

**\*Corresponding author**

\*Marcelo Pontillo-Walerovsky, Emergency Department, Hospital de Clínicas. Faculty of Medicine. University of the Republic. Montevideo, Uruguay.

**Choledochal Cyst during a Elective Laparoscopic Cholecistectomy**

Marcelo Pontillo-Walerovsky\*; Iván Trostchansky-Vasconcellos; Roberto Valiñas-Sotelo.

Emergency Department, Hospital de Clínicas. Faculty of Medicine. University of the Republic. Montevideo, Uruguay

**Mini Review**

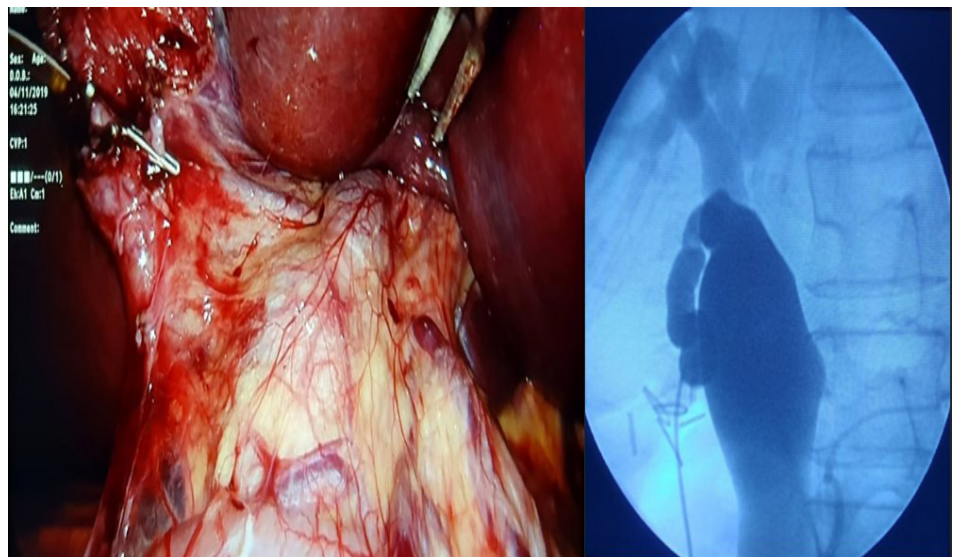
Female, 27 years old patient, healthy. During a laparoscopic cholecystectomy, a wide cystic duct (>1 cm) was found (Fig 1A). Cholangiography was performed and showed an extra hepatic bile duct dilation (>4 cm), without finding common bile duct stones inside (Fig 1B); the cholecystectomy was completed.

Magnetic resonance cholangiopancreatography was performed postoperatively, showing type IB choledochal cyst (Todani's classification)<sup>1</sup>, a sacular dilation that only involves the extrahepatic bile duct; few choledocholithiasis were also found (Fig 2).

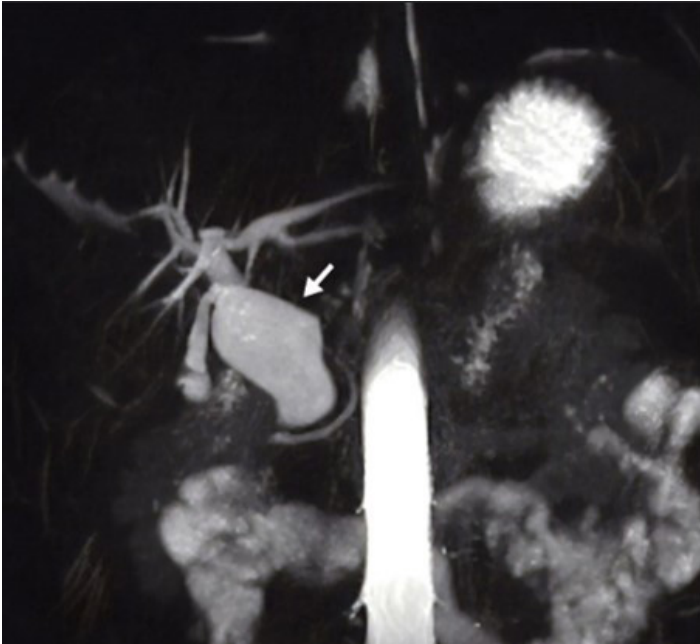
Choledochal cyst is a rare disease (incidence of 1 in 100000 – 150000)<sup>2</sup> associated with primary choledocholithiasis, recurrent cholangitis, portal hypertension and increased risk of cholangiocarcinoma<sup>3,4</sup>.

The patient underwent a resection of the extrahepatic bile duct and reconstruction with a "Roux-en-Y" hepaticojejunostomy<sup>4,5</sup>.

Lifelong strict follow up is necessary, due to an increased risk of biliary cirrhosis development. We therefore emphasize the importance of performing intraoperative cholangiography in the presence of anatomical alterations in biliary surgery.



**Figure 1:** A: laparoscopic view of the extrahepatic bile duct, evidence of a dilated common bile duct. 1 – B: intraoperative cholangiography, finding of choledochal cyst.



**Figure 2:** Cholangioresonance showing a type IB choledochal cyst (white arrow), without involvement of the main pancreatic duct.

## References

1. Miron A, Popa LG, Toma EA. The Curious Case of the Choledochal Cyst-Revisiting the Todani Classification: Case Report and Review of the Literature. *Diagnostics*. 2023; 13(6): 1059.
2. Tariq WB, Twayana AR, Sunuwar N et al. Case Report: a rare case of choledochal cyst. *F1000Res*. 2022; 11: 919.
3. Madadi-Sanjani O, Wirth TC, Kuebler JF et al. Choledochal Cyst and Malignancy: A Plea for Lifelong Follow-Up. *Eur J Pediatr Surg*. 2019; 29(2): 143-149.
4. Lee KF, Lai EC, Lai PB. Adult choledochal cyst. *Asian J Surg*. 2005; 28(1): 29-33.
5. Kowalski A, Kowalewski G, Kaliciński P, et al. Choledochal Cyst Excision in Infants-A Retrospective Study. *Children*. 2023; 10(2): 373.