

Cholangioscopy with Laser Lithotripsy in the Treatment of a Patient with Type II Mirizzi Syndrome

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Keywords

Endoscopic retrograde cholangiopancreatography · Colangioscopia · Mirizzi syndrome

Colangioscopia com Litotripcia Laser no tratamento de doente com Síndrome de Mirizzi tipo II

Palavras Chave

CPRE · Colangioscopia · Síndrome de Mirizzi

Eighty-Seven-year-old woman, without relevant medical past history, was referred to ERCP for treatment of acute cholangitis. Abdominal CT scan revealed dilatation of intra and extrahepatic bile ducts with hyperdense content in the cystic duct and in the common bile duct, suggestive of Mirizzi syndrome and cholelithiasis. An abdominal MRI was performed revealing a large 4 cm stone in the infundibulum-cystic duct, a 2 cm stone in the hepatic duct (Fig. 1).

During the initial ERCP, cholangiography revealed a large stone in the cystic causing a stenosis of the hepatic

duct with upstream dilation of the biliary tree, confirming the Mirizzi syndrome (Fig. 2). A plastic double pigtail stent (7 Fr × 4 cm) was inserted, after sphincterotomy. After multidisciplinary evaluation of the patient conditions, given the patient frailty it was decided to treat the condition using an endoscopic approach – laser lithotripsy assisted by cholangioscopy.

SpyGlass cholangioscopy revealed two impacted large stones, one in the cystic duct and unexpectedly, another in the hepatic duct. Lithotripsy with laser Holmium was successfully performed in both stones; after both lithotripsies, a fistula between the cystic and the hepatic duct was noticed, involving less than one-third of the circumference of the hepatic duct (Mirizzi type II). The patient presented a favourable clinical evolution and was discharged 4 days after the procedure.

Discussion

Mirizzi syndrome is an uncommon cause of acute cholangitis [1]. ERCP allows the resolution of jaundice through the placement of stents and, in some cases, the removal of the cystic duct stone, although most patients

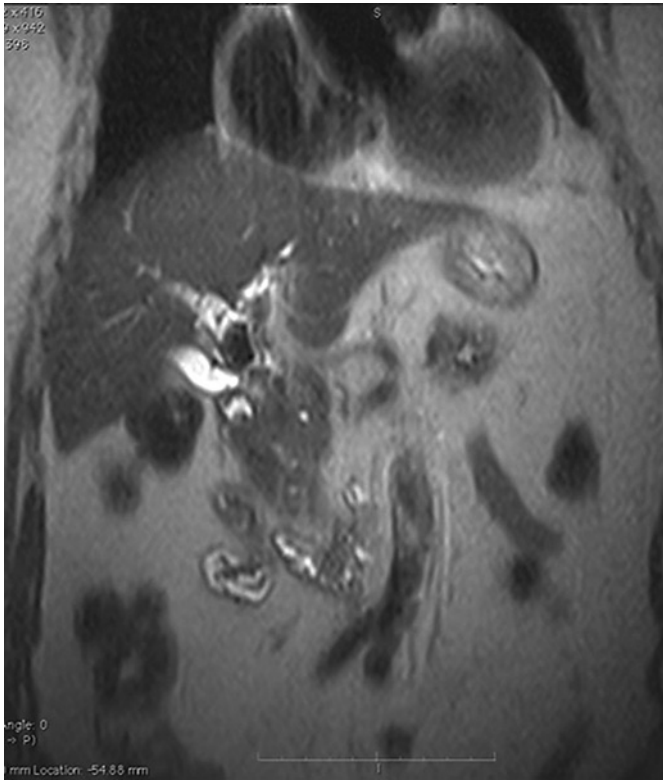


Fig. 1. MRI showing a large stone in the infundibulum-cystic duct, with about 4 cm.

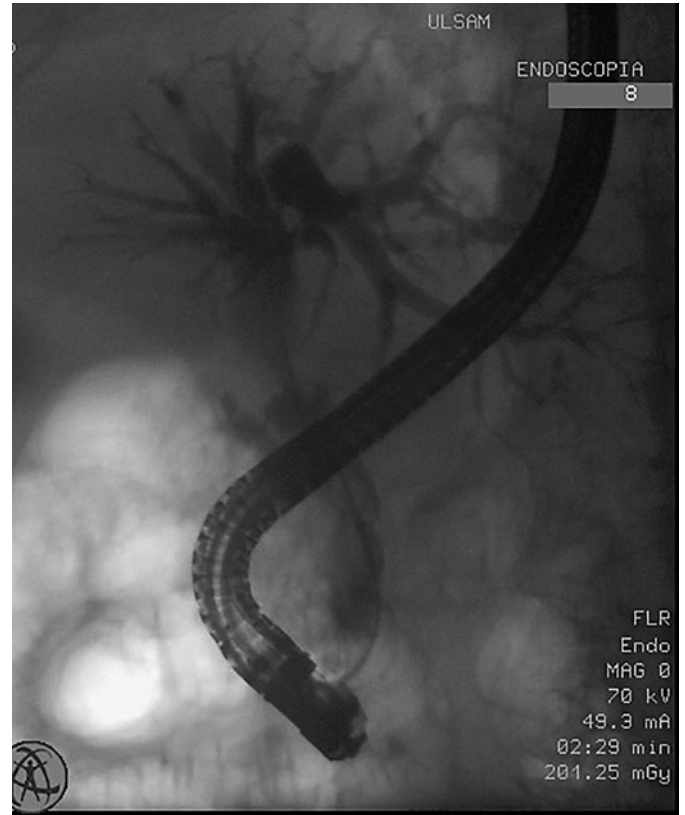


Fig. 2. Cholangiography showing a large stone causing compression of the common hepatic duct.

are treated surgically [1–3]. The use of cholangioscopy-guided lithotripsy with the Spyglass platform was already described in the treatment of patients with Mirizzi syndrome in some case reports [3–5].

Statement of Ethics

The subject has given her written informed consent to publish their case (including publication of images) that is stored in the archives of the department. This article is exempted from ethical approval due to local guidelines. The data regarding this case are not publicly available due to containing information that could compromise the privacy of the patient but are available from M.M. (corresponding author e-mail) upon reasonable request.

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Conflict of Interest Statement

Authors declare no conflict of interests for this article.

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Author Contributions

Marta Moreira, Ana Catarina Carvalho wrote the manuscript. Isabel Tarrío and Alda João Andrade helped in the video edition. Tarcísio Araújo and Luis Lopes were responsible for the revision of its contents.

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