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Original Research Paper

General Surgery

A RARE CASE OF MESENTERIC GASTROINTESTINAL STROMAL TUMOUR (GIST) PRESENTING AS MESENTERIC MASS.

Dr. Bansil V. Javia*	3rd Year Resident, Department of General Surgery, B.J. Medical College and Civil Hospital, Ahmedabad, Gujarat, India. *Corresponding Author
Dr. Hitendra K. Desai	Associate Professor, Department of General Surgery, B.J. Medical College and Civil Hospital, Ahmedabad, Gujarat, India.
Dr. Neel B. Patel	3rd Year Resident, Department of General Surgery, B.J. Medical College and Civil Hospital, Ahmedabad, Gujarat, India.
Dr. Purvesh V. Doshi	3rd Year Resident, Department of General Surgery, B.J. Medical College and Civil Hospital, Ahmedabad, Gujarat, India.

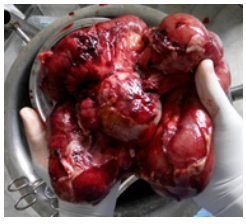
ABSTRACT Gastrointestinal stromal tumours (GIST) are rare tumours arising from mesenchyme of gastrointestinal tract and overexpress C-kit protein. Mainly seen in stomach and small bowel. Mesenteric GIST are rarely reported as they constitute less than 1% of total GIST. We hereby report such a rare case of GIST arising from mesentery of small bowel and presenting as intra-abdominal mesenteric mass. Good surgical clearance ensures good survival whereas incomplete resection results in a high incidence of recurrences with distant metastasis.

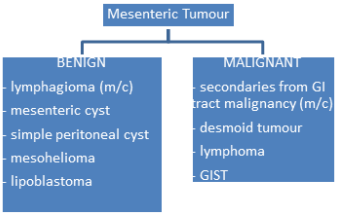
KEYWORDS :

INTRODUCTION

The mesentery of the gastrointestinal (GI) tract consists of a contiguous, fibro-fatty, fanlike structure containing arterial, venous, lymphatic, and neural structures coursing to and from the intestine, along the intestine's entire length.

Mesenteric tumors/masses may present in various forms; may be cystic or solid, and may demonstrate malignant or benign clinical behavior. Although uncommon, they can be encountered in all age groups from infancy to the elderly.These tumors should always be considered in a differential diagnosis of a palpable abdominal mass.But because of their rare occurrence they are most commonly diagnosed after radiological study or during surgery.





Gastrointestinal stromal tumors (GISTs) are mesenchymal tumors of gastrointestinal tract arising from the interstitial cell of Cajal. Most of the tumors are seen in the stomach and rarely in the mesentery (<1%).

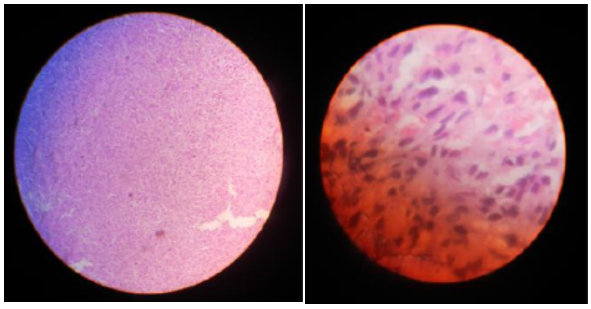
CASE REPORT

A 55 year old Hindu male patient from middle socioeconomic class, came to emergency surgical ward with chief complains of left sided Abdominal pain for 20 days, abdominal lump for 15 days and3-4 episodes of non-bilious, non-projectile vomiting with NO c/o constipation, icterus, weight loss, hematemesis/melena. Patient didn't have any co-morbidities. No significant family history or past history was present.On physical examination, Patient was pale. No generalised lymphadenopathy was present.

On per abdomen examination 12*8 cm well-defined, hard, non-mobile lump was palpated in left lumbar region; not moving with respiration. Dull note was present over the lump. Haemoglobin was 6.3gm/dl and TC-17.7per cumm. Other blood investigations were normal.

Chest and abdominal radiographs were found normal. In USG, *Pseudokidney sign* was present in left upper abdomen. CECT (A+P) was suggestive of 14*9*6 cm heterogeneously echo-textured mass with centrally necrotic area in close proximity to proximal jejunal wall with (?)perforation along its lateral aspect. On planned exploratory laparotomy, 15*10*6 cm size of well-defined mesenteric mass was found at 40 cm distal to DJ junction. Complete resection of mass with adjacent jejunum was done. Histopathological examination revealed Gastro-Intestinal Stromal Tumour (GIST) of mesentery.

No lymph nodes were involved. Post-op course was normal. Patient is discharged on 14th P.O.D. Further workup and imatinib therapy was given at GCRI.



DISCUSSION

GISTs are mostly seen in stomach (60%), followed by small bowel (30%), rectum (5%), and oesophagus (5%). GISTs are rarely seen in mesentery, omentum, or retroperitoneum, comprising <1% of GISTs.Most common symptom of mesenteric GIST or any mesenteric mass is dull-achingabdominal pain with/without abdominal lump. Nausea, vomiting, diarrhoea, bloating and constipation may present. Intestinal obstruction may present with either benign or malignant tumour. Mesenteric lipoma is not appreciated by palpation.

In the case of mesenteric cysts, physical examination findings may reveal a mass lesion that is mobile only in perpendicular direction of the attachment of the mesentery (Tillaux's sign).

Computed Tomography (CT), provide important information regarding size and involvement of adjacent structures, as well as tissue characteristics of the tumor.

The presence of any solid mass lesion of the mesentery that is

not thought to be a reactive lymph node or lymphoma is an indication for surgical removal. Complete surgical resection with negative margins is the mainstay of treatment that shall ensure better prognosis with a good survival. Mesenteric GIST follows the same principle.

Administration of imatinib in the post-resection (adjuvant) setting has the potential to delay tumor recurrence, especially for patients who present with very large tumors and who are likely at very high risk of disease recurrence and metastatic spread. The malignant potential of GIST varies, with benign tumours having a 5-year survival of 95% in contrast to the malignant type where it is 21%.

Mesenteric lymphoma is treated by cytotoxic chemotherapy. Mesenteric desmoidtumours reportedly respond to Sulindac therapy, hormonal manipulation, and cytotoxic chemotherapy.

CONCLUSION

Mesenteric GIST is a rare condition. It presents as an abdominal mass and is an important differential diagnosis in cases of mesenteric growths. It can sometimes present as acute abdomen due to tumor necrosis or intestinal obstruction.Surgery is potentially curable for mesenteric masses as well as mesenteric GIST except lymphoma. At exploration, the mesenteric mass is generally found to be completely contained within the mesentery.Surgery with R0 resection is the mainstay of treatment that shall ensure better prognosis with a good survival. The gross extent of the tumor must be carefully defined in order to obtain clear margins of resection.Definition of proximity to large mesenteric blood vessels is vital.Imatinib therapy postoperatively improves survival.Large mass (>5 cm), incomplete resection margins, mitosis >5 HPF, and central necrosis are all poor indices for survival and result in high recurrences.

REFERENCES

1. Feldman M, Friedman L, Brandt L. Sleisenger and Fordtran's Gastrointestinal and Liver Disease: Pathophysiology, Diagnosis, Management (2 Volume Set), 10th Edition, New York, USA, Elsevier, 2015, P 660.
2. Bucher P, Villiger P, Egger JF, Buhler LH, Morel P. Management of gastrointestinal stromal tumors: From diagnosis to treatment. Swiss Med Wkly. 2004;134:145–53.
3. Feldman M, Friedman L, Brandt L. Sleisenger and Fordtran's Gastrointestinal and Liver Disease: Pathophysiology, Diagnosis, Management (2 Volume Set), 10th Edition, New York, USA, Elsevier, 2015, P 662.
4. AnantSadanandRamani, GuruprasadHuske, and Francisco P Noronha A Rare Case of Mesenteric Gastrointestinal Stromal Tumor Presenting as Acute Abdomen Niger J Surg. 2017 Jan-Jun; 23(1): 71–72
5. Sinha R, Verma R, Kong A. Mesenteric gastrointestinal stromal tumor in a patient with neurofibromatosis. AJR Am J Roentgenol. 2004;183:1844–6
6. Puneet MS, Khanna AK. Gastrointestinal stromal tumours. In: Gupta R, editor. Recent Advances in Surgery 11. Vol. 14. New Delhi, India: Jaypee Brothers Medical Publishers (P) Ltd; 2009. pp. 278–94.
7. Dematteo RP, Ballman KV, Antonescu CR, et al. Adjuvant imatinibmesylate after resection of localised, primary gastrointestinal stromal tumour: A randomised, doubleblind, placebo-controlled trial. Lancet 2009; 373:1097-104.