

# American Society for Gastrointestinal Endoscopy (ASGE) guideline on the role of endoscopy in the diagnosis of malignancy in biliary strictures of undetermined etiology - 2023

## Summary by Smit Deliwala, MD

1. Indeterminate biliary strictures historically have been defined as a stricture in which a prior ERCP had inconclusive cytology results
2. This guideline used the term undetermined biliary strictures to include patients undergoing their first ERCP without a prior negative brush cytology

### Recommendation 1

Fluoroscopic-guided biopsy sampling + brush cytology > brush cytology alone

- Review all cross-sectional imaging
- Discuss in a multidisciplinary committee

#### Outcomes

Incremental yield, lower miss rate, higher sensitivity, and overall low adverse event rate

### Recommendation 2

Cholangioscopic-guided biopsy sampling in:

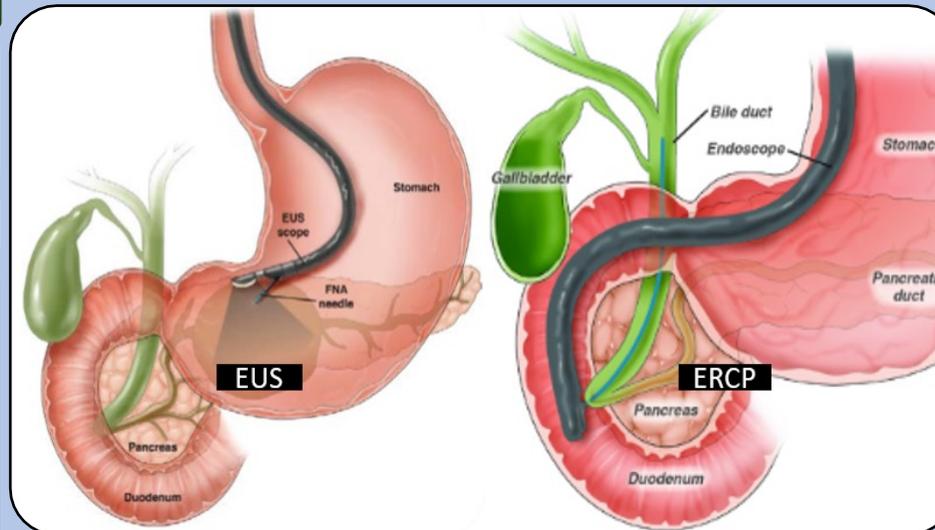
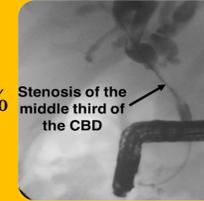
- Nondistal strictures with a high probability of drainage of a liver segment OR
- Previous nondiagnostic ERCP without cholangioscopy AND
- Centers with clinical expertise and easy access to the equipment

- Discuss with a dedicated GI pathologist
- Forceps control in CBD under fluoroscopy
- Not optimal for distal strictures

#### Outcomes

Incremental benefit, lower AE, and cost-effective

- Benign differential - PSC, IgG4, fibrotic, CP
- Benign can mimic malignant - obtain tissue
- Malignancy risk of stricture on imaging - 55%
- Endoscopic > Percutaneous (risk of seeding)
- Diagnosis often requires multiple procedures

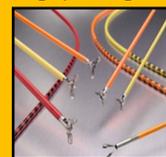


### Tissue acquisition

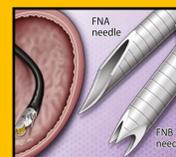
Brush cytology



Intraductal biopsy sampling



EUS + FNA/FNB



Cholangioscopy



### Recommendation 3

Add EUS to ERCP if:

- Prior ERCP(s) were nondiagnostic,
- Distal biliary stricture, or
- Lymphadenopathy/metastasis within reach on imaging

- Upfront EUS + ERCP in the same session
- EUS guided FNA/FNB for hilar cholangiocarcinoma = risk of seeding (do NOT sample biliary mass itself)

#### Outcomes

Incremental yield of at least 27% higher sensitivity, no difference in adverse events, and cost-effectiveness

#### Guideline

Fujii-Lau LL, Thosani NC, Al-Haddad M, et al. American Society for Gastrointestinal Endoscopy guideline on the role of endoscopy in the diagnosis of malignancy in biliary strictures of undetermined etiology: summary and recommendations. *Gastrointest Endosc.* 2023;98(5):685-693. doi:10.1016/j.gie.2023.06.005a

#### Images

Stone CB. Endoscopic retrograde cholangiopancreatography (ERCP). AGA GI Patient Center. <https://patient.gastro.org/endoscopic-retrograde-cholangiopancreatography-ercp/>

Dominguez-Muñoz E, Veloso-Carmo J, Martín-Presas F, Lariño-Noia J, Abdulkader I, Iglesias-García J. A rare cause of obstructive jaundice: diagnosis by EUS and single-operator per-oral cholangioscopy. *VideoGIE.* 2017;4(8):375-378. 2017 Dec 26.

#### Abbreviations

AE – Adverse events  
 CBD – Common bile duct  
 CP – Chronic pancreatitis  
 ERCP – Endoscopic retrograde cholangiopancreatography  
 EUS – Endoscopic ultrasound  
 FNA – Fine needle aspiration  
 FNB – Fine needle biopsy  
 IgG4 – Immunoglobulin subclass type 4  
 PSC – Primary sclerosing cholangitis