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Endoscopic treatment of choledochal cyst in older patient: case report

Tratamento endoscópico de cisto de colédoco em paciente idosa: relato de caso

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RESUMO: Paciente do sexo feminino, 63 anos, foi admitida na emergência com quadro de calafrios, febre e dor em hipocôndrio direito há 7 dias da admissão. Colangioressonancia evidenciou lesão de 4,5 x 4,2cm em terço médio/distal de ducto hepatocolédoco com leve ectasia de vias bilares. Há 5 anos, paciente foi abordada cirurgicamente - colecistectomia videolaparoscópica - devido a colelitíase. No internamento atual, foi optado por tratamento endoscópico por CPRE (Colangiopancreatografia retrógrada endoscópica), com realização de papilotomia para evitar novos episódios de colangite. Paciente evoluiu sem intercorrências há cerca de 8 meses, assintomática, sem novos episódios de febre ou icterícia.

Descritores: Cisto de colédoco; Vias biliares; Tratamento endoscópico; Cirurgia minimante invasiva; Relatos de casos.

ABSTRACT: A 63-year-old female patient was admitted to the emergency room with chills, fever and pain the in the upper right quadrant for 7 days before admission. MRCP (magnetic resonance colangiopancreatography) showed a lesion of 4.5 x 4.2 cm in the middle/distal third of the main bile duct with mild ectasia of bile ducts. Five years ago, the patient was surgically treated - videolaparoscopic cholecystectomy - due to cholelithiasis. At the current hospitalization, patient underwent endoscopic treatment, with papillotomy performed to avoid new episodes of cholangitis. Patient had no further complications, asymptomatic, without new episodes of fever or jaundice.

Keywords: Choledochal cyst; Bile ducts; Endoscopic treatment; Minimally invasive surgery; Case reports.

INTRODUCTION

Choledochal cyst is a rare disease with an estimated incidence between 1:100.000 to 1:150.000 live births in western countries. It is characterized by a congenital intra- and extra-hepatic dilatation of the biliary tree[1]. It was described for the first time by Vater in 1723[2]. Usually, it is detected during the first decade of life. It is more common in males for unknown reasons and it is more prevalent in Asia.[2]

The bile duct and the pancreatic duct form a common duct that allows the reflux of pancreatic juice into the biliary system, increasing the intraductal pressure and causing inflammation, which could lead to the dilatation[3].

Early treatment is recommended to avoid the risk of complications, such as choledocholityasis, cholangitis, pancreatitis, and cholangiocarcinoma[4].

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CASE REPORT

A 63 years-old, female patient, with hypertension, was submitted to laparoscopic cholecystectomy in 2012 due to gall stones. Pre-operatory USG (ultrasound) of the abdomen showed ecographic signs of moderate hepatic steatosis and an anechoic peripancreatic cyst. Biliary tree scintigraphy showed retention of the radiolabeled dye in the gallbladder with an anormal area of retention in the common bile duct path (Figure 1).

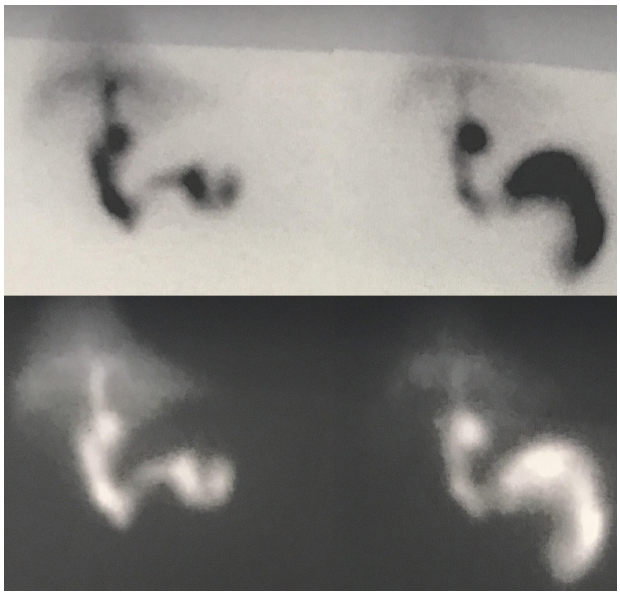

Figure 1. Nodular formation with the accumulation of the radiolabeled dye (intravenous DISIDA-99mTc) in the common bile duct path

MRI (Magnetic resonance imaging) showed small nodular lesions of ill-defined limits grouped and compromising the posterior-superior segments of the right hepatic lobe. It was marked by a hypersignal in the sequences in T2 and with no significative enhancement after the infusion of the dye. There was no intra- or extra-hepatic biliary tree dilatation.

A cystic formation of 3.8 x 3.0 cm in close contact with the middle/distal third of the choledochal duct was observed. Furthermore, a discrete prominence in the area of the pancreatic duct close to the duodenal papilla with failure of contrast enhancement was observed (Figure 2). However, during the procedure, the lesion was not identified.

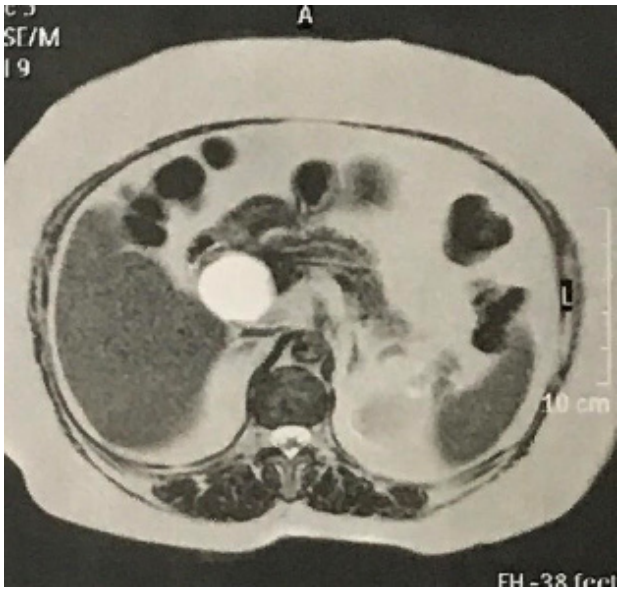

Figure 2. MRI with cystic formation in close contact with the middle/distal third of the choledochal duct of 3.8 x 3.0 cm. Hipersignal in the ponderated sequences in T2

Five years after the surgical procedure, the patient was admitted to the emergency room for 7 days with chills, fever, and pain in the right upper quadrant. Furthermore, she stated that had similar symptoms 3 times in the last 5 years. The surgical team decided to start antibiotics and to investigate with imaging exams. Cholangio resonance showed a cystic formation of 4.5 x 4.2 cm in the middle/ distal third of the common bile duct with imprecise limits in close contact with the head of the pancreas, leaving to mild ectasia of the common bile duct, with no other findings (Figure 3).

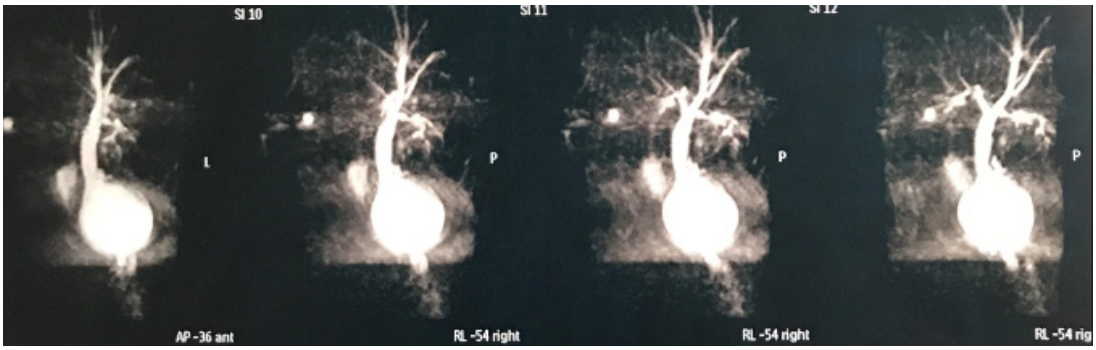

Figure 3. Cholangio resonance with lesiono f 4.5 x 4.2 cm in the middle/ distal third of the common bile duct with imprecise limits in close contact with the head of the pancreas leaving to mild ectasia of the choledochal. (1 cm)

During the hospital stay, the Endoscopic Retrograde Cholangiopancreatography (ERCP) was the treatment of choice, with a papillotomy to avoid new episodes of cholangitis.

The patient had no further complications after the procedure, with good clinical conditions, and regularization of the blood tests. During her follow-up (8 months), she is asymptomatic, with no new episodes of fever or jaundice.

DISCUSSION

The classic triad of symptoms related to the choledochal cyst is composed of abdominal pain, jaundice and palpable mass, with abdominal pain the most common presentation. The more the duration of the disease, the bigger the chances of complications[4].

The diagnose of a choledochal cyst is typically performed by USG. Lately, many imaging modalities has been frequently used including CT scan, MRI and ERCP to confirm the extension of the duct involved in the extra-hepatic disease. In the absence of an intra-hepatic biliary dilatation, USG alone may be enough[5]. ERCP is the gold-standard, because it provides a detailed study of the anatomy of the biliary tree and the pancreatobiliar junctions, but it is an invasive method and not free of risks. The advantage of the cholangio resonance is that it is a non-invasive method, however it does not produce images as good as the endoscopic ones[3].

In 1959 Alonso-Lej proposed a classification only for extra-hepatic biliary cysts. This classification was modified by Todani in 1976 who incorporated the intra-hepatic dilatations[3]. According to the classification, our cause shows a choledochal cyst type III.

According to the classification of Todani, type III is described as a dilatation of the biliary duct inside the wall of the duodenum, also known as choledochocele, which is responsible for less than 10% of the cases[2,3].

Due to the age of the patient and her comorbidities, the team opted to perform the ERCP and the papillotomy. This report is important for the literature for showing the diagnosis performed by the history and physical examination allied to the imaging exams. The treatment of a choledochal cyst by ERCP was individualized and successful in an elderly patient to avoid new episodes of cholangitis and with less morbidity when compared to a surgical procedure.

Participação dos autores: Informamos para devido fins que o artigo foi confeccionado em conjunto pelo grupo de autores. *Vasconcelos GP*, *Lima DL, Cordeiro RN* – Coleta de dados; *Lima DL, Cordeiro RN* - Orientação organizacional e sobre a essência, argumentação e relevância do trabalho; *Moreira IC*, *Pessôa e Silva PF* - Análise, pesquisa dos artigos, leitura e exclusão de pesquisas não pertinentes ao envolvimento do tema escolhido; *Lima DL*, *Vasconcelos GP*, *Cordeiro RN* - Leitura e escrita do conteúdo; *Moreira IC*, *Pessôa e Silva PF*, *Lima DL*, *Cordeiro RN*, *Vasconcelos GP* - Revisão do texto quanto a integridade e veracidade quanto as fontes utilizadas. Dessa forma, o grupo de autores certifica participação conjunta na confecção do artigo, esperando contribuir no tema em questão.

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