

Multiple Intestinal Perforations in Gastrointestinal Lymphoma: A Rare Clinical Entity

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ABSTRACT

Intestinal perforation due to lymphoma is rarely reported. A 22 year old male patient presented to emergency room with acute abdominal pain. He was operated after resuscitation and at laprotomy a large conglomerated mass with multiple perforations of small bowel found. Histopathological examination of resected bowel segment revealed B-cell non-Hodgkin's lymphoma. During postoperative course patient developed enterocutaneous fistula. This patient was later referred to oncologist for chemotherapy. He was lost to follow-up while being treated.

Key words Intestinal perforation, Non-Hodgkin's lymphoma, Peritonitis.

INTRODUCTION:

Gastrointestinal tract lymphomas constitute up to 10%-15% of all the newly diagnosed non-Hodgkin's lymphomas.¹ Primary tumors of small bowel constitute less than 1% of the bowel malignancies and primary lymphomas of the small bowel fraction of all tumors. Lymphomas may involve small intestine as a primary malignancy or as a manifestation of the disseminated systemic illness. Most of the small bowel lymphomas are located in ileum. They commonly present with intestinal obstruction. About 10% patients may develop intestinal perforation. This report describes a patient who presented with peritonitis and sepsis due to bowel perforation.

CASE REPORT:

A 22 year old male patient presented to emergency room with the complaints of pain in the abdomen for 24-hours. It was severe in intensity, colicky in nature, not associated with nausea, vomiting or fever. Patient had history of epigastric pain for two years. He was prescribed proton-pump inhibitor drug for this condition. He had history of pulmonary tuberculosis in childhood. On examination the patient had cachetic look. Pulse was 130bpm, and respiratory rate of 40 breaths/min. Abdomen was distended, tense and tender. Digital rectal examination was unremarkable.

X-ray abdomen showed pneumoperitoneum. Emergency exploratory laparotomy was done after resuscitation. On opening peritoneal cavity greenish yellow colored fluid mixed with fecal material (2100ml) was drained. Gangrenous omentum was found adherent with bowel loops. Multiple inter-bowel loop adhesions were also present. It was not possible to access supra-colic and pelvic compartments of abdomen. Two large perforations were found in small bowel (Fig I). A mass was palpable inside the lumen of the perforated gut, which was suspected as a tumor (Fig II). Multiple large lymph nodes in the mesentery of around 4cm x 4cm, 5cm x 5cm, 3cm x 3cm in size were also present. About 15cm of jejunum containing perforations and tumor was resected and jejunostomy made. Multiple small pinpoint perforations distal to jejunostomy were left as such due to non-resectability, of gut.

Postoperatively patient remained in ICU and was started on TPN. On 10th postoperative day patient



Fig I: Matted bowel loops with enlarged lymph nodes.

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Fig II: Perforated small bowel at operation.

developed low output enterocutaneous fistula at the infra-umbilical midline wound. Fistulogram was done which showed no distal obstruction. Biopsy report came as B-cell non-Hodgkin's lymphoma. Patient was discharged and sent to Oncology department where he received chemotherapy. He was later lost to follow-up.

DISCUSSION:

Zigheboim and Larson analyzed their experience of nineteen years in Mayo clinic and found that the cecum was the most common site involved with lymphoma.² Most commonly patient are in their 5th and 6th decade of life which was in contrast to our case as the patient was 22 year of age. Most common symptoms at presentation include abdominal pain, altered bowel habits and weight loss. Patients may present with bleeding per rectum, intestinal obstruction, perforation and intussusception. The higher percentage of perforation is reported in males.³⁻⁶ The reason for this is not known. The risk of intestinal perforation is lowest in the B- cell indolent lymphomas than aggressive B- cell lymphomas. The German study group on non-Hodgkin's lymphomas reported that the rate of perforation is higher in T - cell lymphomas than in B- cell lymphomas.⁷

The prognostic factors include stage at presentation, presence of perforation, tumor resectability, histological subtype and use of multi-modality therapy. Perforated lymphomas are of higher tumor stage with poor prognosis. The mortality rate is high as the perforation goes unrecognized. The time interval from the onset of symptoms (perforation) to operation may also affect the outcome.

REFERENCES:

1. Coit DG. Cancer of the small intestine. In cancer: Principles and practice of Oncology. Volume 1. 4th Edition. Edited by: Devita VT Jr, Hellman S, Rosenberg SA. Philadelphia, PA: Lippincot Williams and Wikin. 1993:915-28.

2. Zigheboim J, Larson MV. Primary colonic lymphoma. Clinical presentation, histopathologic features, and outcome with combination chemotherapy. *J Clin Gastroentrol.* 1994;18:291-7.
3. Vaidya R, Habermann TM, Donohue JH, Ristow KM, Maurer MJ, Macon WR, et al. Bowel perforation in intestinal lymphoma: Incidence and clinical features. *Ann Oncol.* 2013;24:2439-43.
4. d'Amore F, Brincker H, Grønbaek K, Thorling K, Pedersen M, Jensen MK, et al. Non-Hodgkin's lymphoma of the gastrointestinal tract: a population-based analysis of incidence, geographic distribution, clinicopathologic presentation features, and prognosis. Danish Lymphoma study group. *J Clin Oncol.* 1994;12:1673-84.
5. Domizio P, Owen RA, Shepherd NA, et al. Primary lymphoma of the small intestine. A clinicopathological study of 119 cases. *Am J Surg Pathol.* 1993;17:429-42.
6. Papaxoinis G, Papageorgiou S, Rontogianni D, Kaloutsi V, Fountzilias G, Pavlidis N, et al. Primary gastrointestinal non-Hodgkin's lymphoma: a clinicopathologic study of 128 cases in Greece. A Hellenic cooperative Oncology Group study (HeCOG). *Leuk Lymphoma.* 2006;47:2140-6.
7. Daum S, Ullrich R, Heise W, Dederke B, Foss HD, Stein H, et al. Intestinal non-Hodgkin's lymphoma: a multicenter prospective clinical study from the German Study Group on intestinal non-Hodgkin's lymphoma. *J Clin Oncol.* 2003; 21:2740-6.

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