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CASE REPORT

Intestinal Preserving Giant Mesenteric GIST Excision – A Rare Case

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Abstract

Gastrointestinal Stromal Tumors (GISTs) were originally believed to have originated from the mesenchymal cells of the gastrointestinal tract. These tumors actually originate from the intestinal cells of Cajal. A 26-year-old female came with complaints of mass per abdomen since 3 months which was insidious in onset, slowly progressive, complaining of vomiting,3-4 episodes since the last 4 days, non-blood tinged,non-projectile,non-bilious,non-foul smelling containing food particles associated with pain in the upper abdomen dull aching type,non-radiating, and non-migrating. On per abdominal examination — There was an oval-shaped mass that was firm in consistency, measuring about 15x10cm in size located in the left lumbar extending into the umbilical area which was mobile horizontally but vertical mobility was restricted. Routine investigations, USG, and CECT abdomen & pelvis were done which was pointing the diagnosis towards mesenteric GIST. Exploratory laparotomy and resection of GIST were scheduled. The resected tumor was sent for histopathological examination and a CD-117(IHC) marker was sent, which confirmed the mass as a mesenteric GIST. Literature shows that only a few cases of mesenteric GIST have been reported to date. Incidence of such giant mesenteric GISTs is very rare and intestinal preserving giant mesenteric gist excision is one of the firsts.

Keywords: Mass per abdomen; Mesenteric GIST

Introduction

Gastrointestinal Stromal Tumors (GISTs) were originally believed to have originated from the mesenchymal cells of the gastro-intestinal tract (GIT).[1,2] These tumors actually originate from the intestinal cells of Cajal.[3] HIROTA and colleagues discovered that these tumors express CD 117 antigen (c-kit), a gain of function mutation responsible for activating the growth of these tumors.[4]

Although GIST is considered a rare tumor, most GISTs are discovered incidentally so the true prevalence is unknown. Traditional chemotherapy and radiation are not effective on GIST therefore surgical resection has always been the mainstay of treatment.[5,6]

A young female visited our OPD with mass per abdomen which was diagnosed as a GIANT mesenteric GIST. For which intestinal preserving excision of the GIST was done.

Case Report

A 26-year-old female came with complaints of mass per abdomen since 3 months which was insidious in onset, slowly progressive, complaining of vomiting, 3-4 episodes since the last 4 days, non-blood tinged, non-projectile, non-bilious, non-foul smelling containing food particles associated with pain in the upper abdomen dull aching type, non-radiating, and non-migrating.

On per abdominal examination - There was an oval-shaped mass which was firm in consistency, measuring about 15x10cm in size located in the left lumbar extending into the umbilical area which was mobile horizontally but vertical mobility was restricted.

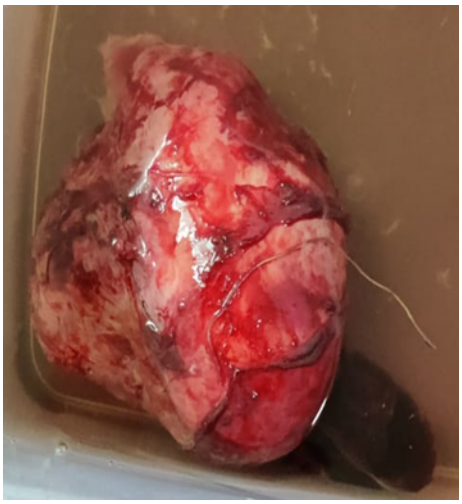
Routine investigations, USG, and CECT abdomen & pelvis were done which was pointing the diagnosis towards mesenteric GIST. Exploratory laparotomy and resection of GIST was scheduled.

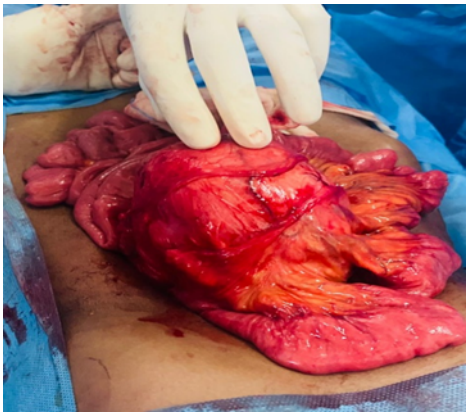
On opening the abdomen a much larger mass with surroundings adhered to the small bowel was noted. The mass was released from the surrounding structures. It was clamped, cut, and transfixed using VICRYL 2 O.

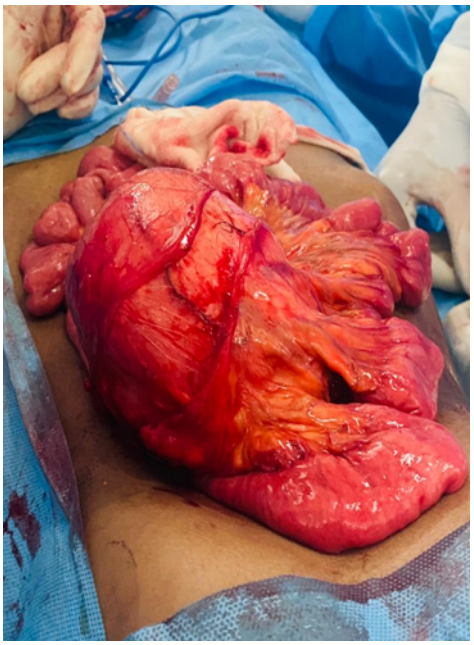
The tumor mass was removed carefully without hampering the small bowel blood supply and preserving the intestines. A thorough abdominal wash was given using warm saline and was closed in layers.

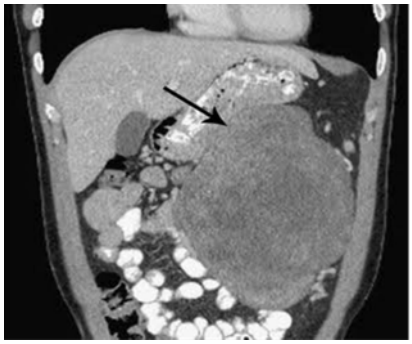
Patient tolerated the procedure well. The intraoperative period was uneventful and postoperatively 1 unit of packed red cells was transfused.

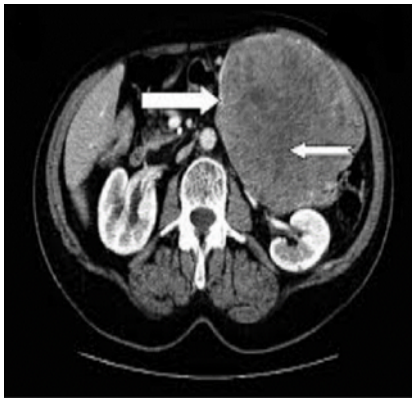
Sutures were removed on day 13 and the patient was discharged on day 14. The resected tumor was sent for histopathological examination and a CD-117(IHC) marker was sent, which confirmed the mass as a mesenteric GIST.











Discussion

GISTs are rare tumors that account for a small percentage of gastrointestinal neoplasms but are the most common mesenchymal tumor. GISTs are mostly seen in the stomach and small intestine.

Usually GISTs are an incidental finding and if GISTs present symptomatically then the line of management is surgical resection through laparoscopy. If the size is large, then an open laparotomy is the preferred method of treatment. [7]

We encountered a case of mesenteric GIST for which open laparotomy and intestinal preserving surgical resection of the tumor was done which is one of its kind.

Literature shows only a few cases of mesenteric GIST have been reported to date. Hence early management and regular follow-ups, can prevent metastasis and growth. Immunohistochemistry CD117 has been constantly associated with GIST.

Conclusion

Literature shows only a few cases of mesenteric GIST have been reported to date. Incidence of such giant mesenteric GISTs are very rare and intestinal preserving GIANT mesenteric GIST excision is one of the firsts.

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