

An unexpected cause of Cullen's sign: rupture of hepatocellular carcinoma

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A 57-year-old man was seen in the emergency department complaining of abdominal pain and periumbilical ecchymosis which he had been experiencing for 6 days. He was a known hepatitis B carrier and had a history of significant alcohol use for more than 30 years (80–100 g/d). Physical examination showed bluish discoloration at the periumbilical area (Cullen's sign) (**Figure 1**). Laboratory investigations did not suggest acute pancreatitis. However, they showed reactive hepatitis B surface antigen and an elevated level of alpha feto-protein (21.04 ng/ml). Computed tomography revealed multiple heterogeneous-enhancing masses with a localised high-density haematoma at the S6 nodule that indicated rupture of hepatocellular carcinoma (**Figure 2**). The patient underwent transcatheter arterial embolisation with successful haemostasis. However, he died as a result of progressive disease 7 months later despite undergoing another two sessions of transcatheter arterial embolisation after the initial treatment.

Cullen's sign, described as ecchymosis at the periumbilical area, is traditionally caused by extravasation of haemorrhage from a retroperitoneal organ. It is rarely associated with rupture of hepatocellular carcinoma which tends to indicate a poor prognosis.

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Figure 1. Prominent bluish discoloration in the periumbilical region that was compatible with Cullen's sign.

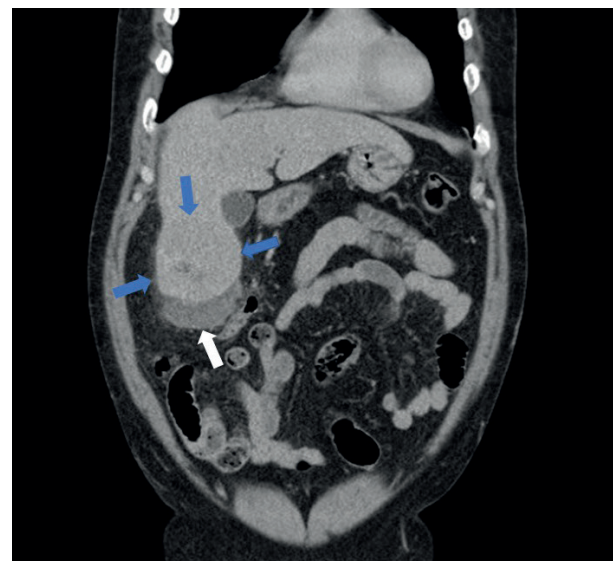


Figure 2. Heterogenous enhancement mass lesion at S6 (blue arrows) with localised haematoma (white arrows).