cytoplasm and hyperchromatic nuclei with moderate atypia.
- surrounding stroma shows hyalinization and areas of hemorrhage, congested blood vessel.
- **IHC Marker** – CD 117 – Strongly positive in 95% of cells
  SMA – Strongly positive in 95% of cells
  Ki 67 – positive in 5% of cells



Management :
Procedure Done : Whipple's Procedure

Intra Op Findings:
Well circumscribed soft fleshy tumor of size 5 x 4 cm in lateral and posterior wall of D2 segment extending into lesser sac. No Ascities and No Nodal Involvement.



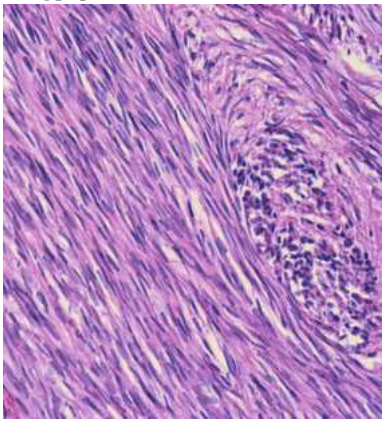
Histopathology Report : GIST - Spindle cell arranged in short fascicles with epitheloid cells

- **Histology-** Low grade
- **Mitosis :** <5/50 hpf
- **Necrosis :** <5%

Proximal 6.5 cm resected margin and distal 15 cm resected margin free from tumor infiltration and all margins free from Tumor Infiltration.

Lymph nodes shows Reactive Hyperplasia

Pathophysiology : pT2N0M0



DISCUSSION

Most of Gastrointestinal tumors are asymptomatic and usually found incidentally during endoscopic or surgical procedures. When symptomatic, these tumors present with an upper or lower GI bleeding, abdominal pain or obstructive symptoms. GIST have the ability for malignant transformation and the risk is closely related to Tumor size, Location and Mitotic figures. Prognosis depends upon Tumour Size, Location, Aggressivness.

Gold Standard Management: Surgery Followed By Chemotherapy.,

Some GIST develop resistance to Tyrosine kinase inhibitor. Advance ion molecular biology and Targeted therapy have improved outcomes for patients with GIST

For this patient As per TUMOUR BOARD Presentation we started on T.IMATINIB 400 mg OD for 5 years.

CONCLUSION

Duodenal GIST has certain malignant potential and they may be asymptomatic or present with abdominal pain or bleeding. A preoperative diagnosis can be difficult to obtain. Endoscopic ultrasound and FNAC may be helpful. Surgical R0 resection remains the only curative approach. However owing to the complex anatomy of Duodenum limited resection is not always possible. In these cases, extensive procedures Pancreaticoduodenectomy or Pancreas preserving Duodenectomy are the treatment of choice.

Conflict Of Interest: None

Informedconsent: Informed consent was obtained for publication of case report and clinical photographs of the patient.

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