

Ruptured Right Hepatic Artery Aneurysm after Side by Side Uncovered Metallic Stent Placement for Hilar Cholangiocarcinoma

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An 82-year-old, male was hospitalized due to fever and abdominal pain. He had already been diagnosed with a hilar cholangiocarcinoma with infiltration of right hepatic artery (RHA) and lung, peritoneal metastases. Previously he had undergone endoscopic biliary drainage with side by side uncovered self-expandable metal stent (SEMS) placement in anterior and posterior branches of right lobe because of obstructive jaundice one month before (Fig. 1). After hospitalization, bloody stools appeared. Laboratory data revealed anemia (hemoglobin 7.2 g/dL), mild hyperbilirubinemia (total bilirubin 3.3 mg/dL), cholestasis and slight increased levels of transaminases. Inflammatory markers were also increased (C-reactive protein=9.40, leucocytes number 14,700/uL). Abdominal contrast-enhanced computed tomography showed an aneurysm in RHA. Based on these findings, haemobilia due to ruptured RHA aneurysm was suspected. On the same day, he underwent an emergency interventional radiology (IVR) which confirmed the aneurysm of RHA (Fig. 2). The aneurysm was successfully embolized with endovascular coiling (Fig. 3). Two days after IVR, endoscopic retrograde cholangiography was performed; there were no signs of biliary bleeding or stent obstruction. After the procedure, his clinical course improved.

Rupture of RHA pseudoaneurysm has been reported as a rare but serious adverse event associated with endoscopic biliary stenting and requires prompt endovascular treatment [1-3]. In this case, although rare, a side-by-side placed metal stent may have compressed the right hepatic artery, with the formation and rupture of a pseudoaneurysm.

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