

Title:

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DOI: 10.17235/reed.2019.5787/2018

Link: [PubMed \(Epub ahead of print\)](#)

Please cite this article as:

Roldán Villavicenci Javier Ismael, Prieto Calvo Mikel, Gastaca Mateo Mikel. Post-ERCP hepatic subcapsular hematoma, from conservative therapy to emergency surgery: an unusual though extremely serious complication. Rev Esp Enferm Dig 2019. doi: 10.17235/reed.2019.5787/2018.



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CE 5787 inglés

Post-ERCP hepatic subcapsular hematoma, from conservative therapy to emergency surgery: an unusual though extremely serious complication

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Key words: ERCP. Subcapsular hematoma. Surgery. Choledochal lithiasis.

Dear Editor,

Post-endoscopic retrograde cholangiopancreatography (ERCP) subcapsular hematoma usually results from an accidental puncture of the intrahepatic biliary tree and microtrauma during cannulation with a metallic guidewire (1-4). Risk factors include a number of cannulation attempts, portal hypertension, coagulopathy, duodenal papilla destructure, bile duct obstruction and malignancies (1,3-5). Presentation as an expanding hematoma associated with hypotension or capsule rupture with secondary hemoperitoneum that requires emergency surgery is exceptional, as in our first case described below. Five such cases have been previously reported (Table 1).

Case report 1

A 51-year-old male developed a hepatic subcapsular hematoma within 48 hours following ERCP. He presented with hemodynamic instability and a computed tomography (CT) scan revealed a large subcapsular hematoma, 18 x 5.5 x 18 cm in size, with multiple active bleeding spots. The segmental arterial branches IVb and VII were initially embolized but persistent anemization and a failed embolization attempt

prompted emergency surgery.

Case report 2

An 83-year-old male developed a hepatic subcapsular hematoma without active bleeding within 15 days after ERCP. The patient remained stable under surveillance in the Intensive Care Unit for 72 hours and a conservative management was successful in this case.

Conclusion

Due to the growing number and invasiveness of endoscopic procedures, we must bear in mind this serious and often delayed complication in order to respond promptly. Furthermore, a range of options should be considered from expectant management via radiologic treatment to surgery.

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Table 1. Cases with subcapsular hematoma that required emergency surgery

<i>Author</i>	<i>Age</i>	<i>Sex</i>	<i>ERCP</i>	<i>Metallic guidewire</i>	<i>Onset</i>	<i>Manifestations</i>	<i>Ruptured hematoma</i>	<i>Surgery</i>	<i>Mortality</i>
González et al. (1)	30	F	Sphincterotomy Stone removal	NA	72 hours	Pain in RUQ	No	Peritoneal evacuation + lavage, hemostasis	Dead
Bartolo et al. (1,3)	66	F	Sphincterotomy Stone removal	Yes	Immediate	Hypotension, tachycardia	NA	Hemo-peritoneum evacuation, hemostasis	Dead
Priego et al. (1,3)	30	F	Sphincterotomy	No	Immediate	Pain in RUQ, tachycardia	NA	Surgery	Alive
Pérez et al. (1,3)	72	F	Sphincterotomy Stone removal	NA	2 hours	Pain in RUQ	Yes	Hemo-peritoneum evacuation	Alive
García-Támez et al. (1)	25	F	Sphincterotomy Stone removal	Yes	12 hours	Pain in RUQ, anemia 4.2 mg/dl	Yes	Surgery	Alive

NA: not

applicable, not available.