REVISTA ESPAÑOLA DE ENFERMEDADES DIGESTIVAS The Spanish Journal of Gastroenterology

Title: Active bleeding due to a hepatic arterial pseudoaneurysm that occurred after acute cholangitis

Authors: Mario Fernández Conesa, Ana Milena Muñoz, María Ángeles Valero González

DOI: 10.17235/reed.2020.6483/2019 Link: <u>PubMed (Epub ahead of print)</u>

Please cite this article as: Fernández Conesa Mario, Milena Muñoz Ana, Valero González María Ángeles. Active bleeding due to a hepatic arterial pseudoaneurysm that occurred after acute cholangitis. Rev Esp Enferm Dig 2020. doi: 10.17235/reed.2020.6483/2019. <section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



CC 6483 inglés

Active bleeding due to a hepatic arterial pseudoaneurysm that occurred after acute cholangitis

Mario Fernández Conesa, Ana Milena Muñoz and María Ángeles Valero González

Diagnostic Radiology Service. Hospital Universitario San Cecilio. Granada, Spain

Correspondence: Mario Fernández Conesa e-mail: mario.fdez.conesa@gmail.com

Keywords: Bacterial cholangitis. Hepatic arterial pseudoaneurysm. Active bleeding. Percutaneous arterial embolization.

Dear Editor,

We read with interest the article by Guido Villa-Gómez, Manuel Alejandro Mahler and Dante Manazzoni "A new case of pseudoaneurysm of the right hepatic artery secondary to laparoscopic cholecystectomy" (1). A 57-year-old cholecystectomized female was admitted due to abdominal pain with an analytical pattern of cholestasis and liver enzyme alterations, with cholangitis that progressed to septic shock of a biliary origin with gradual anemia and hypotension. An urgent abdominopelvic computed tomography (CT) was performed with intravenous contrast, which revealed phlegmonous areas in the hepatic parenchyma due to cholangitis, hepatic subcapsular hematoma. Furthermore, there was an image compatible with active bleeding due to hepatic arterial pseudoaneurysm and signs of hemoperitoneum (Fig. 1). A hepatic arteriography was performed using the Seldinger technique, which confirmed an intrahepatic pseudoaneurysm of the distal branch of the right hepatic artery. Subsequently, superselective microcatheterization and arterial microcoils embolization was performed.

Discussion



The hepatic pseudoaneurysm secondary to acute cholangitis due to *Escherichia coli* is a rare vascular lesion whose most frequent primary etiology is arteriosclerosis, followed by trauma (2,4). They are commonly caused by arterial injuries secondary to blunt, penetrating and/or iatrogenic injuries (3,5). However, periarterial inflammations or bile duct damage, secondary to cholangitis, cholecystitis and pancreatitis (as in our case) is less frequent (2,3). The mortality rate associated with rupture of a hepatic artery pseudoaneurysm has been reported to be as high as 40% (1). The clinical manifestations are variable, hemorrhage secondary to hemobilia being the most frequent presentation. The first line of treatment is embolization of the affected artery (1,5), as in our case, with concomitant antibiotic treatment. This led to a resolution of the bleeding and a favorable evolution.

References

1. Kobayasi N, Kubota K, Nakajima A. Hepatic artery pseudoaneurysm associated with cholangitis that ruptured into the bile duct. Clin Gastroenterol Hepatol 2009;7:e45. DOI: 10.1016/j.cgh.2009.01.007

2. Yu YH, Sohn JH, Kim TY, et al. Hepatic artery pseudoaneurysm caused by acute idiopathic pancreatitis. World J Gastroenterol 2012;18(18):291-4. DOI: 10.3748/wjg.v18.i18.2291

3. Villa-Gómez G, Mahler MA, Manazzoni D. Un nuevo caso de pseudoaneurisma de la arteria hepática derecha secundario a colecistectomía laparoscópica. Rev Esp Enferm Dig 2018:110(12):832. DOI: 10.17235/reed.2018.5668/2018

4. Lloret Estañ F, López Conesa A, Capel Alemán A, et al. Post-traumatic hepatic artery pseudoaneurysm treated with endovascular embolization and thrombin injection. World J Hepatol 2010;2(2):87-90. DOI: 10.4254/wjh.v2.i2.87

5. Harvey J, Dardik H, Impeduglia T, et al. Endovascular management of hepatic artery pseudoaneurysm hemorrhage complicating pancreaticoduodenectomy. J Vasc Surg 2006;43(3):613-61. DOI: 10.1016/j.jvs.2005.11.031

REVISTA ESPAÑOLA DE ENFERMEDADES DIGESTIVAS The Spanish Journal of Gastroenterology



Fig. 1. Abdominopelvic CT with intravenous contrast. An encapsulated subcapsular heterogeneous and high density collection in relation to a hepatic subcapsular hematoma (white arrowhead) is observed. In addition, several poorly defined hypocaptant liver areas were identified, one in segment 8 in relation to a phlegmonous area, with a rounded image of 11 mm in relation to a phlegmonous area with a hepatic artery pseudoaneurysm and active bleeding in the thickened area (red circle). There was also a moderate amount of intra-abdominal free fluid with a high density component, compatible with a hemoperitoneum.