

Gastrointestinal Tumour of Ascending Colon: A Rare Case Report

Dr Ameya Sanjiv Thakur, Dr Bahar Kulkarni

Abstract: 38 year old female presented with lump in right hypochondrium to right lumbar region. her cect (abdo+pelvis) was suggestive of well defined intraperitoneal space occupying lesion in the right lumbar and right infralumbar region measuring 14.4*9.5CM with the lesion abutting ileo-caecal junction and ascending colon without its encasement?? omental sarcoma. Her trucut biopsy report was spindle cell tumour. So preoperative diagnosis was made of spindle cell tumour of ascending colon. On exploratory laprotomy, she was found to have 15*9.5CM mass involving the distal ileum and ascending colon with no intraluminal component. She was operated for right hemicolectomy with ileo-colic anastomosis. Her postoperative period was unconventional. Histopathological report suggestive of spindle cell gastrointestinal tumour of ascending colon. Her immunochemistry was negative for c-kit 117. One month post surgery patient is healthy without any evidence of metastasis.

Keywords: GIST, Immunohistochemistry, CD-117, Spindle Cell

1. Case Report

A 38 year old female presented with lump in abdomen with no other abdominal symptom. There was no history of altered bowel bladder habits.

On abdominal examination, a lump 14*10cm size was found in right hypochondrium extending up to right lumbar region. The lump had indistinct margin and smooth surface.

On palpation, the lump was mobile, firm in consistency and dull on percussion. Digital rectal examination was unremarkable.

Blood investigations and LFTs were normal.

CT Abdomen revealed well defined intra peritoneal space occupying lesion measuring 14.4*9.5cm in the right lumbar and right infralumbar region causing mass effect on adjacent bowel loops. The lesion is abutting with the ileo-cecal junction and ascending colon which is splayed around the lesion without enhancement. No evidence of infiltrative changes.

Usg guided trucut biopsy revealed Spindle cell tumournegative for definitive malignancy.

Provisional diagnosis of mesenchymal tumour was kept and exploratory laprotomy was planned. A growth arising from ascending colon about 14*9*8.5cm was found intraoperatively. There were no peritoneal, omental and liver deposits. A right hemicolectomy with ileal-transverse colon anastomosis was performed. Post operative course was uneventful and patient discharged on postoperative day 10.

Gross specimen on histopathology revealed a mass measuring 12.5cm*9cm*8cm. Cut surface was variegated showing grey white necrotic areas. Microscopic examination revealed morphology of gastrointestinal stromal tumour (GIST) with <5mitoses/50HPF (high power field) with low to moderate malignant potential. Both resected ends were tumour negative. The tumour stained negative for CD-117.

2. Discussion

GIST are most common mesenchymal tumour of gastrointestinal tract. They represent 0.1%-3% of all GI cancers. They usually arise from interstitial cells of Cajal. They are currently defined as CD-117 spindle cell or epithelioid neoplasms with minimal or incomplete myogenic or neural phenotype. Tumours of true smooth muscle, neural, fibroblastic or vascular origin are not considered in the category of GIST's.

CD-117 negative GISTs do exist, accounting for approximately 6% of all GI mesenchymal neoplasms. Tumour recurrence or distant metastasis correlates to both the KIT mutations at codons 557/558 and the mitotic counts, but not to the tumour size.

The most common anatomical sites of origin are stomach (40-60%), small intestine (30-40%) and less commonly colon, rectum and oesophagus. When in a colonic location, most are present in transverse or descending colon. Most common presenting symptom is bleeding. Patient might also have other symptoms like abdominal pain, bloating, obstruction or they might present with abdominal lump with no symptoms. About 10 to 25% patients will have metastasis at the time of presentation. There are no pathognomic, radiological imaging findings characterising GIST. Evaluation of malignancy is based on mitotic count, tumour size and extra GI spread.

Surgical resection is the mainstay of treatment and the goal of surgery is to completely resect the tumour to achieve negative margins. GIST rarely metastasize to lymphnodes, hence lymphadenectomy is warranted only in evident lymphnode involvement. Although chemotherapy and radiotherapy have not been found of much helpas adjuvant treatment of these tumours, trials are underway to define the role of imatinib, a selective and competitive inhibitor of tyrosine kinase, as adjuvant therapy following complete gross excision, as it has been found beneficial in the treatment of metastatic and locally advanced GISTs.



Figure 1: Intraoperative Finding Showing the Colonic Mass



Figure 2: Gross Cut Section of Colonic Mass

3. Conclusion

The diagnosis of GISTs is difficult, especially in the rarer sites, since there is no pathognomic features to suggest GIST on preoperative clinical examination and investigations, and only a detailed histopathological analysis of the specimen reveals true nature. We could find very little literature about CD117-negative colonic GISTs, which motivated us to report this case regarding this unusual presentation.