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Emergency Radiology

Isolated Post-Traumatic Colonic Intramural Hematoma: A Rare Complication

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Abstract

Colonic intramural hematoma is a rare and poorly described complication of abdominal trauma, preferentially involving the duodenum or small intestine, and much more rarely the colon. Colonic intramural haematomas are mainly associated with abdominal trauma, anticoagulant therapy, coagulation disorders or haemorrhagic disease. We report the case of a 71-year-old man who had been involved in a road traffic accident with an abdominal point of impact. An emergency abdomino-pelvic CT scan was ordered as part of a lesion assessment, which revealed an isolated colonic intramural hematoma. The patient was monitored but not operated on. The outcome was favorable.

Keywords: Colonic Intramural Hematoma, Abdominal Trauma, Road Traffic Accident, Anticoagulant Therapy, CT Scan. Copyright © 2025 The Author(s): This is an open-access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY-NC 4.0) which permits unrestricted use, distribution, and reproduction in any medium for non-commercial use provided the original author and source are credited.

INTRODUCTION

Colonic intramural haematoma is a rare entity, but one that needs to be taken into account, given the risk of haemorrhage. It is caused by a number of etiologies, notably post-traumatic and iatrogenic.

It presents a clinical picture of abdominal pain, lower GI haemorrhage and, rarely, colonic occlusion. The examination of choice is the CT scan, which confirms the diagnosis and reveals a spontaneously hyperdense intramural formation.

CASE REPORT

We report the case of a 71-year-old patient, with no particular pathological surgical or medical history, who presented to the emergency department for an injury assessment, following a public road trauma, with an abdominal point of impact. The patient was hemodynamically and respiratorily stable, presenting with diffuse abdominal pain, most marked in the right flank. An abdomino-pelvic CT scan was performed to rule out or confirm traumatic lesions, and revealed a well-limited, oval formation with regular contours, spontaneously hyperdense, non-enhanced after injection of PDC, with no other associated lesions, in connection with an isolated colonic intramural hematoma (figures a, b and c). The patient was monitored, with a good clinical course.

Case Report



Figure 1: PDC-free abdominal-pelvic CT scan, axial (a), sagittal (b), coronal (c) sections, showing isolated colonic intramural hematoma

DISCUSSION

Abdominal trauma is increasingly common in emergency rooms, and continues to be associated with significant morbidity and mortality despite early diagnosis and treatment. The liver, spleen and small intestine are the most frequently traumatized intraabdominal organs [1].

Trauma to the colon is rare, accounting for only 3 to 5% of all injuries. Among these, intramural hematoma of the colon is a rare complication, and the acute form is rarer than the chronic form [2]. The rectum and sigmoid are the sites most affected by trauma [3].

Clinical symptoms vary in severity: abdominal pain, intestinal obstruction, lower gastrointestinal haemorrhage, haemorrhagic shock. Physical examination may reveal localized or diffuse abdominal tenderness and peritoneal irritation [3].

imaging, Advances in cross-sectional principally CT scanning, have contributed to the early and accurate recognition of this condition. Unenhanced CT findings have been reported previously (4) and homogeneous, symmetrical include intramural thickening with hyperdense material (30-80 H) in the bowel wall. Hyperdensity of the intestinal wall can be seen within the first 10 days of symptom onset and can help distinguish this condition from other infiltrative processes that can affect the small intestine, such as malignancy and infection [4]. However, hyperdensity diminishes as the hematoma ages, evolving into a hypodense area that may mimic an intramural cystic lesion [4, 5].

Isolated colonic haematomas with stable patients generally resolve over time, without short-term complications [6].

CONCLUSION

Traumatic colon hematoma is a rare condition in all abdominal trauma. CT scanning is the gold standard for confirming the diagnosis and guiding therapeutic management.

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