Laparoscopic Assisted ERCP for CBD Stone Post OAGB with Prior Sleeve Gastrectomy

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Conflicts of interest

- Nothing to disclose

Gallstones and Bariatric Surgery

- GS are highly prevalent in the morbid obesity at rates as high as 45% which is 4-5 times > general population
- Rapid weight loss is risk factor for GS formation whether by BS or other means
- The speed of weight loss is proportional to the incidence of GS formation
- The more weight loss and the higher the BMI, the higher the chance of forming cholesterol GS

Surgical Endoscopy (2019) 33:2531–2538

Gallstones and Bariatric Surgery

Incidence of **symptomatic GS disease** requiring cholecystectomy post-BS: **2–55 %**

- **3 strategies being used:**
  1. Simultaneous lap chole at the time of BS
  2. Simultaneous lap chole in those with abnormal US or biliary symptoms
  3. A wait-and-see approach in which lap chole is performed in those who develop symptoms, coupled or not by prophylaxis with bile salts

Surgical Endoscopy (2019) 33:2531–2538

ELSEVIER

Surgery for Obesity and Related Diseases 18 (2022) 21–34

SURGERY FOR OBESITY AND RELATED DISEASES

ASMBS Guidelines

Biliopancreatic access following anatomy-altering bariatric surgery: a literature review

Pavlos Papasavas, M.D.[a,*], Salvatore Docimo, Jr., D.O.[b], Rodolfo J. Oviedo, M.D.[c], Dan Eisenberg, M.D.[d], for the American Society for Metabolic and Bariatric Surgery Clinical Issues Committee

The indications for accessing the biliary tree post-bariatric surgery:

1. CBD stones Most common
2. Sphincter of Oddi dysfunction
3. Biliary pancreatitis
4. Pancreatic mass evaluation
5. Treatment of bile leak post-cholecystectomy

ERCP in patients with Roux-en-Y anatomy

Biliary tree access routes post gastric bypass:

1. TG-ERCP
2. EB-ERCP
3. CBDE
4. IR-PTC

Approaches for ERCP in patients with Roux-en-Y anatomy

Technique	Advantages	Disadvantages	Best application
Duodenoscope advanced transorally through anatomic route	▪ Ideal instrument for cannulation and therapy of native papilla ▪ Minimally invasive	Frequently unsuccessful due to inability to reach target	Patients with short Roux limb and native papilla
Colonoscope/enteroscope advanced transorally through anatomic route	▪ Greater depth of insertion compared to duodenoscope ▪ Minimally invasive	▪ Frequently unsuccessful in patients with long Roux limb ▪ Forward view ▪ Lack of elevator	Patients with short Roux limb and bilioenteric/ pancreatoenteric anastomosis
Deep enteroscopy assisted ERCP	Greater reliability in reaching target, even in patients with long Roux limb	▪ Forward view ▪ Lack of elevator ▪ Limited availability of accessories and instruments	Patients with long Roux limb and bilioenteric/ pancreatoenteric anastomosis
Transgastrostomy tract ERCP	▪ Allows use of side viewing duodenoscope and all standard accessories ▪ Provides reliable access for repeat procedures	More invasive than purely endoscopic techniques	RYGB patients with native papilla, or when repeated procedures are anticipated
Laparoscopy-assisted ERCP	▪ Allows use of side viewing duodenoscope and all standard accessories ▪ Ability to diagnosis and treat internal hernias	▪ More invasive than purely endoscopic techniques ▪ Requires significant coordination between surgery and endoscopy teams	RYGB patients with native papilla, particularly when internal hernia is suspected
Percutaneous approaches via interventional radiology	Less invasive than surgical approaches	▪ Morbidity (pain, external drains) ▪ No access to pancreas	Patients with biliary tract pathology who are poor surgical candidates

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ORIGINAL CONTRIBUTIONS

Trans-Gastric ERCP After Roux-en-Y Gastric Bypass: Systematic Review and Meta-Analysis

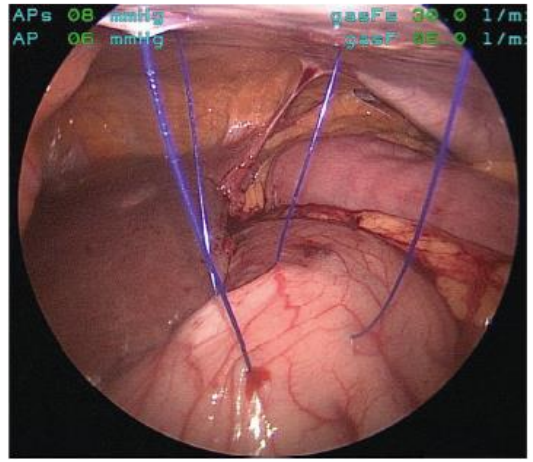
Alberto Aiolfi[1] · Emanuele Asti[1] · Emanuele Rausa[1] · Daniele Bernardi[1] · Gianluca Bonitta[1] · Luigi Bonavina[1]

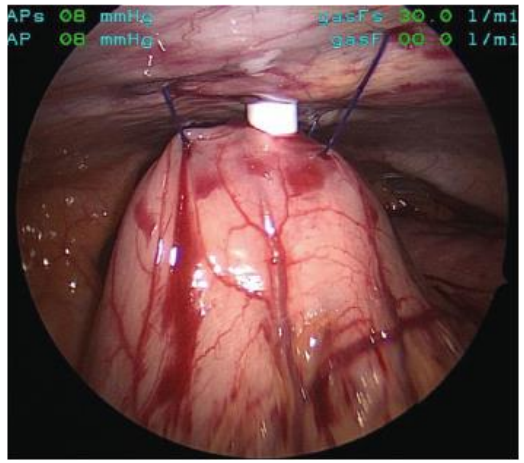
Thirteen studies published between 2009 and 2017 met the inclusion criteria. These studies included 850 patients (range 10–579) and 931 procedures

The most common biliary indications for TG-ERCP were choledocolithiasis, papillary stenosis, and sphincter of Oddi dysfunction (49, 21, and 12%, respectively). The most common pancreatic indication was acute/recurrent pancreatitis (92%).

The papilla was successfully reached and cannulated in 98% of the cases.

the success rate of TG-ERCP seems higher compared to enteroscopy balloon-assisted ERCP (B-ERCP), which has been reported to range from 60 to 80%





Laparoscopic-Assisted Transgastric ERCP Decreases Length of Stay Compared with Common Bile Duct Exploration in the Treatment of Choledocholithiasis after Gastric Surgery

Russell C Kirks, Jr, MD, Patrick D Lorimer, MD, Mike Fruscione, MD, Allyson R Cochran, Stephen E Deal, MD, FACG, Erin H Baker, MD, John B Martinie, MD, FACS, David A Iannitti, MD, FACS, Dionisios Vrochides, MD, PhD, FACS, FRCSC
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CONCLUSIONS: T-ERCP is a minimally invasive option for treatment of choledocholithiasis after gastric surgery when gastroduodenal anatomy is preserved. T-ERCP facilitates shorter LOS and demonstrates similar efficacy when compared with CBDE.

Table.

Variable	Transgastric ERCP (n = 14)	CBDE (n = 16)	p Value
Age, y, median (range)	61.5 (39–69)	66.5 (40–79)	0.091
BMI, kg/m,^{2} median	33.5	24.6	0.019
Antrectomy, n (%)	0 (0.0)	8 (50)	
Gastric bypass, n (%)	14 (100)	8 (50)	
Cholangitis, n (%)	2 (14.3)	1 (6.3)	0.464
Choledocholithiasis, n (%)	8 (57.1)	5 (31.3)	0.153
Biliary stricture or obstruction, n (%)	4 (28.6)	10 (62.5)	0.063
Surgical LOS, d, median (range)	2 (1–15)	4.5 (2–28)	0.011

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Wolters Kluwer

Percutaneous transhepatic cholangioscopy

Author: Hiroto Kita, MD, PhD
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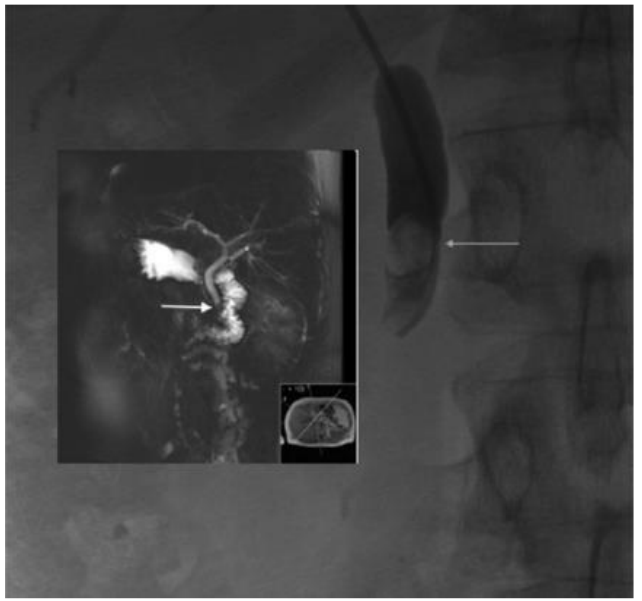
All topics are updated as new evidence becomes available and our peer review process is complete.

Literature review current through: Oct 2022. | **This topic last updated:** Aug 24, 2021.



International Journal of Surgery Case Reports 5 (2014) 249–252

Percutaneous transhepatic cholangiography for choledocholithiasis after laparoscopic gastric bypass surgery

Marialessia Milella[a], Maryam Alfa-Wali[a], Luca Leuratti[a], James McCall[b], Gianluca Bonanomi[a,*]

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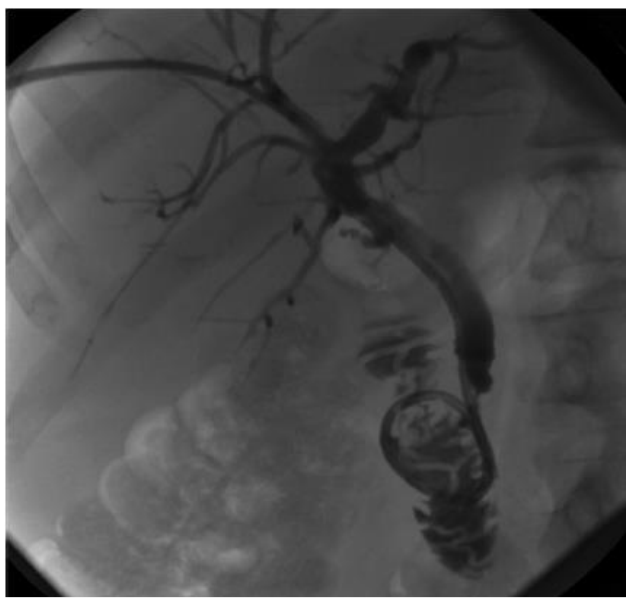
[b] *Department of Radiology, United Kingdom*



Laparoscopic Assisted ERCP for CBD stone post OAGB with prior sleeve gastrectomy


BONES
MAQUET


THANK YOU