

# Unusual clinical umbilical hernia: pitfall

Floryn Cherbanyk,<sup>1</sup> Jean-Loup Gassend,<sup>1</sup> Olivier Martinet<sup>2</sup>

<sup>1</sup>Department of Surgery, HFR  
Fribourg Hôpital Cantonal,  
Fribourg, Switzerland

<sup>2</sup>Department of Surgery, Hôpital  
Riviera-Chablais, Montreux,  
Switzerland

## Correspondence to

Dr Floryn Cherbanyk; floryn.cherban@yahoo.fr

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## DESCRIPTION

A 75-year-old alcoholic male patient with severe malnutrition was admitted to the hospital with the diagnosis of pneumonia. The finding of a symptomatic umbilical hernia on patient examination mandated a surgical consultation with the question of an operative hernia repair.

Clinically, the abdomen was distended with spider angiomas. Palpation of the umbilical hernia was painless. The hernia content was not reducible. A suspicious murmur (Cruveilhier-Baumgarten murmur) was identified on auscultation of the umbilicus (figure 1). The abdominal

CT scan showed signs of portal hypertension. A large recanalised paraumbilical vein coursing from the left side of the portal vein through the falciform ligament and draining into a large umbilical varicose vein was visible. An enlarged right inferior epigastric vein originating from the umbilical varicose vein drained into the right femoral vein. The hernial sac contained only the umbilical varicose (figure 2A,B,C). On further investigation, it was discovered that the patient suffered from liver cirrhosis. These venous vascular abnormalities represented a portosystemic shunt in the context of portal hypertension caused by the liver cirrhosis.

Umbilical hernias constitute a frequent complication of liver cirrhosis. The natural course of these hernias is to complicate with bowel incarceration or skin rupture occurring. Urgent umbilical hernia repairs in the context of liver cirrhosis are associated to a sevenfold increase in mortality.<sup>1</sup> It is therefore advisable to operate these umbilical hernias on an elective basis before complications occurred.<sup>2</sup> Repair can be made with or without a mesh, the mesh technic having a lower recurrence rate but a higher rate of infection and of enterocutaneous fistula formation.

However, before undertaking any surgical treatment, the exact nature of the hernia contents needs to be determined in order to insure that it does not contain any vascular structures. If such is the case, the portal hypertension can be reduced medically and by transjugular intrahepatic portosystemic shunt (TIPS). In cases of variceal bleeding requiring urgent treatment, several options are available. The bleeding varix can be embolised radiologically or by injection of sclerosant into the varix. Emergency portosystemic shunt surgery can also be performed, though it carries a high morbidity and mortality.<sup>3</sup>

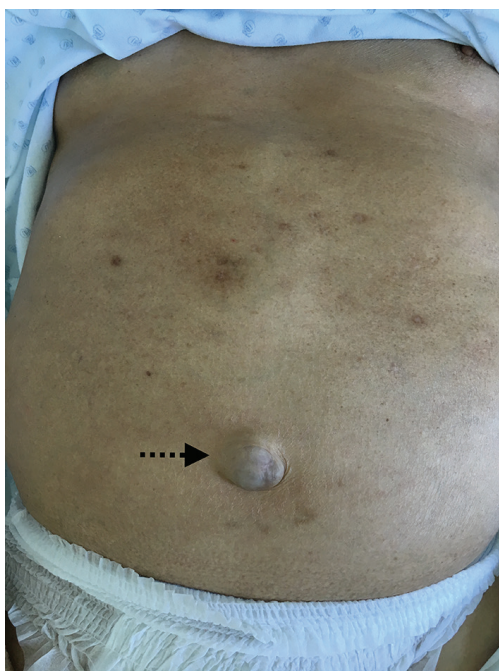


Figure 1 Umbilical 'hernia': clinical picture.

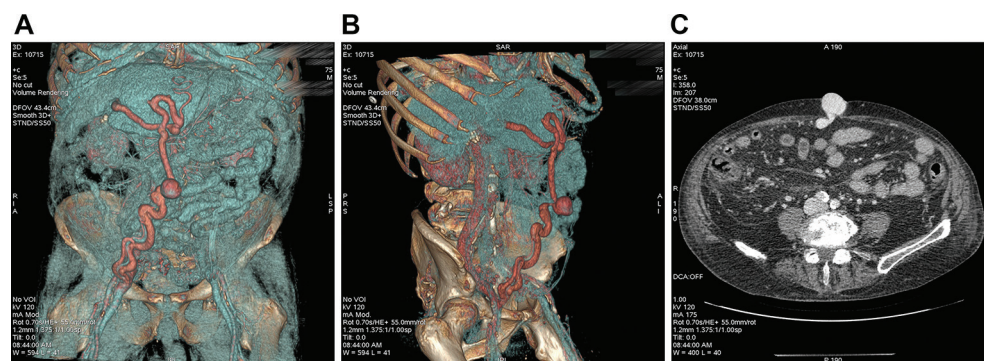


Figure 2 (A, B, C) Abdominal CT scan showing a large recanalised paraumbilical vein draining into a large umbilical varicose vein.



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## Learning points

- ▶ In the context of liver cirrhosis, both umbilical hernias and venous varices in the umbilical area are common.
- ▶ Imaging should be done in all cases of umbilical hernias to exclude the possibility of varicose veins being present in the hernial sack.
- ▶ Transjugular intrahepatic portosystemic shunt can reduce portal hypertension and decrease the risk of variceal bleeding.

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