

# An Unusual Cause of Intraperitoneal Hemorrhage Mimicking Ectopic Pregnancy

Bilquis Fatema<sup>1\*</sup> Rashedul Hasan<sup>2</sup>

## ABSTRACT

Massive intraperitoneal hemorrhage is a life-threatening emergency. Many gynecological and non-gynecological causes are associated with it. In gynecological practice, an ectopic pregnancy is one of the causes of maternal morbidity and mortality that needs emergency laparotomy. Massive, life-threatening intraperitoneal bleeding is a rare representation of the Gastrointestinal Stromal Tumor (GIST). We report a case of bleeding distal ileal GIST in a 24-year-old female who presented with a hemorrhagic shock that required emergency laparotomy for suspected ectopic pregnancy. Histopathology confirmed the diagnosis of GIST.

**Key words:** Gastrointestinal stromal tumors; Ectopic pregnancy; Hemoperitoneum.

## INTRODUCTION

Gastrointestinal Stromal Tumors (GISTs) are rare neoplasms of the Gastrointestinal Tract (GIT) and are usually found in advanced age with small male preponderance. They are mesenchymal tumors of GIT and are commonly found in the stomach. However, about 20% of them occur in the small intestine. Many GISTs are asymptomatic and identified incidentally. When symptoms occur, they range from nonspecific nausea, bloating, and abdominal pain to gastrointestinal bleeding and rarely, intraperitoneal hemorrhage<sup>1</sup>. On the other hand, ectopic pregnancy usually presents with a short period of amenorrhoea (80-85%) abdominal pain (85-90%) and vaginal bleeding (80-85%)<sup>2</sup>. For confirmation, we depend on urinary pregnancy test (Positive in 50% of cases) and Ultrasonogram (USG). When they are ruptured, presentation may be with a variable amount of intraperitoneal hemorrhage, and sometime with shock. Non-gynecological conditions may be confused with an ectopic pregnancy that present with a similar type of bleeding. We report a case of GIT bleeding due to GIST in a young lady of reproductive age which produced massive intraperitoneal hemorrhage.

1. Assistant Professor of Gynecology & Obstetrics  
Rangamati Medical College, Rangamati, Bangladesh.
2. Assistant Professor of Surgery  
Rangamati Medical College, Rangamati, Bangladesh.

\*Correspondence to:

**Dr. Bilquis Fatema**

Mobile : +88 01817 33 89 81

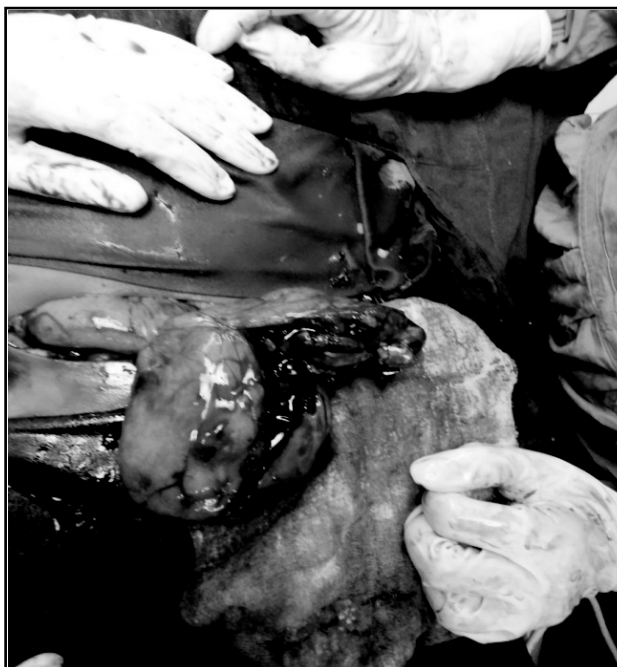
Email: bilquisfatema1970@gmail.com

Date of Submission : 21-01-2019

Date of Acceptance : 07-03-2019

## CASE REPORT

A 24 years old married woman presented on 25th July 2017 with a history of 7 weeks amenorrhoea, lower abdominal pain and per vaginal bleeding for two days, a severe weakness for one day. She was a diagnosed case of Polycystic Ovarian Syndrome (PCOS). Her menstrual cycle was irregularly occurring at 2-3 months intervals and trying to conceive for one year.



**Figure 1 :** Per-operative findings of a distal ileal GIST.

On examination, she was severely anemic, pulse 120/min, blood pressure 80/50 mm of Hg. The abdomen was soft and moderately distended and diffuse lower abdominal tenderness with no definite radiation. On per vaginal examination uterus was normal in size, fornices were full but no specific localized tenderness. At that moment facilities for USG were not available, the pregnancy test was negative. She was resuscitated at first, the decision for emergency laparotomy was taken for suspected ectopic pregnancy. Three units of blood were transfused during and after laparotomy.

Her abdominal cavity was full of blood clots, both ovaries were enlarged in size, polycystic pattern, no lesion was found. Both tubes were healthy. But there was a medium-sized mass with areas of hemorrhage and necrosis originating from the anti-mesenteric border of the distal ileum (Fig 1). Wedge resection of the tumor done with a one cm margin of the normal ileal wall. After the closing of resected part and peritoneal toileting abdomen was closed in layers.

Her postoperative period was uneventful without any complications and was discharged from the hospital on the 4<sup>th</sup> post-operative day. Macroscopic assessment of the specimen revealed a 6 x 5 x 4 cm size mass with patchy areas of necrosis and hemorrhage attached to the anti-mesenteric border of the ileum. Both surgical margin and mesentery were free from tumor. Histopathologically it was a confirmed case of GIST.

#### DISCUSSION

There are many gynecological and non-gynecological condition which causes intraperitoneal hemorrhage. Among gynecological disorders ruptured ectopic pregnancy, ruptured corpus luteum and ruptured ovarian cysts are common.

GIST may occur anywhere of GIT. The stomach is the commonest site (70%). The small intestine is involved in 20% of cases. Large gut and esophageal involvement are infrequent. GISTs are typically solitary lesions. The growth can be intraluminal or extraluminal. Extraluminal extension often presents late as large mass<sup>3</sup>. They do carry malignant potential and common among elderly subjects<sup>3</sup>.

The presentation of GIST is non-specific. Abdominal pain, mild GIT bleeding, and anemia had been reported in past as presenting symptoms<sup>4</sup>. Sometimes a large tumor can produce features of gut obstruction<sup>6</sup>. Massive GIT hemorrhage and hemoperitoneum with GIST is uncommon<sup>5,6</sup>.

In the case of malignancy, distant metastasis occurs late. Common sites of secondaries are the liver and peritoneum<sup>3</sup>. Lymph node involvement is uncommon (0-8%).

There are three histological subtypes of GIST, namely spindle cell (70%) epithelioid (20%) and mixed (10%) variant<sup>7</sup>.

Surgical resection is the mainstay of therapy for managing GISTs to obtain a microscopically negative margin. Lymphadenectomy is not required since these tumors rarely metastasize to lymph nodes<sup>1</sup>.

#### CONCLUSION

During the management of a case of intraperitoneal hemorrhage, all organ-specific causes should be kept in mind. It may not always be a common cause. GIST should be in the differential diagnosis. A high index of suspicion is necessary during the evaluation of intraperitoneal bleeding. One should not wait for confirm diagnosis during a life-threatening situation when emergency laparotomy is required.

#### DISCLOSURE

Both the authors declared no competing interest.

#### REFERENCES

1. Shively J, Ebersbacher C, Walsh W T, Allemang MT. Spontaneous Hemoperitoneum From a Ruptured Gastrointestinal Stromal Tumor. *Cureus*. 2020;12(7): e9338. DOI 10.7759/cureus.9338.
2. Liyanage ASD, Thalaspitiya SPB, Kalaiselvan R, Rajaganeshan R. A Rare Case of Life-Threatening Bleeding Caused by a Jejunal GIST. *Surgical Case Reports*. 2019; 2(6): 1-2.
3. Michael A Choti, MD, MBA, FACS; Chief Editor: N Joseph Espot, MD, MS, FACS, Rajesh Ramanathan, MD. *Gastrointestinal Stromal Tumors (GISTs)*. Medscape. 2020.
4. Nung RCH, Wong SSM, Lee RK, Chan ABW, Lee YYP. Two Cases of Gastrointestinal Stromal tumour Presenting Uncommonly as intraperitoneal Rupture in Patients Prescribed Warfarin. *Hong Kong J Radiol*. 2016; 19:132-136.
5. Fukuda S, Fujiwara Y, Wakasa T et al. Small, spontaneously ruptured gastrointestinal stromal tumor in the small intestine causing hemoperitoneum: A case report. *Int J Surg Case Rep*. 2017; 36: 64–68.
6. Kim SW, Kim HC, Yang DM, Won KY. Gastrointestinal Stromal Tumours (GISTs) with a thousand faces: Atypical manifestations and causes of mis diagnosis on imaging. *Clin Radiol*. 2016; 71:0.
7. Xiaohui Zhao X, Yue C. Gastrointestinal stromal tumor. *J Gastrointest Oncol*. 2012; 3(3): 189–208. doi: 10.3978/j.issn.2078-6891.2012.031.