Hepatic pseudoaneurysm secondary to blunt trauma successfully treated with percutaneous transhepatic intervention

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DESCRIPTION
A 25-year-old man presented to the emergency department with haematemesis, which was occasionally repeated during the last 3 months. The patient had been severely beaten 3 months ago. Gastroscopy was performed to identify the reason of haematemesis, but we did not find any pathological condition in the upper gastrointestinal tract. Abdominal ultrasonography revealed a lesion, which seemed to be a haematoma, in the right liver lobe adjacent to the gall bladder. Abdominal CT showed a haematoma in the right anterior lobe of the liver measuring 89 × 78 mm. There was a pseudoaneurysm in the haematoma area next to the right hepatic artery with a diameter of 19 × 11 mm (figure 1).

Digital subtraction angiography revealed that the pseudoaneurysm originated from the right hepatic artery with a narrow neck (figure 1A). We could not reach the lumen of the pseudoaneurysm using a microcatheter because of the narrow neck. Digital subtraction angiography confirmed a pseudoaneurysm of the right hepatic artery origin (figure 1B). We thought that the pseudoaneurysm was opened to the biliary tract and caused haemobilia.

The pseudoaneurysm was reached through a percutaneous transhepatic route with a 20 G Chiba needle and was coagulated with thrombin injection (figure 1C). The pseudoaneurysm is embolised completely after 24 h of thrombin injection. Control CT images showed complete thrombosis of the pseudoaneurysm (figure 1D). After coagulation of the pseudoaneurysm, bleeding has not recurred for approximately 6 months.

Hepatic artery pseudoaneurysms are late complications of iatrogenic interventions to the liver or blunt abdominal trauma. These pseudoaneurysms frequently rupture into the biliary tract¹ or the peritoneum² and have a high death rate.

Figure 1  (A) Coronal reformatted CT imaging: a pseudoaneurysm originating from the right hepatic artery. (B) Digital subtraction angiography confirms a pseudoaneurysm originating from the right hepatic artery. (C) Thrombin administration into a pseudoaneurysm through an ultrasound-guided percutaneous transhepatic route. (D) Coronal reformatted control CT imaging: note that the pseudoaneurysm is embolised completely after 24 h of thrombin injection.
REFERENCES
