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Type I Choledochal Cyst in an Adult: Clinical Report and Surgical Approach

Type I Choledochal Cyst in an Adult: Clinical Case and Surgical Management

Sophia Maia Dib Bastos - Getúlio Vargas University Hospital - sophiadib@hotmail.com

Carlos Eduardo Alves da Costa - Getúlio Vargas University Hospital

Leandro Moraes Costa - Getúlio Vargas University Hospital - leandromedicinauea@gmail.com

Danielle Alcântara Barbosa Macedo – Getúlio Vargas University Hospital – daniellealb@hotmail.com (Advisor)

Summary

Choledochal cysts are rare congenital dilatations of the bile ducts, most frequently diagnosed in childhood, with less common identification in adult patients. When not treated adequately, they can progress to complications such as cholangitis, pancreatitis, and malignant transformation. We report the case of a 58-year-old female patient with chronic abdominal pain, diagnosed by imaging studies with a type I choledochal cyst. She underwent surgical intervention with Roux-en-Y biliodigestive bypass, with satisfactory postoperative evolution. This case highlights the importance of early diagnosis and surgical treatment, even in adult patients, aiming to reduce complications and the risk of malignancy.

Keywords: Choledochal cyst; Todani I; Biliary-digestive bypass; Hepatojejunostomy.

Abstract

Choledochal cysts are rare congenital dilations of the biliary tract, most commonly diagnosed in childhood and less frequently identified in adults. When inadequately treated, they may lead to complications such as cholangitis, pancreatitis, and malignant transformation. We report the case of a 58-year-old female patient with chronic abdominal pain diagnosed with a type I choledochal cyst through imaging studies. The patient underwent surgical management with Roux-en-Y biliary reconstruction and presented a satisfactory postoperative course. This case highlights the importance of early diagnosis and surgical treatment, even in adult patients, to reduce complications and malignancy risk.

Keywords: Choledochal cyst; Todani classification; Hepaticojejunostomy. Billionaire reconstruction;

1. Introduction

Choledochal cysts are rare congenital dilatations of the bile ducts, both intra- and/or extra-

Liver diseases, with an estimated incidence between 1 in 100,000 and 1 in 150,000 in Western populations.

Most cases are diagnosed in childhood, with presentation in adulthood being uncommon.

In adults, symptoms are usually nonspecific, including abdominal pain, dyspepsia, or

recurrent episodes of cholangitis. The importance of diagnosis is related to the risk of

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complications such as gallstones, pancreatitis, strictures, and malignant transformation, whose Incidence increases with age.

The standard treatment consists of resection of the affected segment combined with reconstruction. The biliary-digestive tract is usually accessed via Roux-en-Y hepatojejunostomy. This study reports a... A case of type I choledochal cyst diagnosed in an adult patient and treated. surgical.

2. Theoretical Framework

The Todani classification is the most widely used for choledochal cysts, with type I being the most common. frequent, characterized by fusiform dilation of the common bile duct.
The pathophysiology is frequently associated with an anomalous pancreatobiliary junction, leading to reflux of pancreatic enzymes and chronic inflammation of the biliary tract.
Complete cyst resection is recommended whenever possible, due to the risk of... Malignancy. In cases with distal extension to the pancreatic region, surgical intervention is necessary. It must balance the radical nature of the resection with the morbidity of more extensive procedures. such as pancreaticoduodenectomy.

3. Materials and Methods

This is a descriptive case report study based on clinical data.
Laboratory, imaging, surgical, and anatomopathological data obtained through medical record review.
The doctor followed ethical principles, guaranteeing the patient's anonymity.

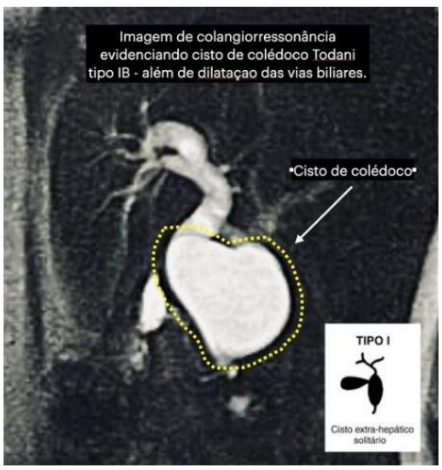
4. Results and Discussion

Female patient, 58 years old, with systemic arterial hypertension, diabetes mellitus, and asthma. and hypothyroidism, with a history of cholecystectomy approximately 40 years ago,
She had been experiencing epigastric pain radiating to her back for three years, which worsened after ingesting... Fatty foods, without jaundice or other cholestatic symptoms.
Preoperative laboratory tests revealed a total bilirubin level of 0.40 mg/dL, and a direct bilirubin level of... 0.10 mg/dL, alkaline phosphatase of 254 U/L and gamma-glutamyltransferase of 85 U/L, without hyperbilirubinemia or significant liver dysfunction.

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Magnetic resonance cholangiopancreatography and endoscopic ultrasound demonstrated fusiform dilation of the common bile duct compatible with type I choledochal cyst (Todani), with a maximum diameter of 31 mm, associated with dilation of the intrahepatic bile ducts, presence of sludge.
Biliary/microcalculi and hepatic steatosis.
The patient underwent laparotomy, and firm adhesions resulting from [unclear] were observed.
Previous surgery, no free fluid, collections, or peritoneal implants. A large volume was identified.
Choledochal cyst in the distal third, extending to the region of the pancreatic head.
Sectioning of the common bile duct was performed above the cystic segment, followed by drainage of thick bile.
cyst roof detachment, fulguration of residual mucosa, and reconstruction via hepatojejunostomy.
Roux-en-Y resection via transmesocolic approach. At the end of the procedure, it was positioned tubulolaminar drainage.
The postoperative course was uneventful, with removal of the drain and hospital discharge.
On the sixth day. In outpatient follow-up after 20 days, the patient was asymptomatic.
The histopathological examination did not reveal any changes consistent with malignancy.
Presentation in adults is less common and often associated with symptoms.
nonspecific symptoms, which can delay diagnosis. The surgical approach remains the
The treatment of choice is complete cyst resection combined with reconstruction.
Biliary digestive therapy is a strategy that reduces complications and the risk of malignant transformation.



Final Considerations

Type I choledochal cyst in adults is a rare condition with clinical presentation.
often nonspecific. Diagnosis by imaging methods and surgical treatment.

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Proper treatment is essential to prevent late complications and malignancy.

Roux-en-Y hepatojejunostomy remains a safe and effective technique, providing good clinical results.

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