Annals of Clinical and Medical Case Reports

ISSN 2639-8109

Case Report

Acute Gastrointestinal Bleed Due to Leiomyoma of the Ileum: A Case Report

Vuković M[1*] and Petaković G[2]

[1]Department of Clinical Center of Vojvodina, Clinic for Abdominal and Endocrine Surgery, Novi Sad, Republic of Serbia

[2]Department of Medical Faculty of Novi Sad, Clinical Center of Vojvodina, Clinic for Abdominal and Endocrine Surgery, Novi Sad, Republic of Serbia

Volume 5 Issue 1- 2020

Received Date: 22 Sep 2020

Accepted Date: 10 Oct 2020

Published Date: 13 Oct 2020

2. Keywords

Leiomyoma, Bleeding from the small intestine, Endoscopic diagnosis, Emergency surgery

1. Abstract

1.1. Introduction: Leiomyomas are benign smooth muscle tumours that may occur along the entire gastrointestinal tract. Usually occur in the small intestine. Bleeding is the most common symptom. Nausea, vomiting and abdominal pain are rarely present.

1.2. Case report: The paper shows the patient, age 37 old-man, who have been recidive gastrointestinal bleeding. At the reception done esophagogastroduodenoscopy and colonoscopy. At the colonoscopy, blood was seen in the colon without a clear place of bleeding. Apply conservative therapy to which improvement occurs. The next day in the evening there is a worsening of the general condition, pronounced amenia and tachycardia. Second colonoscopy with examination of terminal ileum diagnosed the tumour in the terminal ileum with ulcer and active bleeding.

1.3. Discussion: Leiomyomas are the most common benign tumours symptomatically small intestine. Diagnosis is usually set in the fifth decade of life. Two thirds of patients have been bleeding from the lower part of the gastrointestinal tract and a quarter of obstruction. No sex differences in the representation of benign tumours. CT angiography was not performed preoperatively due to technical reasons, so the quality work of the endoscopist identified the bleeding site.

1.4. Conclusion: Treatment leiomyomas are required segmental resection with clean margins, because it is hard to make a difference in frozen compared to leiomyosarcomas. Recidive and metastases are rare. The multidisciplinary approach enables valid diagnosis and timely treatment.

3. Introduction

Leiomyomas are benign tumours of soft tissue origin of smooth muscles [1]. Subsets of tumours are known under the name of gastrointestinal stromal tumours. Leiomyomas are rarely diagnosed preoperatively. Diagnosis is difficult because of their rare occurrence and the absence of specific symptoms [2]. Small intestinal tumours include 1,7-6,5% of all gastrointestinal tumours [1]. They are usually benign and rarely meet in clinical practice [3]. Around 65% of the tumour is localized in the stomach, 23% in the jejunum, ileum or duodenum [3].

Leiomyomas diagnosis is difficult because they are very rare. The two most common symptoms of benign tumours of the small intestine are intermittent bleeding and obstruction, rarely present with intestinal invagination [4]. The rarity of the condition does not allow anyone surgeon to gain sufficient expertise. In this paper, is shows leiomyoma of the terminal ileum, which repeated bleeding. Diagnosis is set during the colonoscopy when examined terminal ileum. In the terminal ileum during colonoscopy identified the tumour small intestine, which is active bleed.

4. Case report

Patient 37 age old-man admits to the Clinic for Gastroenterology and Hepatology for rectal bleeding. Bleeding lasted 4 days before hospitalisation. The patient had no similar problems previously. There was no vomiting or constipation. On receipt of patient haemodynamic was stable, with TA 110/75 mm Hg, pulse 84/min. The abdomen was soft, painless, without defans. Digitorectal examination discovered the existence of melaena, but hemoglobin was 80g/l. Coagulation profile, liver and renal function tests were within normal limits. The patient was admitted to the ward in order to further diagnosis and treatment. Were urgent esophagogas-

***Corresponding Author (s):** *Milivoje Vuković, Clinical Center of Vojvodina, Clinic for Abdominal and Endocrine Surgery, Hajduk Veljkova 1, Novi Sad, Serbia. E-mail: vukovicns@sbb.rs or micolakatis@gmail.com*

Citation: Vuković M. Acute Gastrointestinal Bleed Due to Leiomyoma of the Ileum: A Case Report. Annals of Clinical and Medical Case Reports. 2020; 5(1): 1-3.

troduodenoscopy, that is excluding bleeding from upper gastrointestinal tract parties. Colonoscopy, it is not revealed a clear source of bleeding, although the colon is filled with the remnants of blood. Started in the department of conservative treatment. He received 3 units of pack red cell transfusion in the first 24 hours. The next day in the evening there is a worsening of the general condition, pronounced amenia and tachycardia. Preoperative laboratory data demonstrated leukocytosis of 12800, erythrocyte 2 300 000, hemoglobin of 80g/l and a haematocrit of 23,9%, hearts rate rate/min. Renal function and electrolytes were all within normal. After a second colonoscopy with examination, the terminal ileum identifies intraluminal tumour, size of about 4 cm, oval shape, with ulcer which is clearly observable bleeding. The tumor is about 10 cm proximal from the ileocecal valve. After the clear identification of the place is bleeding use emergency laparotomy (Figure 1-3). We're part of small intestine resection with a tumour and reconstruction with anastomosis. In the postoperative course, the patient ninth day discharged from the hospital.

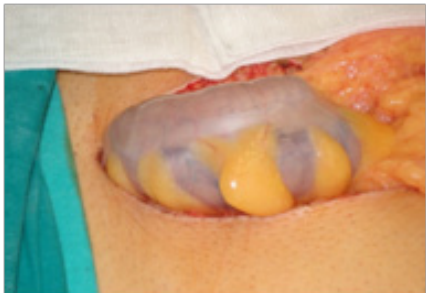

Figure 1: Blood in the sigmoid colon-operative view

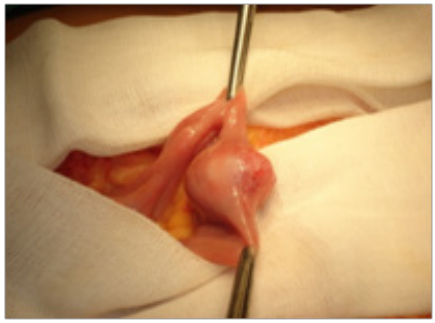

Figure 2: Tumour in the terminal ileum

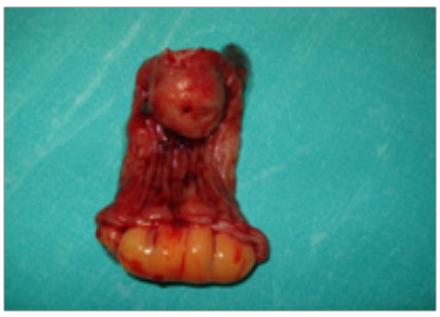

Figure 3: Specimen - Tumour with ulceration in the terminal ileum

5. Discussion

Leiomyomas of the gastrointestinal tract, although rare and most common benign nonepithelial tumours of the small intestine. They usually present with massive bleeding. The first description of these tumours had a Virchow in 1854 [1]. The malignant alteration leiomyoma is not proven. Small intestinal tumours are rare. If the small intestine occupies about 80% length and 90% of the mucose gastrointestinal tract, only 3-6% of the tumours gastrointestinal tract, and 1% of malignant neoplasm occurs in the thin hose. Frequently, small intestinal tumours are diagnosed incidentally or in the post mortem.

Smooth muscle tumours gastrointestinal tract can be classified as leiomyoma or leiomyosarcoma, depending on the atipic cell and mitosis index. Symptomatically leiomyomas are the most common benign tumours. Diagnosis usually in the fifth decade of life, with two-thirds of patients due to bleeding from the lower gastrointestinal tract, and about one-quarter of patients due to intestinal obstruction. No gender predisposition for the development of leiomyomas of the small intestine.

In the case of this patient, the tumour was located intraluminally in the distal ileum. The patient preoperative had a anaemia and tachycardia after 3 units of pack red cell transfusion. In coordination with the gastroenterologist-endoscopist localized the bleeding site and immediately continued with the operation, which involved the excision of modified segments of the small intestine. The resection line should go to the macroscopically healthy tissue because the macroscopic impossible to determine whether it is a leiomyoma or leiomyosarcoma.According to a study from Taiwan in 1995. The distribution leiomyomas gastrointestinal tract is as follows: stomach (40%), jejunum (20%), ileum (14.3%), rectum (14.3%), duodenum (8.57%), and oesophagus (2,86%) [5]. Leiomyomas have four ways of growth: extraluminal (65%), intramural (16%), dumb-bell shaped (11%) and intraluminal (8%) [6] Macroscopic, leiomyomas are white-grey lesions. Microscopically, these tumours contain differentiated smooth muscles, without mitosis, which may be easily compared to the malignant tumours of smooth muscle. The leading problem in leiomyomas the blood or peritoneal cavity or lumen hose. Various clinical studies show an approximately identical representation of the symptoms of bleeding (43.8%), abdominal tumours (37.5%), abdominal pain (21.3%), obstruction (16.4%), and without symptomatology 8,8% [5].

During roentgen examination recording these tumours appear as ovoid filling defects hoses lumens [7, 8]. When large, can have a central liquid, as a consequence of tumour necrosis due to weak vascularisation. Diagnostic computed tomography can identify leiomyoma in 90% of the cases, and cannot differentiate malignant and benign lesions. Malignant tumours are distinguished by size

and the biological behaviour of [8, 9]. Small bowel leiomyomas are rare, with atypical clinical presentation, due to delayed diagnosis [10]. In this case, during the surgery, the blood is clearly noticed by a short segment of the distal small intestine and the whole large bowel. In accordance with the preoperative diagnosis and intraoperative findings done a resection and formed the anastomosis. There were no signs of regional limphdenomegaly. Absence of metastases or mesenteric changes. Intraoperative not be able to distinguish between leiomyoma and leiomyosarcoma.

It can be difficult to distinguish benign from malignant leiomyomas based on imaging alone [11]. A definitive diagnosis can be established only by histopathological examination and immunohistohemy findings for leiomyomas usually mimic GISTs [12]. IHC staining for c-kit (CD 117) expression and other antigenic markers (CD34, SMA, Desmin 2, S 100, Ki 67) are also variably positive [13].

6. Conclussion

The treatment is sufficient leiomyomas segment resection with clear margins, because the macroscopic differentiation to leiomyosarcomas hard even on pathological examination. Lymphadenectomy is not running because leiomyosarcoma is not wider in lymphatic ways. Recidive and metastasis of benign leiomyomas are extremely rare. For the assessment of malignancy, histological diagnosis is required with careful monitoring mitotic activity for the assessment of malignancy. The multidisciplinary approach enables valid diagnosis and timely treatment.

Reference:

1. Virchow R. Ueber Makroglossie und pathologische Neubildung quergestreifter Muskelfasern. Virchows Arch (Pathol Anat). 1854; 7: 126-38.
2. Sunamak O, Karabicak I, Aydemir I, Aydogan F, Guler E, Cetinkaya S and Korman MU. An Intraluminal Leiomyoma of the Small Intestine Causing Invagination and Obstruction: A Case Report. The Mount Sinai Journal of Medicine; Vol 73: No 8, December 2006: 1079-1081.
3. Valls C, Sancho C, Bechini J et al. Intestinal leiomyomas: angiographic imaging. Gastrointest Radiol 1992; 17 (3): 220-222.
4. Gill SS, Heuman DM, Mihas AA. Small intestinal leiomyomas. J Clin Gastroenterol 2001; 33: 267¬282.
5. Fong-Fu Chou, Hock-Liew Eng, Shyr-Ming Sheen-Chen. Smooth muscle tumours of the gastrointestinal tract: Analysis and prognostic factors. Surgery 1996; 119 (2): 171-7.
6. Agustin A Burgos, Mignel E Martinez, Bernard M Jaffe, Michael J Zinner, Seymour I Schwartz, Harrold Ellis. Maingot's Abdominal Operations. USA: Appleton and Lange 1997; 2: 116.
7. Korman MU. Radiologic evaluation and staging of small intestine neoplasms. EUR J Radiol 2002; 42 (3): 193–205.
8. Megibow AJ, Balthazar EJ, Hulnick DH, et al. CT evaluation of gastrointestinal leiomyomas and leiomyosarcomas. AJR Am J Roentgenol 1985; 144 (4): 727–731.
9. Blanchard DK, Budde JM, Hatch GF 3rd, et al. Tumours of the small intestine. World J Surg 2000; 24 (4): 421–429.
10. Roso I, Fildisevski I, Panovski M. Leiomyoma of the ileum: a case report and literature review. Mac Med Review 2016; 70(1): 43-46.
11. Minordi LM, Binda C, Scaldaferri F, Holleran G, Larosa L, Belmonte G, Gasbarrini A, Colosimo C, Manfredi R. Primary neoplasms of the small bowel at CT: a pictorial essay for the clinician. European Review for Medical and Pharmacological Sciences 2017; 22: 598-608.
12. Cengiz H, Yıldız Ş, Kaya C, Ekin M. A diagnostic dilemma of acute abdomen in pregnancy: Leiomyoma of the small intestine. J Turk Ger Gynecol Assoc 2014; 15: 60-2.
13. Yildirim M, Yakan S, Doganavsargil B, Akalin T. A rare cause of intestinal hemorrhage: Stromal tumor of duodenum. Turkish Journal of Cancer; Volume 34, No.4, 2004:163-165.