



Case report

Surgical treatment for bleeding ileal varices: A case report

Anis Haddad, Hazem Beji^{*}, Youssef Chaker, Houcine Maghrebi, Mohamed Jouini, Montassar Kacem

Department of General Surgery A Hospital La Rabta Tunis, Tunisia

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ABSTRACT

Introduction and importance: Bleeding from ileal varices is a rare and a life-threatening situation. Its management is difficult and includes endoscopic, surgical and interventional radiology treatment.

Here we report a successful emergency surgery for bleeding ileal varices in a patient with cirrhosis due to autoimmune hepatitis.

Presentation of a case: A 60-year-old woman was admitted for rectal bleeding. She had a history of autoimmune hepatitis. She was treated by endoscopic ligation for oesophageal varices.

Eso-gastro-duodenal fibroscopy and colonoscopy failed to reveal the bleeding site.

CT scan was then performed showing ileal varices due to a portocaval shunt, there was a communication between the superior mesenteric vein and the right internal iliac vein.

As the embolization was not feasible and the bleeding did not stop, an exploratory laparotomy was performed showing two dilated veins on the surface of the ileal wall, communicating with the right internal iliac vein. We performed a ligation of the vessels. Postoperative course was uneventful.

Discussion: Ectopic varices are a rare case of gastrointestinal bleeding. Most of those patients have portal hypertension and liver cirrhosis.

Diagnosing bleeding ileal varices is difficult because endoscopic examination can't always reveal the bleeding site.

Interventional radiology is a good option for patients having bleeding ileal varices knowing that they often have advanced liver cirrhosis making them poor candidates for surgery.

Haemostasis by endoscopy is often temporary and bleeding frequently recurs.

Surgery should be considered if non-invasive treatments failed to ensure the haemostasis.

Conclusion: Bleeding ileal varices is a rare situation. Interventional radiology and endoscopy can be good options. If not feasible, surgical treatment should not be delayed.

1. Introduction and importance

Gastro intestinal bleeding in patients with portal hypertension is usually due to esophagogastric varices. Extra esophago-gastric varices are called ectopic varices.

Ileal varices are very rare and represent 17% of the bleeding ectopic varices [1]. Bleeding from ileal varices is a life-threatening situation. Its management is difficult and includes endoscopic, surgical and interventional radiology treatment [2].

Here we report a successful emergency surgery for bleeding ileal varices in a patient with cirrhosis due to autoimmune hepatitis.

This work has been reported in line with the SCARE 2020 criteria [3] and the PROCESS guidelines [4].

2. Presentation of a case

A 60-year-old woman was admitted to the surgery department A of the hospital La Rabta for rectal bleeding. She had a history of autoimmune hepatitis for 15 years treated with corticosteroids. She had a total hysterectomy by a midline incision for an endometrial tumour two years prior. She was treated by endoscopic ligation for oesophageal varices five years prior. She had no family medical history.

On the physical examination at admission, her blood pressure was 100/60 mmHg and pulse rate 100/min, regular. We assessed shifting dullness.

Laboratory studies revealed haemoglobin of 8.9 g/dl, platelet count of 73,000/ μ l, prothrombin time of 43%, total bilirubin of 17 mg/dl,

^{*} Corresponding author at: 52, Street of roses, 8050 Hammamet, Tunisia.

E-mail addresses: anis.haddad@fmt.utm.tn (A. Haddad), hazembj@gmail.com (H. Beji).

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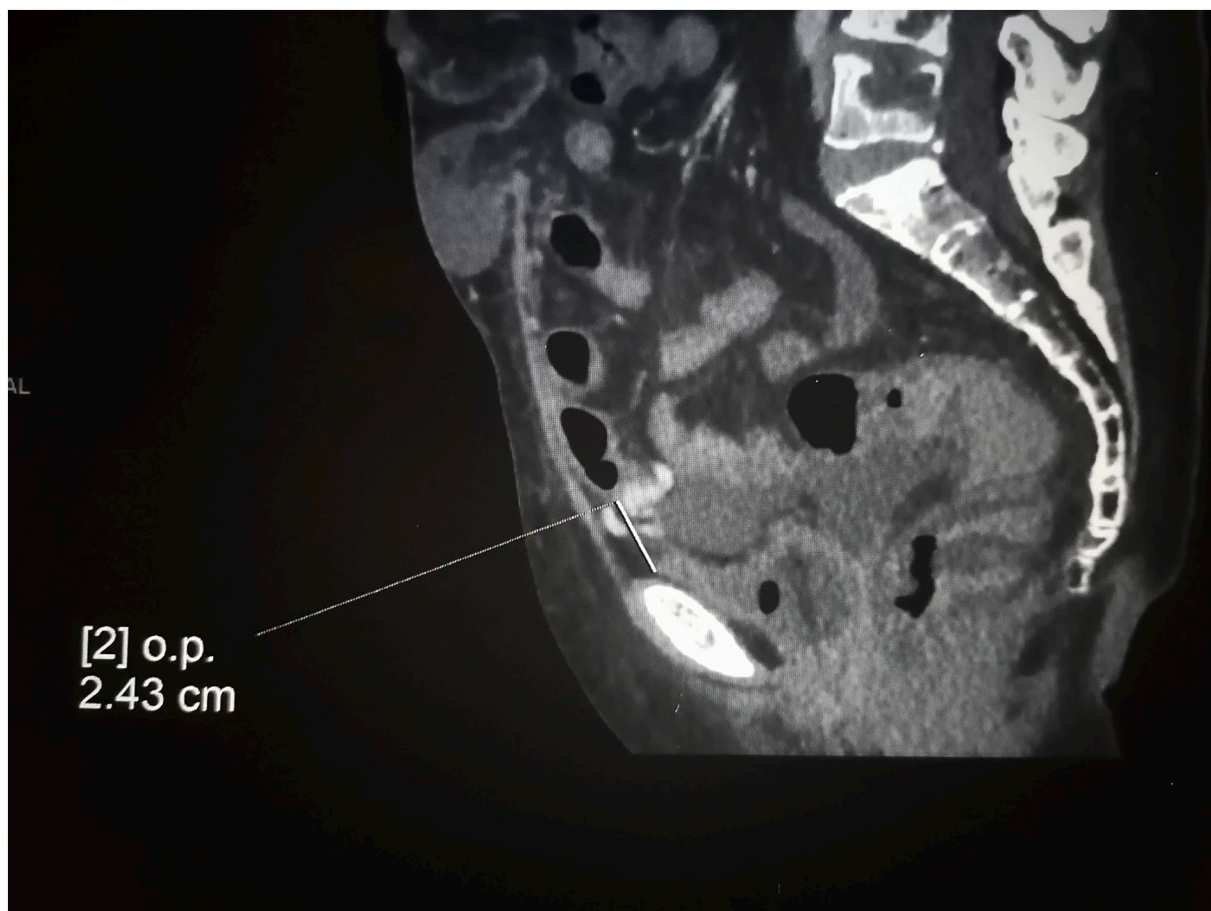


Fig. 1. CT scan in the sagittal plane showing the ileal varices.

glutamic oxaloacetic transaminase of 69 IU/l and glutamic pyruvic transaminase of 36 IU/l.

Eso-gastro-duodenal fibroscopy was performed showing no evidence of bleeding. Total colonoscopy showed bright red blood in the colon but failed to reveal the bleeding site.

The patient required three units of packed red cells during the initial 4 days of hospitalization to keep the patient hemodynamically stable. There was recurrent bleeding.

CT scan was then performed showing ileal varices due to a porto-caval shunt, there was a communication between the superior mesenteric vein and the right internal iliac vein (Figs. 1 and 2).

Embolization was found to be not feasible by the radiologists. As the bleeding did not stop, an exploratory laparotomy was performed by a surgeon with five years of experience.

We opted for a laparotomy knowing that the patient had a total hysterectomy by a midline incision for an endometrial tumour two years prior. Therefore, the adhesiolysis could be dangerous with laparoscopy.

There were adhesions between the distant ileal loop and the abdominal wall 20 cm from the ileum end. There were two dilated veins on the surface of the ileal wall, communicating with the right internal iliac vein (Fig. 3).

We performed a ligation of the vessels. The bowel has kept a good vitality so we did not perform an enterectomy. Pathological examination revealed haemorrhages.

No further gastrointestinal bleeding occurred during the two-months follow up.

3. Clinical discussion

This is one of the rare cases describing ileal bleeding varices. The

absence of experienced interventional radiologists is a weakness to our work because the surgical treatment could have been avoided.

Ectopic varices are a rare case of gastrointestinal bleeding, accounting for only 1–5% of all variceal bleeding [5]. Most of those patients have portal hypertension and liver cirrhosis [6].

The clinical features that led to the diagnosis of ileal varices in our patient were; gastrointestinal bleeding, the evidence of portal hypertension due to autoimmune liver cirrhosis, the history of laparotomy two years prior and the CT scan findings.

Ectopic varices may be present in duodenum, jejunum, ileum, colon, anorectum, peristomal, biliary, peritoneal, retroperitoneal, umbilical, urinary bladder, uterine, ovaries, and other locations [7].

Portal hypertension in patients having adhesions due to previous surgeries is responsible of a collateral circulation between the abdominal wall and the small intestine. Varices are then formed under the intestinal mucosa caused by porto-caval anastomoses [8].

Diagnosing bleeding ileal varices is difficult because endoscopic examination can't always reveal the bleeding site.

Interventional radiology is a good option for patients having bleeding ileal varices knowing that they often have advanced liver cirrhosis making them poor candidates for surgery.

Haemostasis by endoscopy is often temporary and bleeding frequently recurs [9]. Medical therapy, such as terlipressin can be used [10].

Surgery was the best option for our patient as interventional radiology could not be done because the ruptured varix was impossible to access angiographically.

In summary, we reported a patient with autoimmune hepatitis and liver cirrhosis who had bleeding from ileal varices due to a porto-caval shunt. Knowing that endoscopic studies fail to reveal the bleeding site,

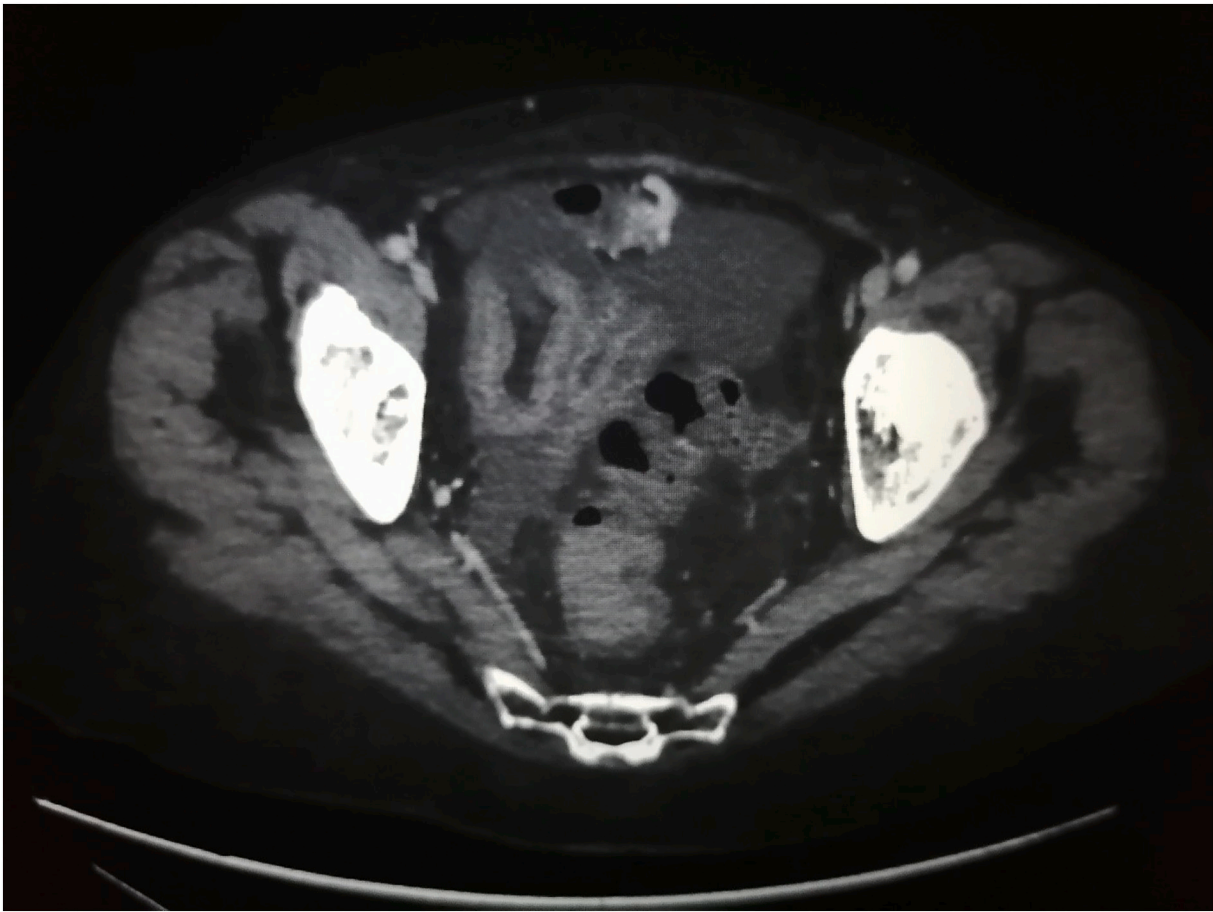


Fig. 2. CT scan in the axial plane showing the ileal varices.

such varices should be considered, and the CT scan is performant to confirm the diagnosis.

4. Conclusion

Bleeding ileal varices is a rare situation. It occurs usually in patients having portal hypertension. Diagnosis can be difficult due to the inefficiency of endoscopy.

Interventional radiology and endoscopy can be good options. If not feasible, surgical treatment should not be delayed.

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Ethical approval

Ethical approval for this study was obtained from the ethical committee of the hospital La Rabta.

Reference number: 1019/SC/21.

Patient consent

Written informed consent was obtained from the patient for publication of this case report and accompanying images. A copy of the written consent is available for review by the Editor-in-Chief of this journal on request.

Author contributions

Haddad Anis and Beji Hazem did the conception and design of the work, the data collection and the data analysis and interpretation.

Chaker Youssef and Maghrebi Houcine did the critical revision of the article.

Kacem Montassar and Mohamed Jouini did the final approval of the version to be published.

Registration of research studies

Not applicable.

Guarantor

Dr. Haddad Anis.

Dr. Beji Hazem.

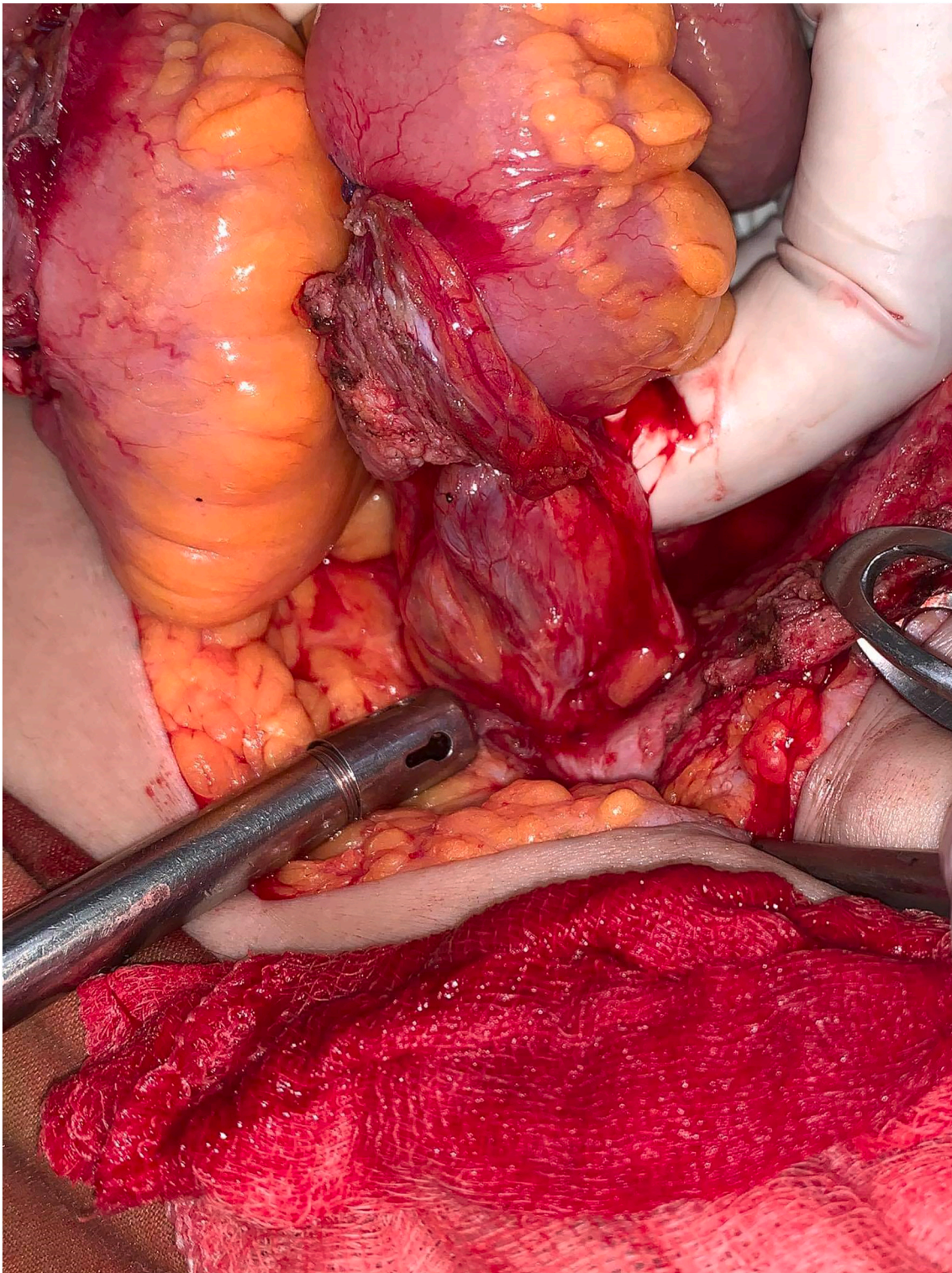


Fig. 3. Intraoperative view shows two dilated veins on the surface of the ileal wall.

Provenance and peer review

Not commissioned, externally peer-reviewed.

Declaration of competing interest

No conflicts of interest.

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