

# Right Hepatic Artery Pseudoaneurysm Following Laparoscopic Cholecystectomy

## Pseudoaneurisma da Artéria Hepática Direita Após Colectomia Laparoscópica

 Luiz Eduardo Correia Miranda<sup>1\*</sup>,  Laécio Leitão Batista<sup>1</sup>,  Luis Eduardo Gomes<sup>1</sup>

1. Oswaldo Cruz University Hospital, University of Pernambuco, Recife, Brazil

**Corresponding Author/Autor Correspondente:**

Luiz Eduardo Correia Miranda [lecmiranda@gmail.com]

Oswaldo Cruz University Hospital, University of Pernambuco, Recife, Brazil

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Laparoscopic cholecystectomy is recognized as the gold standard for the treatment of cholelithiasis.<sup>1-4</sup> However, concerns have emerged regarding the increased risk of surgical complications, some of which can be fatal.<sup>2-4</sup> We present the case of a 53-year-old female patient who underwent laparoscopic cholecystectomy due to gallbladder calculi. A small injury to the main biliary duct during dissection of a fibrotic Calot's triangle with a chronically inflamed gallbladder was diagnosed and repaired laparoscopically. The cystic artery was not located, and the surgery proceeded without

further complications. The following day, the patient was reoperated due to an acute abdomen caused by a punctate duodenal injury. Duodenal suturing and cavity toilet were performed, leading to good clinical progression and early discharge.

Two weeks after discharge, the patient experienced upper gastrointestinal bleeding, with episodes of hematemesis and hemodynamic repercussions. Digestive endoscopy revealed a bulge in the duodenal bulb (Fig. 1A) and a small fistula on

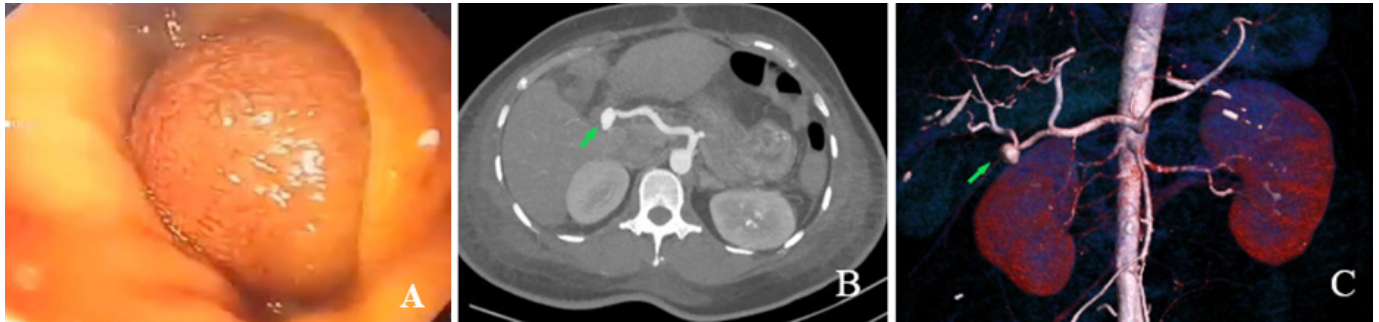
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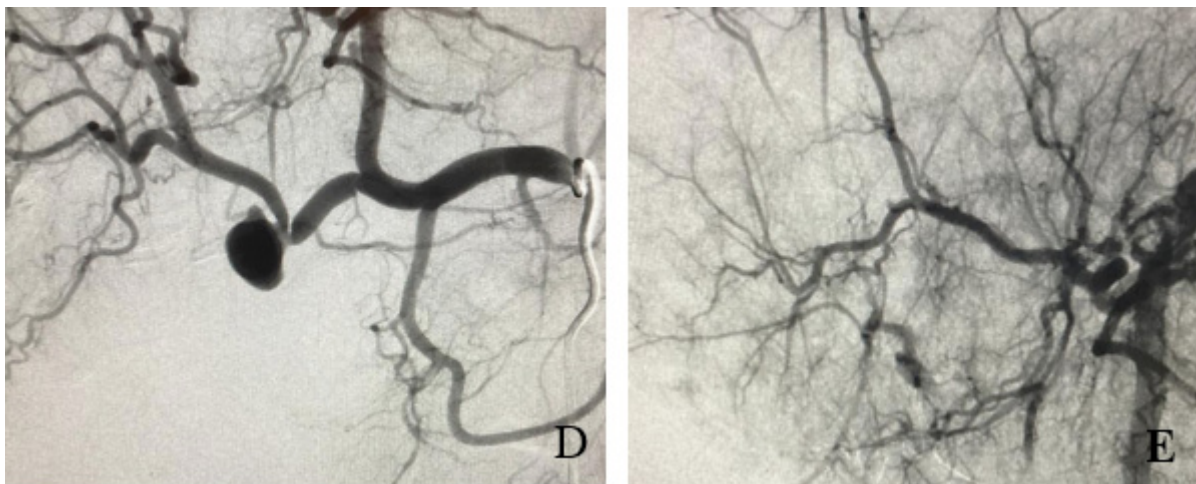
the posterior wall. Angio-tomography showed a saccular dilation of the right hepatic artery (Fig. 1B and C) and a right retroperitoneal collection. Arteriography (Fig. 2D and E) confirmed a 14 mm pseudoaneurysm of the right hepatic artery, in contact with the duodenum. Treatment involved intra-arterial injection of lipiodol and 33% histoacryl, along

with percutaneous drainage of the collection, resulting in the resolution of the conditions. Hepatic artery pseudoaneurysm, a rare complication of complex cholecystectomies, requires a high index of suspicion to prevent fatal outcomes. Endovascular intervention offers rapid diagnosis and definitive treatment.<sup>4,5</sup>



**Figure 1:**

A – Upper gastrointestinal endoscopy showing bulging in the duodenal bulb.  
B – Computed tomography of the abdomen in the arterial phase.  
C – Three-dimensional reconstruction of the abdominal aorta and its branches. The green arrow corresponds to a pseudoaneurysm of the right hepatic artery.



**Figure 2** – Celiac arteriography pre (D) and post-embolization (E) of aneurysm.

## ETHICAL DISCLOSURES

**Conflicts of Interest:** The authors have no conflicts of interest to declare.

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**Patient Consent:** Consent for publication was obtained.

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## CONTRIBUTORSHIP STATEMENT

**LEM:** Responsible for the conceptualization, supervision of the project, writing the draft and reviewing and editing.

**LEG and LLB:** Responsible for data curation and investigation.

All authors approved the final version to be published.

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