Life threatening hemobilia after endoscopic retrograde cholangiopancreatography (ERCP)

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A 55-year-old woman presented to the local community hospital with acute cholangitis. She underwent ERCP, biliary sphincterotomy, incomplete stone extraction, and plastic stent placement. ERCP was complicated by profuse GI bleed. Patient was intubated and resuscitated. Repeat ERCP noted bright red blood and blood clots actively exiting the biliary orifice. Sphincterotomy bleed was suspected. Endotherapy was performed followed by deployment of a fully covered self-expandable metal stent (FC-SEMS) across the papilla. The patient continued to bleed profusely and required multiple transfusions with PRBCs. She was then life-flighted to our medical ICU. She had multiple maroon stools with large blood clots, and expelled the FC-

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SEMS in her stools (Fig. 1). Urgent CT angiography showed active extravasation of contrast into the stomach, small bowel, and common bile duct (CBD) [dilated at 16 mm with multiple filling defects] (Fig. 2A). In view of these findings and the limitations of further endoscopic therapy, patient underwent hepatic selective angiography. This showed active extravasation of contrast from a pseudoaneurysm of the right hepatic artery (RHA). Contrast filled the CBD and flowed freely into the second duodenum (D2) (Fig. 2B). Area was successfully stented with 2 stent grafts (Fig. 2C). The patient recovered well with no bleeding recurrence. Arterial vascular complication from ERCP is exceedingly rare [1]. Angiography has replaced surgery as the most useful diagnostic and therapeutic modality for massive arterial gastrointestinal bleed.

#### **Disclosures:**

Financial disclosure: None to report. Informed consent was obtained from the patient to publish these images.

#### **CONFLICT OF INTERREST**

Conflict of interest: None to report.

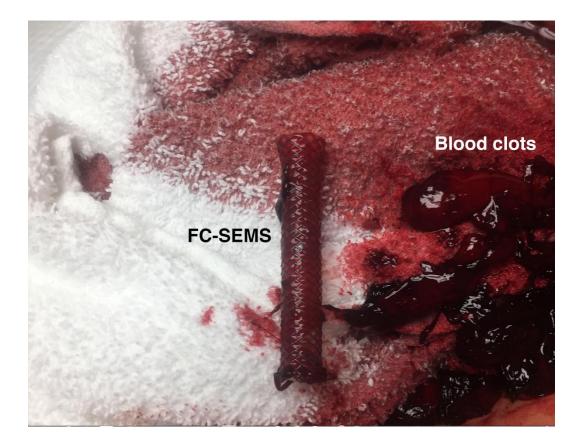
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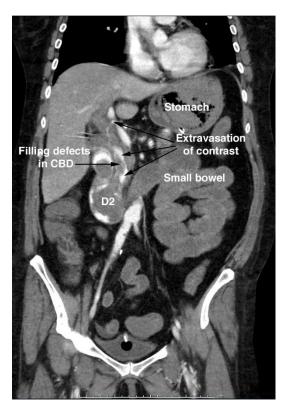
#### References

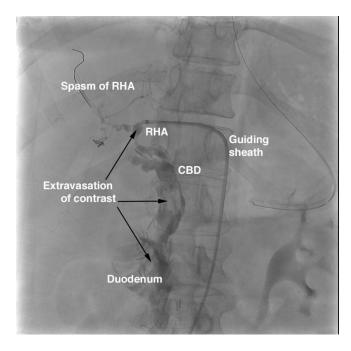
[1]. Espinel J, Pinedo E, Rascarachi G, et al. Exceptional vascular complication during ERCP: cannulation of the hepatic artery. Rev Esp Enferm Dig 2011;103:164-5.

FIG 1



### FIG 2 2a,2b,2c





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