Idiopathic intramural hematoma of sigmoid colon.
A case report

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Intramural hematoma of the colon is rare. It may be "spontaneous" in patients with anticoagulant therapy or blood dyscrasia or caused by blunt abdominal trauma. An uncertain origin is also reported, so we have also "idiopathic hematoma". The AA report a new case of uncertain origin and review the literature. The diagnosis is difficult. Symptoms and signs of intestinal obstruction or colic bleeding are often present. Rx plain abdomen and colonoscopy are not diriment. Angio-TC is useful for detailed diagnosis. Resection of colic segment with hematoma is the gold standard therapy, but evacuation of hematoma might be considered. The reported data show that also colic intramural hematoma should be taken into account in cases of colic obstruction or bleeding. This diagnosis should be considered specially in patients with anticoagulant therapy or referred blunt abdominal trauma.

KEY WORDS: Colic bleeding, Intramural colic hematoma, Intestinal obstruction

Introduction

Intramural hematoma of the colon is rare: only 27 cases have been reported in the literature in the last 20 years. Blunt abdominal trauma, anticoagulant therapy and blood dyscrasia are the common causes [1-10]. Cases of uncertain origin are extremely uncommon [11].
Symptoms and clinic signs are not specific, presenting usually as bowel occlusion [2-3,11.] Therefore, intramural hematoma of the colon raises particular diagnostic and therapeutic issues [1-3.]
This study wish to aid more knowledge about this rare disease. Therefore we report one recently observed case of "idiopathic" sigmoid intramural hematoma, and review the literature.

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Case report

A 66–year–old–man has recently come to our observation, because symptoms and signs of intestinal occlusion. Left hemiparesis, sphincterial incontinence. diabetes mellitus, hypertension and malnutrition were co-morbidities. Anticoagulant therapy or abdominal trauma had not been reported. Laboratory findings at admission showed anemia (Hb 6.8g/dl, Ht 20%), normal white blood cells count and low levels of serum albumin (1,9g/dl). Plain abdomen x ray showed dilatation of colon until sigmoid. An urgent colonoscopy showed three blue and roundish formations at 20 cm, 18 cm and 15 cm from anal margin in submucosal layer. The surface was covered with normal colic mucosa. Subsequently, contrast-enhanced CT imaging revealed in abdomen a law-density mass measuring 9 cm sticked to sigmoid pre-occlusive area (Fig. 1).
Waiting to define the diagnosis , nasogastric tube decompressing has been positioned, TPN and red blood cells transfusion had been administered. At third day from admission, a profuse colic bleeding led us to repeat the colonoscopy which showed a solution of continuity of the bowel wall (3 cm in diameter) at 18 cm from anal

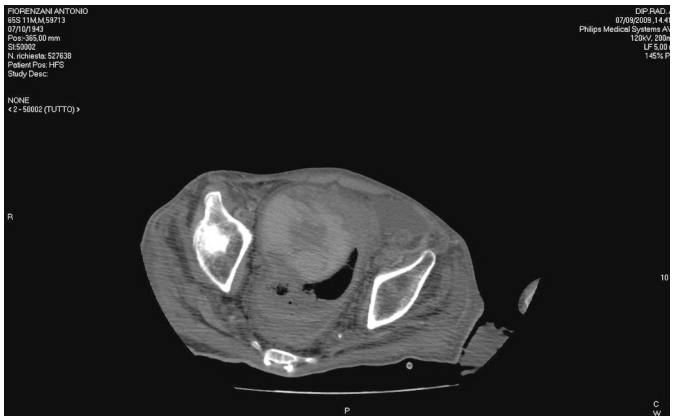

Fig. 1: Idiopathic intramural hematoma of sigmoid colon.
Contrast-enhance CT imaging revealed in abdomen a law-density mass measuring cm 9 sticked to sigmoid colon.

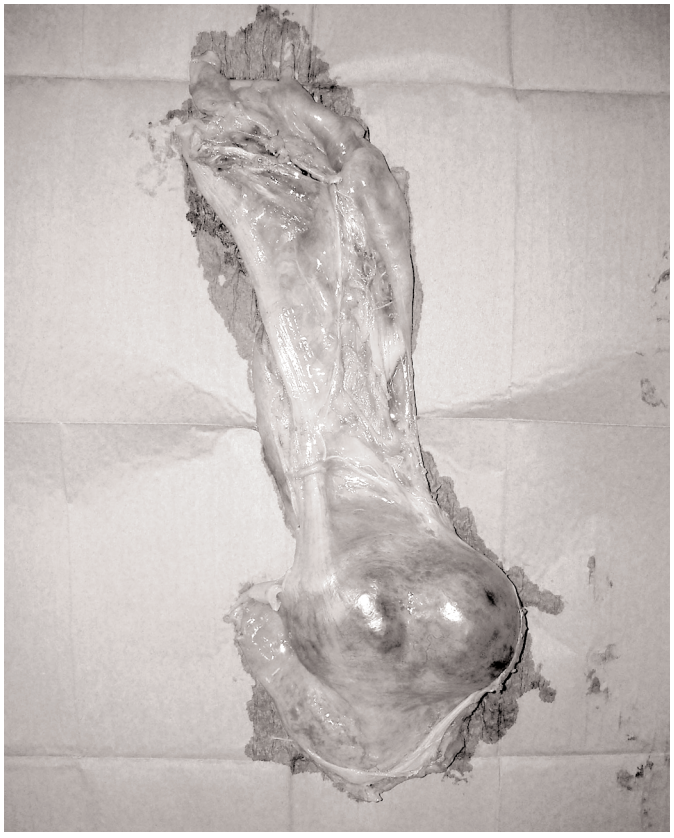

Fig. 2: Idiopathic intramural hematoma of sigmoid colon.
Three red intramural masses of the sigmoid colic may be observed in the closed operative specimen.

margin. Suspecting diagnosis of perforated mass into the colon, an urgent surgery was planned. At laparotomy, three red intramural masses of the sigmoid were present. Considering the poor general condition of the patient and the uncertain diagnosis of the masses, we opted for sigmoid resection (Figg. 2, 3) according to Hartmann procedure. Histopathology findings of the surgical specimen showed "submucosal hematomas". The postoperative course was uneventful and the patient was discharged in mild general condition on postoperative nineteen day.

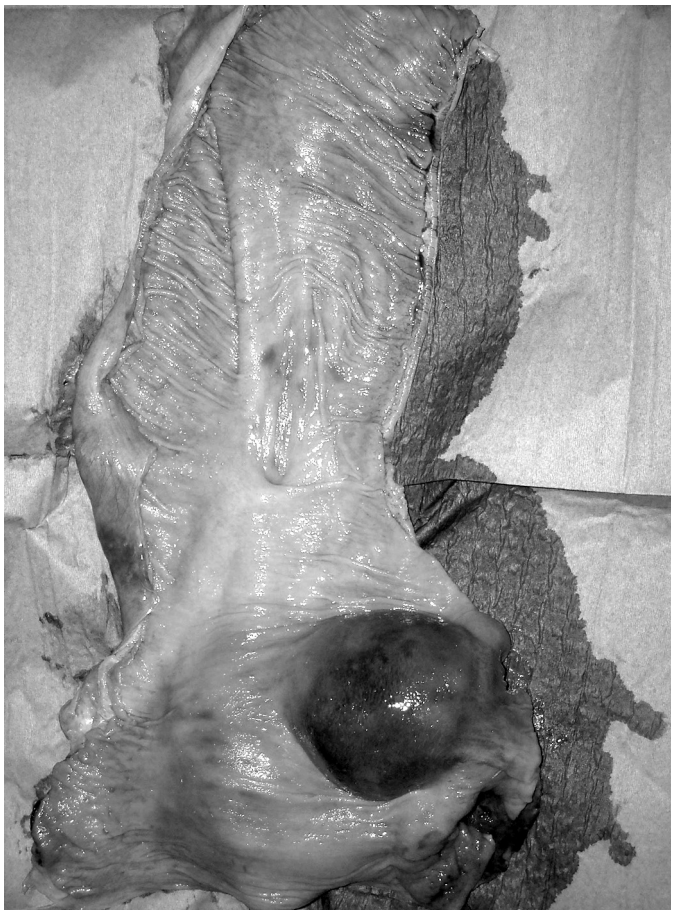

Fig. 3: Idiopathic intramural hematoma of sigmoid colon.
The open operative specimen show the submucosal site of the haematomas.

Discussion

Intramural hematoma of the colon is a rare disease [1-3], as the all intramural hematomas of other segments of gastrointestinal tract [12-14].
Intramural colic hematoma may be secondary or "spontaneous".
Blunt abdominal trauma is the common cause of the first, even if, recently, some cases had been reported after stapled hemorroidectomy [15]. Anticoagulant therapy, blood dyscrasia are frequently associated with the second. However, the causes are unknown in 1% of spontaneous [3,11], so that the hematomas must been considered "idiopathic", as in our case. The hematomas are usually found in the submucosal layer [6,11].
Single hematomas have been reported usually [2], however multiple hematomas might been found, as in our case.
Symptoms and signs of intestinal occlusion had been often reported [1-3,11]; intestinal perforation, bleeding and

hemoperitoneum are rarely [2]. Intestinal occlusion and colic bleeding, as in our case, was associated in only three cases [1-2,11]. The diagnosis of intramural hematoma of the colon is difficult [1-4], because clinic symptoms and signs are not specific. Plain abdominal x-ray films reveal only typical patterns of colic obstruction. Colonoscopy may be useful but not diriment, showing "blue and roundish formations" in submucosal layer [11], as in our case. Only angio-CT scans might be capable of yielding detailed diagnosis [1-3,11], if intramural hematoma has been considered.

The resection of colic segment with hematoma is the gold standard therapy [1-3,11], with a good outcome. The only evacuation of the hematoma is possible if colic mucosal perforation is absent; on the contrary, as in our case, colic resection is mandatory [2]. If the diagnosis of colic intramural hematoma is performed in patients with anticoagulant therapy, and symptoms and clinic signs showing urgent surgery are absent, conservative therapy may be indicated [1-4]. Cessation of anticoagulant therapy might be resolved colic haematomas in 30% of cases [11]. However if the lesions do not resolve spontaneously within a few week, the surgical therapy is necessary [11] because the risk of complications is high [1-3,11]. Postoperative recurrent intramural hematoma have not been reported.

In conclusion the our reported case and literature data show that also colic intramural hematoma should be taken into account in cases of colic obstruction or bleeding, if an abdominal mass is present. This diagnosis should be considered specially in patients with anticoagulant therapy or referred blunt abdominal trauma.

Riassunto

L'ematoma intramurale del colon è una evenienza alquanto rara. Può essere "spontaneo" in soggetti sottoposti a terapie anticoagulanti o portatori di alterazioni della crasi ematica, quale l'emofilia, o causato da traumi chiusi dell'addome. Peraltro sono stati riportati in letteratura due casi, cosi detti "idiopatici, in cui non è stato possibile individuare la presenza delle suddette o di altre cause. Con questo lavoro, gli autori, riportando un nuovo caso di "ematoma idiopatico" e rivisitando i dati della letteratura, intendono contribuire ulteriormente alla conoscenza di tale rara patologia.

La diagnosi di ematoma intramurale del colon è difficoltosa in quanto il quadro clinico è aspecifico. Infatti sono presenti sintomi e segni clinici di occlusione intestinale o, meno frequentemente, di sanguinamento colico. Rx diretta addome nel primo caso e colonscopia nel secondo non sono sempre esaustivi. L'AngioTac è invece dirimente. La resezione del segmento colico interessato dall'ematoma è l'intervento di scelta. In alcuni casi può essere presa in considerazione la sola evacuazione dell'ematoma. Recidive postoperatorie non sono riportate.

Le suddette osservazioni devono indurre a sospettare anche la diagnosi di ematoma intramurale del colon in caso di occlusione o sanguinamento colico, specie in pazienti con malattie emolitiche o sottoposti a terapia anticoagulante.

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