



Case Report

Inferior mesenteric artery aneurysm revealed by massif rectal bleeding, case report



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ARTICLE INFO

Keywords:

Inferior mesenteric artery
Aneurysm
Shock

ABSTRACT

Introduction: Inferior mesenteric aneurysms are rare, usually asymptomatic. Their diagnostic is challenging based on clinical examination, ultrasonography, and abdominal CT scan; surgery remains the gold standard of treatment.

Case report: In this paper, we will report a clinical case of 62 years old man admitted to the emergency department for massif rectal bleeding due to inferior mesenteric aneurysm fistulization in the transversal colon one month after a left colectomy; the treatment was surgical consisted of a Ligation.

Conclusion: IMA aneurysm is a rare condition, usually asymptomatic, and it might be revealed by various symptoms, including massif rectal bleeding.

1. Introduction

Inferior mesenteric artery aneurysm (IMA) is an infrequent condition representing 0.5% of the splanchnic arteries after splenic artery aneurysm (60%) and hepatic artery aneurysm (20%) [1,2].

In this paper, we will represent the case of IMA aneurysm fistulized in the transverse colon revealed by massif rectal bleeding.

2. Case presentation

A 62 years old man with a history of diabetes and left colectomy was admitted to the emergency department for shock state due to massif rectal bleeding. The initial physical examination was as follow: blood pressure of 50/30 mmHg, tachycardia at 140 beats/min, oliguria at 0.3 cc/kg/h, Glasgow coma scale at 12/15 (eyes opening 3/4, Motor response 5/6, and verbal response 4/5), pulse oxymetry at 80% on ambient air with active rectal bleeding on rectal examination. The initial complete blood count was Hg 3 g/dl, platelets 85,000/mm³, fibrinogen 1.6 g/l, prothrombin ratio at 55%, lactate at 6 mmol/l with normal renal

and hepatic function.

The initial management consist on fluid resuscitation by 500 cc of saline serum, norepinephrine perfusion to maintain a median blood pressure at 65 mmHg, acid tranexamic (1g) and transfusion of 4 fresh frozen plasma, 4 packed red blood cells and 4 platelets units, after hemodynamic stabilization, an abdomino – pelvic CT scan was performed showing a massif aneurysm of the IMA measuring 91*66 mm, fistulized in the transverse colon with signs of rupture (Fig. 1).

After hemodynamical stabilization, the patient was taking to the operating room OR for hemostatic gesture; the surgical laparotomy founds a hematoma in aorto-iliac vascular axis, fistulized in the transverse colon with active bleeding of branch of the inferior mesenteric artery (Fig. 2). It was treated by ligation of the inferior mesenteric artery with control of the bleeding.

The patient was admitted to the intensive care unit for postop follow-up with good outcomes, the patient was discharged after 7 days.

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<https://doi.org/10.1016/j.amsu.2021.102425>

Received 1 May 2021; Received in revised form 17 May 2021; Accepted 22 May 2021

Available online 1 June 2021

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3. Discussion

IAM aneurysms are rare and asymptomatic most of the time. However, Duke and al have suggested that they are probably more common than what is reflected in the literature [2]. Clinical manifestations of IAM are usually asymptomatic, and the rupture rate is between 20% and 50% [3,4]. The main cause of IAM aneurysm is degenerative, followed by Takayasu disease, pseudoaneurysm post-surgery, which was our case, and polyarteritis nodosa [5], the clinical manifestations of this condition are variable, in our case, it was revealed with shock state due to massive rectal bleeding. The aneurysm localization in most cases is proximal; in our patient, the aneurysm was fistulized in the transverse colon leading to massive rectal bleeding, surgical exploration found a massive hematoma in the aortoiliac axes fistulized in the transverse colon with active bleeding of the IMA. The abdominal scenography and CT scan are the gold standard for the diagnosis [6], the treatment is mainly surgical consisting on the ligature, resection, and reimplantation of the artery or

the prosthesis as well as resection with saphenous vein bypass [7]. Endoscopic treatment is also an option, but in our case, due to hemodynamical instability, the surgical treatment was our best option.

4. Conclusion

IMA aneurysm is a rare condition, usually asymptomatic, and it might be revealed by various symptoms, including massive rectal bleeding. The abdominal sonography and CT scan are the gold standard; surgery and endoscopic treatment are proposed depending on the patient hemodynamic state.

The work has been reported in line with the SCARE 2020 guideline [8].

Ethical approval

The ethical committee approval was not required give the article

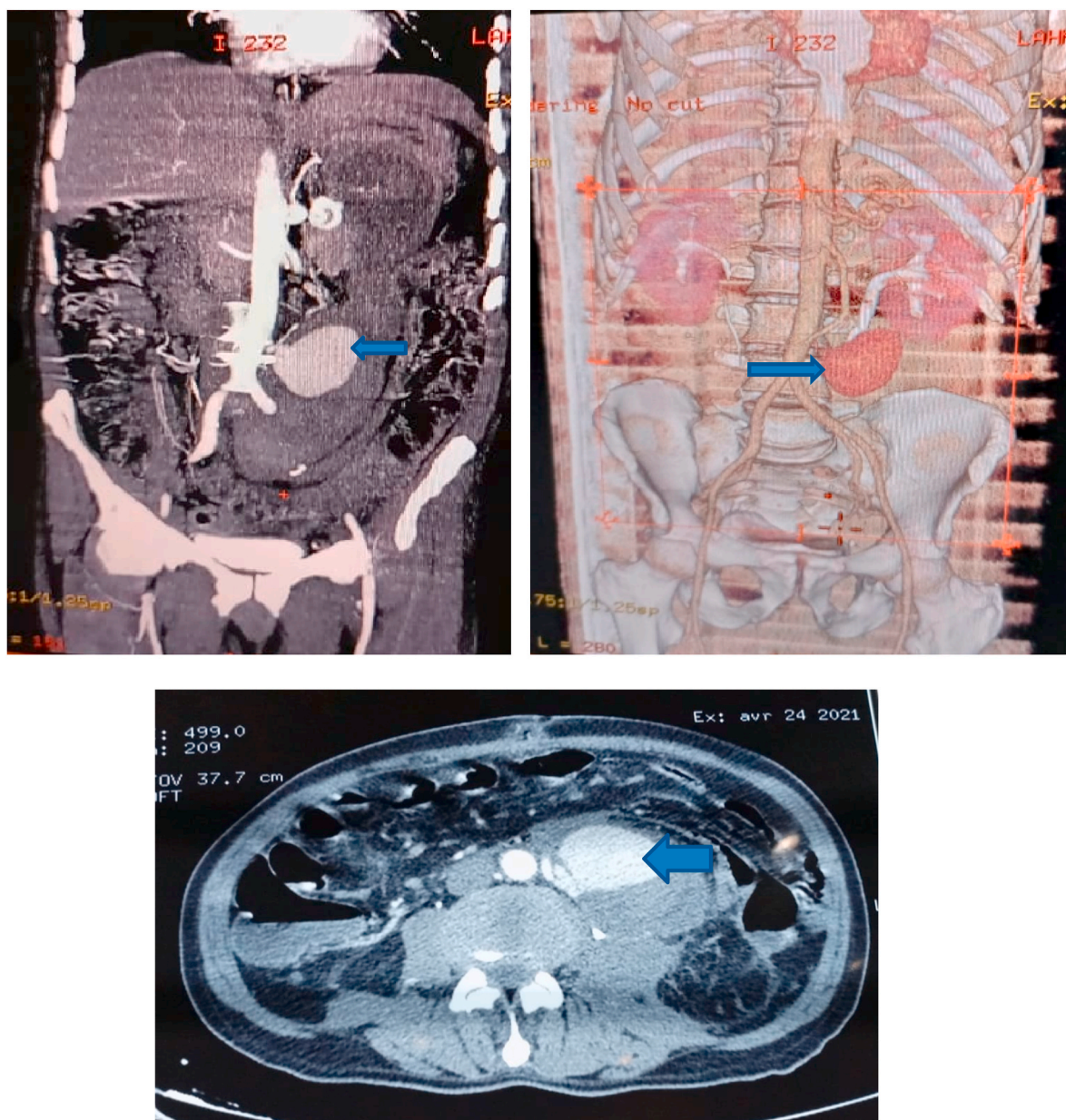


Fig. 1. Abdominal CT scan showing inferior mesenteric artery aneurysm (blue arrow). (For interpretation of the references to colour in this figure legend, the reader is referred to the Web version of this article).

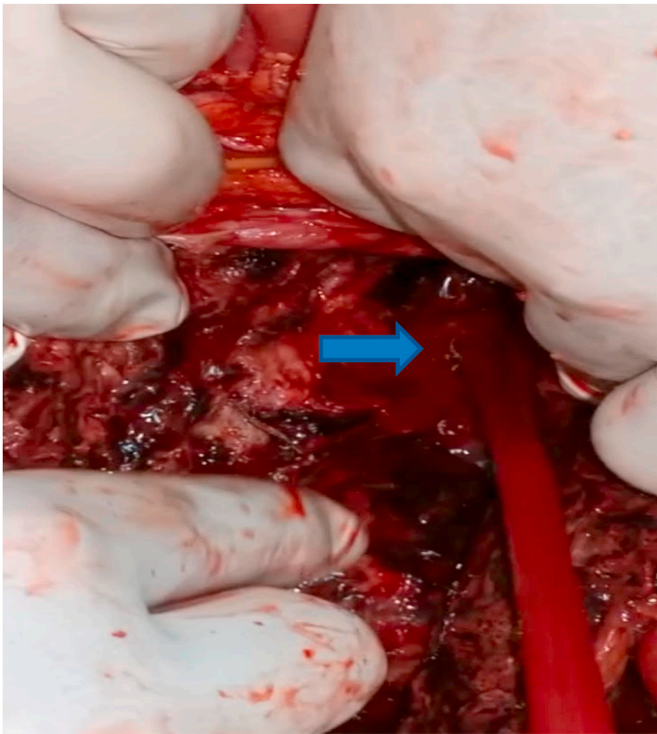


Fig. 2. Aneurysm of Inferior mesenteric artery (blue arrow). (For interpretation of the references to colour in this figure legend, the reader is referred to the Web version of this article).

type (case report). However, the written consent to publish the clinical data of the patients was given and is available to check by the handling editor if needed.

Sources of funding

None.

Author contribution

EL KAOUINI Abderrahim: study concept, Data collection; data analysis; writing review & editing.

BERRAJAA Sara: Study conception, data analysis.

AABDI Mohammed: Study conception, data analysis.

MERBOUH Manal: contributor.
 EL MEZZEOUI Sanae: contributor.
 EL AIDOUNI Ghizlane: contributor.
 BKIYAR Houssam: contributor.
 JABI Rachid: contributor.
 BOUZIANE Mohammed: supervision and data validation.
 HOUSNI Brahim: supervision and data validation.

Research Registration number

This is not an original research project involving human participants in an interventional or an observational study but a case report. This registration was not required.

Guarantor

EL KAOUINI Abderrahim.
 BERRAJAA Sara.

Consent

Obtained.

Declaration of competing interest

None.

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