

## EP-003 - DIAGNOSTIC YIELD OF ENDOSCOPIC ULTRASONOGRAPHY IN DILATION OF COMMON BILE DUCT OF INDETERMINATE CAUSE

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**Introduction:**

With the widespread use of abdominal imaging, common bile duct (CBD) dilation is a common problem in daily practice. However, the significance of a dilated CBD as a predictor of underlying disease has not been well elucidated and there are no guidelines for its approach.

**Methods:**

Retrospective study including patients who underwent endoscopic ultrasonography (EUS) between 2010-2017 for dilated CBD detected on TUS (VBP $\geq$ 7mm) or CT (VBP $\geq$ 10mm) with no identified cause. The primary aim of this study was to assess the diagnostic yield of endoscopic ultrasonography (EUS) for CBD dilation in patients with negative initial study with transabdominal ultrasound (TUS) or computed tomography (CT). The secondary aim was to identify predictors for positive EUS.

**Results:**

We included 56 patients - mean age of 70 years, 70% female, 29% cholecystectomized.

The majority of patients (n=39) had normal findings on EUS. Abnormal EUS findings were seen in 30% (n=17) of the patients - choledocholithiasis (n=6), ampuloma (n=3), choledochal cyst (n=2), benign CBD stenosis (n=2), cyst of the head of the pancreas (n=1), cholangiocarcinoma (n=1), chronic pancreatitis (n=1) and CBD compression due to adenomegaly (n=1). Factors positively related with findings in EUS were an increased gamma glutamyl transferase (331U/L vs 104U/L, p=0.039), alkaline phosphatase (226 U/L vs 114 U/L, p=0.041), total bilirubin (TB) (6.5 g/dL vs 1.2 g/dL, p=0.035) and the presence of signs/symptoms (p=0.042).

From the 21 patients (38%) who were asymptomatic and with normal liver biochemical tests, 4 (19%) had findings on EUS.

**Conclusions:**

EUS identified a cause for CBD dilatation in 30% of cases, with increased cholestasis enzymes, increased TB and presence of signs and symptoms being predictors of a positive test. However, asymptomatic patients with normal biochemical tests should still be investigated since some will have positive findings.