CASE REPORT

Successful percutaneous angioembolisation of bleeding jejunal varix by acrylate glue and coils

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SUMMARY

Portal hypertension is a common disease worldwide. One of its rare complications is bleeding jejunal varices which is usually asymptomatic and may present with gastrointestinal bleeding. We present a case of a jejunal bleeding that was successfully embolised with acrylate glue and embolisation coils. A middle-aged woman with a history of multiple abdominal surgeries for adenocarcinoma of right ovary, presented to us with multiple episodes of haematochezia. On a CT scan of the abdomen, she was diagnosed with chronic liver disease with portal hypertension, multiple varices at porto-systemic anastomosis and ectopic jejunal varix. She was treated by interventional radiologists by percutaneous embolisation of bleeding varix using glue and embolisation coils through a portal venous approach.

BACKGROUND

This is an unusual approach of treating the jejunal varix and only a few cases have been reported in literature.

CASE PRESENTATION

A middle-aged woman presented with a history of mucinous cyst adenocarcinoma of right ovary, for which she underwent transabdominal hysterectomy and bilateral salpingo-oophorectomy in 2007. Later she developed peritoneal deposits, also involving the right side of the colon, for which she underwent another surgery—right hemicolectomy and ileocolic anastomosis in 2008. She received chemotherapy in 2009 and 2010. Since then she was lost to follow-up.

In June 2013, she came in to the emergency room with haematochezia. She was managed conservatively. Her serum haemoglobin level was 6.4 gm/dL and she was transfused 2 units of packed cells. Her bleeding stopped. She was kept under observation for 2 days. She refused further investigation at that time and was hence discharged. After a few days, she again developed similar symptoms and was admitted.

INVESTIGATIONS

The patient's serum haemoglobin level was 9 g/dL. Her CT scan showed features of chronic liver disease with portal hypertension and multiple varices at porto-systemic anastomosis. An enlarged varix was identified in the paraumbilical region in continuation with the superior mesenteric vein. It was projecting into an adjacent small bowel loop

and was suspected to be the cause of episodic gastrointestinal bleeds (figure 1).

TREATMENT

Interventional radiology department was consulted for percutaneous angioembolisation as it was difficult for gastroenterologist to reach to that varix using endoscope.

The right branch of the portal vein was punctured percutaneously under ultrasound and fluoroscopy guidance and distal superior mesenteric venogram

Figure 1 CT scan of the abdomen (venous phase) showing a large paraumbilical varix (arrow).

Figure 2 Anteroposterior view and lateral view: angiogram showing catheter in superior mesenteric vein (SMV) outlining the abnormal varix (arrow). Dye also seen in normal tributaries of SMV.

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Figure 3 Postembolisation angiogram showing coils (arrowhead) and acrylate glue (white arrow).

was performed that revealed a tortuous varix in the lower mid-abdomen, with some focal aneurysmal dilation and draining into epigastric paraumbilical vein (figure 2).

Selective catheterisation of the varix was performed with a microcatheter (Progreat—Terumo, Japan) and embolised distally with microcoils (Cook Inc, USA). It was followed by embolisation of the abnormal varix with acrylate glue (Histoacryl—B/Braun, Germany). Postprocedure run shows complete exclusion of the abnormal vein with normal flow through tributaries of the superior mesenteric vein (figure 3).

OUTCOME AND FOLLOW-UP

The patient has been followed up for 4 months and has not had any episode of bleeding since the procedure. Her general condition has also improved.

DISCUSSION

Hepatic cirrhosis with portal hypertension is a common and widespread disease worldwide. One of the very rare manifestations of portal hypertension is a bleeding jejunal varix. These are usually asymptomatic but may present with gastrointestinal bleeding.^{1 2} Jejunal varices may present with three cardinal features of portal hypertension, history of abdominal surgery and bleeding per rectum.^{3 4} Variceal bleed can be treated non-surgically with endoscopic sclerotherapy, band ligation and endoscopic procedures as transjugular intrahepatic portosystemic shunts.⁵ Endoscopic sclerotherapy is usually successful in areas that can be approached by endoscopes; however, in

cases such as ours where endoscope could not reach the varix we recommended radiological intervention as a first-line therapy using small catheters to reach to that site and block it.

There are few cases of jejunal varices reported in literature which were embolised successfully percutaneously. Most of them were approached through trans-splenic route.⁶ Koo *et al*⁷ embolised jejunal varix through portal vein approach. Lim *et al*⁴ performed embolisation by direct puncture of the varix percutaneously. Sato *et al*⁵ performed embolisation of a jejunal varix using anhydrous ethanol and detachable coils. No case of percutaneous embolisation of a jejunal varix by acrylate glue was found in literature after thorough search.

In summary, it is a successfully treated case of jejunal variceal bleeding using embolisation coil and glue.

Learning points

- ▶ Jejunal/ectopic varices may develop in patients with cirrhotic, especially after surgeries.
- ▶ Percutaneous approaches may be helpful which may be less invasive.
- ▶ Care should be taken in embolising the normal vessels.

Contributors TUH and NA were involved in the writing of the manuscript, and care of the patient. RS contributed in the concept and writing of the manuscript, and also in the care of the patient. KHH participated in the writing of the manuscript.

Competing interests None.

Patient consent Obtained.

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