

## **Annals of Case Reports**

# Abdominal Mass Revealing an Enormous Cystic Dilatation of the Common Bile Duct

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#### Abstract

We present a clinical case (new born) of female at 11 months of life for an abdominal mass. In this context, we discuss the surgical procedure step by step. Cystic dilatation of the common bile duct can be defined as pseudo aneurysmal congenital ectasia biliary tract, a rare condition first described in 1723 by VATER. In the light of this presentation and after a review of the literature, we highlight the rarity of cystic dilation of the bile duct. It may be misunderstood. The diagnosis is most often only carried out intra operatively. Left untreated, the condition can lead to secondary biliary cirrhosis. The treatment is surgical and the current trend is unanimous: the radicality of the gesture by resection of the cyst when it is possible with hepatico-jejunal anastomosis.

**Keywords:** Cystic Dilation; Mass; Bilio-Digestive Anastomosis

#### Introduction

Congenital cystic dilations of the main bile duct (DCVBP) are rare malformations of the bile ducts, their incidence is in the order of 1 / 100,000 to 1 / 150,000 births and are seen mainly in Asian countries [1]. They are the most common congenital disorder of the biliary tree after bile duct atresia. They are most often described in children with a clear predominance of women (four girls for an affected boy) [2]. Many theories have been proposed to explain the origin of these malformations and the most commonly accepted is that which was advanced by Babbit in 1969 and which incriminated an anomaly of the biliopancreatic junction [3]. Their congenital nature is underlined by the discovery of some cases on antenatal ultrasound. These are conditions represented by an ectasia of the main bile duct, most often of the aneurysmal or spindle-shaped type, much more rarely of the sacciform or diverticular type, the topography of which is segmental or total and presenting a variable size [4]. Their diagnosis is suspected by ultrasound and confirmed by Bili-MRI [5]. They are grouped by Todani into five types based on the location, extent and type of bile duct dilation. Type I is the most common found in 80% of cases [1]. This pathology can remain asymptomatic for a very long time.

The biggest problem is the risk of degeneration after several years of evolution, hence the need for complete surgical treatment [1].

#### Patient and observation

It is a female infant hospitalized at 11 months of life for abdominal mass an abdominal CT scan speaks of a cystic mass suggestive of a probable mesenteric cyst (Figure 1) Surgical exploration finds a large mass above mesocolic including the upper pole adhering to the liver and bile ducts (Figure 2) and the lower pole of the mass anastomosed to D2 (Figure 3) and type I of the classification of congenital dilations of the main bile duct according to Todani et al. (Figure 4) then we perform a resection of the cyst with hepatico-jejunal anastomosis (Figure 5).



Figure 1: Cystic mass suggestive of a probable mesenteric cyst.

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**Figure 2:** The exploration finds a large mass sus mesocolic pole superior adhering to the liver and bile ducts.



Figure 3: Lower pole of the mass anastomosed at D2.



Figure 4: Cholecystectomy, hepatic canal on lacquer.



Figure 5: Opératives part containing bile.



Figures 6&7: Jejunal hepatocellular anastomosis on the handle in  $\rm Y$ 

#### **Discussion**

Intraperitoneal cystic masses rarely manifest as cystic dilatation of the common bile duct; Spindle or saccular dilation of the common bile duct can give abdominal mass syndrome. However, the diagnosis of DCVBP is most often made in childhood; The pain, jaundice, mass triad classically evokes cystic dilation of the bile ducts; However, this triad is only found in 10% of cases [4], ULTRASOUND The initial diagnosis of BCV is based mainly on ultrasound It represents a reliable examination in the assessment of the extent of the dilation of the biliary tree [5], CT as currently performed has no indication as long as MRI is available [6], LA BILI-IRM This is the gold standard examination for exploring multiple bilio-pancreatic pathways [7] (Figures 6, 7).

#### Conclusion

In the light of this observation and after a review of the literature, we underline the rarity of cystic dilation of common bile ducts. It risks being unrecognized. The diagnosis is most often made only in per- peration. Left untreated, the affect can lead to secondary biliary cirrhosis. The treatment is surgical and the current trend is unanimous: the radicalism of the procedure by resection of the cyst when possible with hepatico-jejunal anastomosis.

**Competing interests**: The authors declare no competing interests.

**Contributions from the authors:** All authors have read and accepted the final manuscript.

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