



## Peritoneal Nodules, A Rare Presentation Of Gastrointestinal Stromal Tumour– A Case Report

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### ABSTRACT

Gastrointestinal stromal tumours are the commonest mesenchymal tumours of the gastrointestinal tract. They contribute about 2% of all the neoplasms of gastrointestinal tract. Here we report a case of rare metastatic peritoneal nodules due to small bowel GIST seen in a 70 year old female patient who came with vague abdominal pain. Diagnostic laparoscopy was done, which revealed an iliocaecal mass. Multiple biopsies were taken from nodules in her right iliac fossa and send for histopathological examination which confirmed the tissues to be of metastatic GIST. Colonoscopic biopsy from caecum was reported as GIST. The patient was referred to Medical Oncology department for neoadjuvant Imatinib therapy. After 3 months of treatment, relaparoscopy followed by laparotomy was done. Right radical hemicolectomy was done followed by Imatinib mesylate adjuvant therapy for another 3 months post-operatively with no uneventful changes.

**Keywords:** Peritoneal nodules, gastrointestinal stromal tumour

**Abbreviations:** GIST – Gastrointestinal stromal tumours; NCCN - National Comprehensive Cancer Network; FDG-PET –Fluorodeoxyglucose positron emission tomography

### Introduction

Gastrointestinal stromal tumors (GIST) are the most common mesenchymal neoplasms of the gastrointestinal tract. They are thought to have their origin from the interstitial cells of Cajal, the pacemaker cells [1]. They have a wide spectrum of histologic appearances and biological activity. They contribute about 2% of all the neoplasms of gastrointestinal tract [2]. Metastatic neoplasms in the form of peritoneal nodules are a rare occurrence. Most often small GISTs are detected in the stomach and rectum [3]. Herein we report a typical case of GIST which was identified as a local group of peritoneal nodules that appeared on the right abdominal wall in the right iliac fossa region upon incidental finding during diagnostic laparoscopy done for appendicitis.

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## Case Report

A 70 year old female presented in the Surgery OPD with complaints of vague abdominal pain of 2 days duration. She had developed mild tenderness in the right iliac fossa with mild rigidity but no guarding. Patient had a previous history of pulmonary tuberculosis at the age of 35 and was treated with antituberculous therapy. Routine blood and Urine investigations were normal and ultrasound done was also normal except for a few mesenteric lymph nodes.

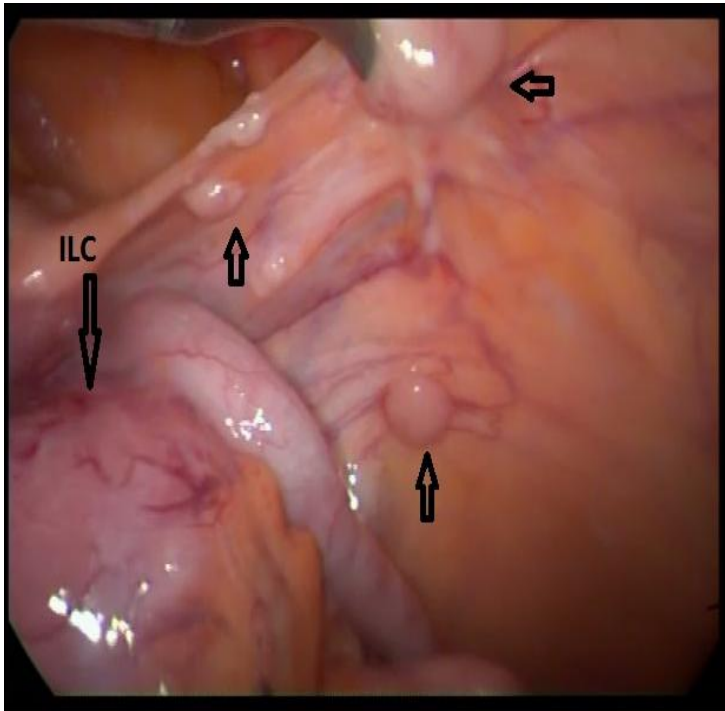


Fig 1: Image showing multiple peritoneal nodules and the Ileo-caecal mass (ILC)

## Operative Findings

Diagnostic laparoscopy was done. Multiple peritoneal nodules were seen in the right iliac fossa with an adherent ileocaecal mass (figure 1). Suspecting in terms of abdominal tuberculosis due to her previous history of pulmonary tuberculosis, multiple peritoneal nodule biopsies were taken and sent for pathologic analysis. No definitive procedure was attempted as patient had no obstructive symptoms. Peritoneal lavage was given. Postoperative period was uneventful.

## Histopathological Examination

Pathologist report confirmed the biopsy sample as metastatic GIST.

## Follow up

Colonoscopic biopsy from ileocaecum was reported as GIST. The patient was referred to Medical Oncology department for neoadjuvant Imatinib therapy. After 3 months of treatment, relaparoscopy followed by laparotomy was done. Right radical hemicolectomy was done followed by Imatinib mesylate adjuvant therapy for another 3 months postoperatively with no uneventful changes.

## Discussion

GIST occurrence in the form of peritoneal nodules is a rare one. Review of literature showed that there is only one such case of GIST with peritoneal nodules have been reported although the site was upper abdomen and there was a lack in the evidence regarding the smooth muscle differentiation [4]. The reason for this kind of peritoneal nodules with histopathological findings following metastasis is unknown.

## Conclusion

Like all other sarcomas surgery is the primary therapy for non-metastatic GIST. But for the metastatic GIST as in this case, NCCN currently recommends a neoadjuvant therapy with Imatinib mesylate for 3-6 months and evaluation of response with FDG-PET for 4 weeks following the initiation of therapy with Imatinib.

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