

© 2015 Mirela Delibegovic, Admira Alispahic, Jasmina Gazija, Zlatan Mehmedovic, Majda Mehmedovic
This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (<http://creativecommons.org/licenses/by-nc/4.0/>) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.

Med Arh. 2015 Jun; 69(3): 206-207
Received: April 15th 2015 | Accepted: May 25th 2015

Published online: 10/06/2015 Published print: 06/2015

Intramural Haemorrhage and Haematoma as the Cause of Ileus of the Small Intestine in a Haemophiliac

Mirela Delibegovic¹, Admira Alispahic¹, Jasmina Gazija¹, Zlatan Mehmedovic², Majda Mehmedovic³

¹Radiology and Nuclear Medicine Department, University Clinical Centre, Tuzla, Bosnia and Herzegovina

²Surgical Department, University Clinical Centre, Tuzla, Bosnia and Herzegovina

³Medical Department, University Clinical Centre, Tuzla, Bosnia and Herzegovina

Corresponding author: Mirela Delibegovic, MD. Radiology and Nuclear Medicine Department, University Clinical Centre, Tuzla, Bosnia and Herzegovina.

ABSTRACT

Introduction: The most frequent sites of bleeding in patients with haemophilia are the soft tissues, the joints, the urinary tract, but much more rarely the gastrointestinal tract. The complications of intramural bleeding are acute intestinal obstruction, but also rupture of the haematoma in the lumen or the peritoneal space. **Case report:** We present the case of a haemophiliac patient who was admitted as an emergency due to distended abdomen, nausea, vomiting and the clinical picture of ileus. The native abdomen in a standing position presented air fluid levels with moderate distension of the accompanying bowel loops. A nasal probe was inserted and the symptoms of ileus disappeared, but after taking food by mouth, the picture of ileus returned. CT of the abdomen and pelvis was performed, which showed circular, high density thickening of the walls in places in the area of the jejunum, indicating haemorrhage, but also the formation of haematoma in the wall structure. After administering factor VIII, the symptoms of ileus ceased, and the patient recovered completely. **Conclusion:** This unusual presentation of haemophilia with bleeding in the wall of the small intestine is very rare and has only been seen in a few cases in the world. CT diagnosis defined the cause of the obstruction and saved the patient from an unnecessary surgical procedure.

Key words: ileus, haemophilia, bleeding.

1. INTRODUCTION

Haemophilia is a congenital blood ailment characterized by the lack of coagulating factor VIII (haemophilia A) or factor IX (haemophilia B).

Severe forms of haemophilia may present with bleeding. The most frequent sites of bleeding are the soft tissue, the joints, the urinary tract, and much more rarely the gastrointestinal tract (1). Gastrointestinal haemorrhage has an incidence of 17.5–25% in haemophiliacs and causes death in 4% of this population overall (2).

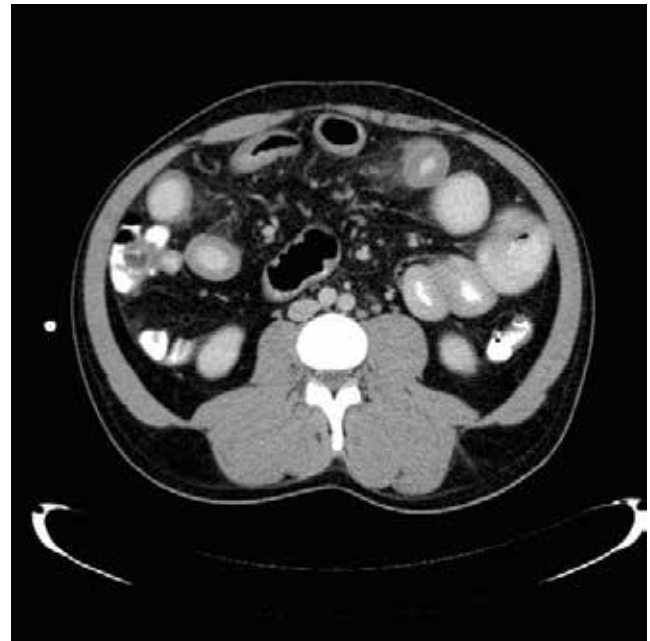
The complications of intramural bleeding are acute intestinal obstruction, but also the rupture of the haematoma in the lumen or in the peritoneal space (3). This case presents a patient with haemophiliac ileus of the small intestine, where CT diagnostics defined the cause of the obstruction and saved the patient unnecessary surgery.

2. CASE PRESENTATION

The patient was admitted in the evening as an emergency case, due to a distended abdomen, nausea, vomiting and the clinical picture of ileus. The native abdomen in a



Figure 1. Air fluid levels with moderate distension of the relevant bowel loops.



Figures 2 and 3. In the area of the jejunum circular high density thickening of the walls in places, indicating haemorrhage, but also the formation of haematoma in the wall structure.

standing position presented air fluid levels with moderate distension of the relevant bowel loops (Figure 1).

A nasal probe was inserted and the symptoms of ileus disappeared, but after taking food by mouth, the picture of ileus returned.

Laboratory test results: WBC 11/00, RBC 6.35, HCT 0.503, HGB 166. CRP 68.60.

a-PTT 84.8 (RV:26-28 s), Antithaemophilic factor A (AHG-A), F-VIII < 0.05 (RV:0.7-1.5 j).

CT of the abdomen and pelvis was performed, which showed circular high density thickening of the walls in places in the area of the jejunum, indicating haemorrhage, but also the formation of haematoma in the wall structure. The presence in places of air fluid levels suggested disturbed passage through the bowels (Figures 2 and 3).

After administering factor VIII the symptoms of ileus disappeared, and the patient gradually recovered completely.

3. DISCUSSION

Bleeding in the gastrointestinal tract in haemophiliacs is not rare, and is usually manifest either in melena or per rectum. Bleeding less often occurs in the intestinal wall, with the symptoms of intestinal obstruction. In this case, intramural bleeding had occurred in the small intestine (Figure 2) and the intramural haematoma was the cause of paralytic ileus and intestinal obstruction.

The most probable physiopathology of intramural haematomas of the bowel is characterized by the spread of the terminal arterial vessels as they leave the mesentery and penetrate the muscular layer of the intestinal wall (3).

An intramural haematoma may also cause intussusception, as another form of ileus (4). As bleeding is the most frequent cause of acute abdominal pain in haemophiliacs, an acute abdomen should be deemed to be bleeding, until proven otherwise by diagnostic methods (CT).

The diagnostic imaging technique of choice is computed tomography (5). It is a very useful method in diagnosing intramural haematoma, defining the area of the haemorrhage and revealing possible complications. Most intramural haematomas can be treated conservatively and spontaneous resolution occurs, where bleeding is treated by prompt compensation of factor VIII. CT helps to differentiate a surgical cause of acute abdomen from bleeding. Correct diagnosis and a multi-discipline approach are imperative in order to avoid unnecessary explorative procedures.

CONFLICTS OF INTEREST: NONE DECLARED.

REFERENCES

1. Ramadan KMA, Lowry JP, Wilkinson A, McNulty O, McMullin MF, Jones FGC. Acute intestinal obstruction due to intramural haemorrhage in small intestine in a patient with severe haemophilia A and inhibitor. *Eur J Haematol.* 2005; 75: 164-166.
2. Aronson DL. Cause of death in haemophilia A patients in the United States from 1968-1979. *Am J Hematol.* 1988; 27: 7-12.
3. Jarry J, Biscay D, Lepont D, Rullier A, Midy D. Spontaneous intramural haematoma of the sigmoid colon causing acute intestinal obstruction in a haemophiliac: report of a case. *Haemophilia.* 2008;14: 383-384.
4. Nakayama Y, Fukushima M, Sakai M, Hisano T, Nagata N, Shirahata A, Itoh H. Intramural hematoma of the cecum as the lead point of intussusception in an elderly patient with haemophilia A: report of a case. *Surg Today.* 2006; 36: 563-565.
5. Martínez Cecilia D, Torres Tordera EM, Arjona Sánchez A, Artero Muñoz I, Rufián Peña S. Spontaneous intramural small bowel hemorrhage: an event on the increase. *Gastroenterol Hepatol.* 2007; 30: 331-333.