Case Report

Surgery

A Rare Cause of Acute Abdomen Due to Spontaneous Intramural Haematoma of the Jejunum in a Patient on Warfarin.

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ABSTRACT

Spontaneous intestinal haematoma is a rare complication of anticoagulant therapy. The first symptom usually is abdominal pain, which is frequently accompanied by nausea and vomiting. A history of anticoagulant use with prolonged international normalized ratios in patients who present with abdominal pain should alert the physicians to search for this entity. An early diagnosis is crucial, because most of the patients are treated non-operatively, with a good outcome. We report here, an interesting case of an elderly male patient who presented as a case of acute abdomen to our hospital.

Key Words: Acute abdomen, Spontaneous, Intramural haematoma of the jejunum, Warfarin

INTRODUCTION

Warfarin is used extensively for therapeutic and prophylactic purposes. The most important complication of the anticoagulation treatment with Warfarin is bleeding. It is associated with various haemorrhagic complications, including haematuria, gastrointestinal bleeding, intracerebral haemorrhage, soft tissue haematoma, epistaxis, and retroperitoneal haematoma [1]. Bleeding, which presents as an intramural haematoma of the small intestine, is a rare complication, which is seen in 1 out of 2,500 patients [2].

Over-anticoagulation with warfarin is the most common cause of spontaneous, intramural small bowel haematoma. Other risk factors include haemophilia, idiopathic thrombocytopaenic purpura, laeukemia, lymphoma, myeloma, chemotherapy, vasculitis, pancreatitis, and pancreatic cancer [3, 4].

The presentation can vary from a mild abdominal pain to intestinal obstruction and an acute abdomen. If suspected pre-operatively, the diagnosis usually requires CT scan for its confirmation. Most of the patients can be treated non-operatively, with a good outcome.

CASE REPORT

A 65 years old male patient presented to the casualty department of our hospital with history of acute pain abdomen of one day's duration, which was associated with vomiting .He had a past history of bilateral lower limb ischaemia, for which he was anticoagulated with Warfarin. On examination, he was found to be haemodynamically stable. His abdomen was mildly distended and there was tenderness and rebound tenderness in the periumbilical region, which was associated with some guarding and rigidity. Bowel sounds were present and his rectal examination was unremarkable. The blood tests revealed normal haemoglobin, a mildly elevated white cell count (11,500/cu.mm) and a grossly deranged International Normalized Ratio (INR) 13.34. Ultrasound of the abdomen showed dilated bowel loops .CT scan of the abdomen showed a long abnormal loop of thick walled jejunum .A diagnosis of spontaneous, intramural haematoma of the jejunum was made.

He was treated conservatively with nil by mouth, intravenous fluids, and nasogastric aspiration. Fresh frozen plasma and vitamin K were given to normalize his clotting parameters. The patient improved clinically and he was allowed to start with oral fluids and a soft diet. The clotting parameters normalized and he was discharged to go home on a normal diet after one week.

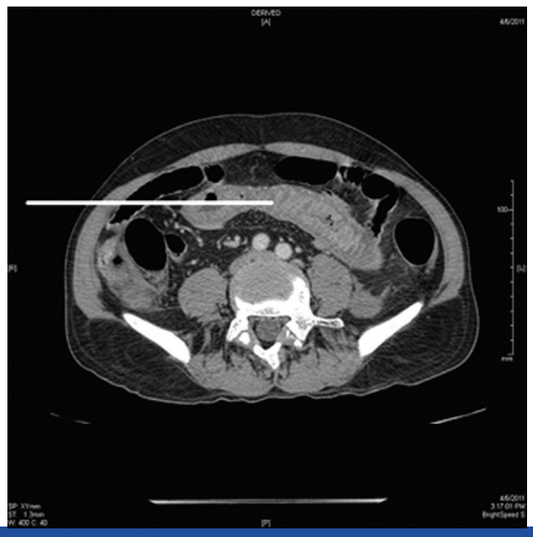
DISCUSSION

Spontaneous intramural haematoma of the jejunum is a rare complication of anticoagulation therapy. In 1965, Walter Goldfarb published a series of eleven patients with intestinal haemorrhage which was related to oral anticoagulation therapy [5]. Warfarin toxicity still remains the dominant cause, accounting for the vast majority of patients [3]. The small bowel is affected in up to 85% of the occurrences of haematoma, with the jejunum being the most affected region, in contrast to the post-traumatic findings which affect the duodenum more [3]. The incidence of spontaneous intramural haematoma is reported to be 1 per 2,500 anti-coagulated patients [2]. The mean age at presentation in one recent series of 13 patients was 64 years; 15% of the patients in this series had multiple haematoma [2].

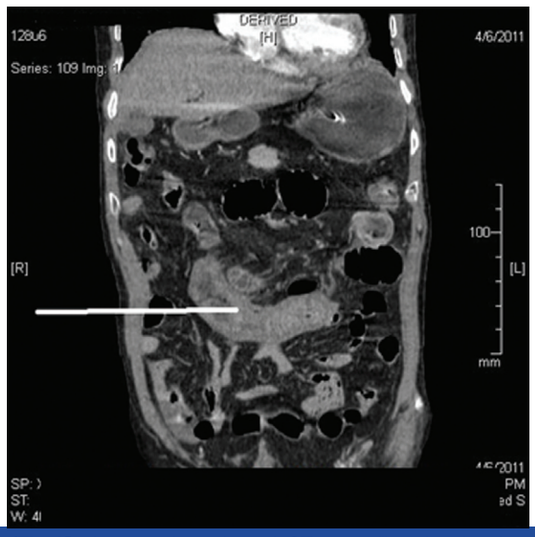
The presentation can vary from mild, vague abdominal pain to intestinal obstruction and an acute abdomen [1,4]. The haemorrhage is usually located in the submucosal layer of the bowel and it originates from a small vessel that produces slow bleeding. Haemorrhagic ascites can be present and it is related to the leakage of blood from an engorged, thickened and inflamed bowel wall, with the submucosal bleeding extending into all the layers [1,3]. In addition to intramural bleeding, intraluminal, intramesenteric and retroperitoneal haemorrhage can also occur, especially when the duodenum is involved [3].

Abdominal CT is the key for its diagnosis, with the characteristics including circumferential wall thickening, intramural hyperdensity, luminal narrowing, intestinal obstruction, and hyperdense ascites.

The first step in the treatment of acute intramural small bowel haematoma is the discontinuation of the anticoagulant medication and the correction of the coagulation parameters with fresh-frozen plasma and vitamin K. Operative intervention is only indicated if there is significant intraluminal haemorrhage, bowel perforation or ischaemia [1, 2, and 6].



[Table/Fig-1]: Axial CT scan film showing intramural haematoma of a segment of jejunal loop



[Table/Fig-2]: A coronal section of CT scan film showing intramural haematoma of segment of jejunal loop

CONCLUSION

Spontaneous small bowel haematoma is a rare clinical entity. It should be considered in any patient on long-term anticoagulation therapy, who present with an acute abdomen. CT, especially non-enhanced CT, is a valuable tool in the diagnosis of this condition. An early diagnosis is crucial, because most of the patients can be treated non-operatively, with a good outcome.

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DECLARATION ON COMPETING INTERESTS:
No conflicting Interests.

Date of Submission: **Aug 14, 2011**
Date of per review: **Aug 26, 2011**
Date of acceptance: **Sep 03, 2011**
Date of Publishing: **Nov 11, 2011**