# Laparoscopic transcystic common bile duct exploration with lithotripsy for clearance of gallstones from the common bile duct and common hepatic duct after unsuccessful ERCP.

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## Introduction

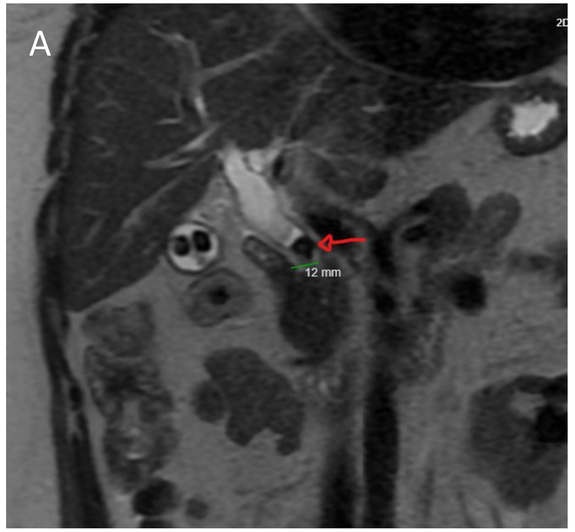
Common bile duct stones are routinely managed with ERCP or laparoscopic common bile duct exploration (LCBDE). LCBDE offers the patient the benefit of a single procedure and often decreased length of stay, however this procedure is less frequently performed than ERCP nationally. Some of the reasons are technical expertise and longer operating room times.

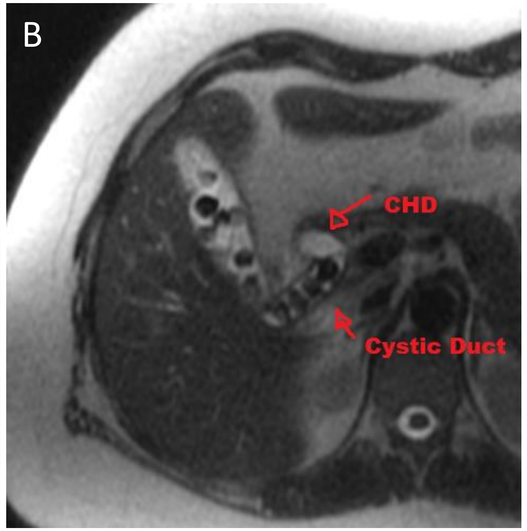
## Presentation

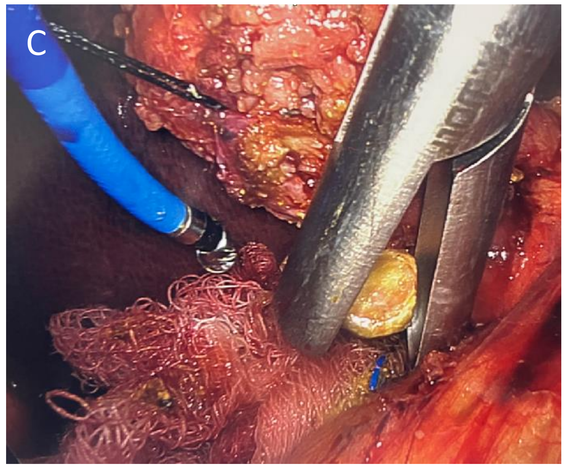
The presented case demonstrates the value of LCBDE in treating patients with unusual pathology. We report an otherwise healthy 27 year old female patient who presented with obstructive jaundice secondary to a 12mm choledocholithiasis at the confluence of the cystic duct and common hepatic duct(A). Interestingly, the patient had 4 additional 10mm gallstones in the cystic duct(B). ERCP was attempted but unable to remove the gallstones.

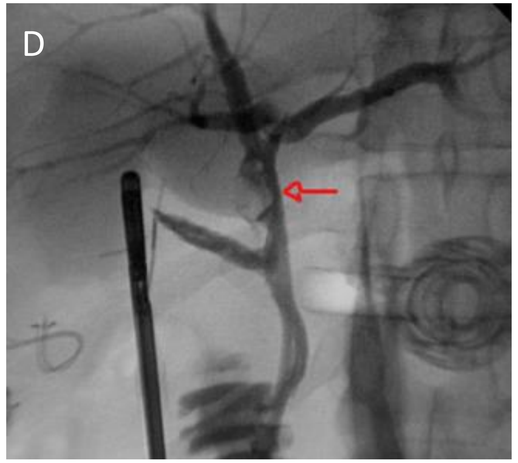
## Procedure

LCBDE with lithotripsy was performed and successful in fracturing and removing the majority of the gallstones(C,E). Some fragments of gallstones were left in the common hepatic duct (D) for removal with post op ERCP, due to difficult extraction around the acute angle. The patient was discharged on post op day 1 after ERCP.




## Discussion

ERCP is effective in treating choledocholithiasis in 90% of cases, however there are several circumstances during which LCBDE is favored over ERCP.
Some instances are secondary to the foregut anatomy such as RNYGB or duodenal diverticula. In our case, the patient had multiple large impacted stones in the cystic duct that were unable to be retrieved by the endoscopist during ERCP. Using the transcystic LCBDE approach (Boston Scientific, Spyglass), we were able to break apart and remove the gallstones from the biliary tree.

## References

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Baucom RB, Feurer ID, Shelton JS, Kummerow K, Holzman MD, Poulose BK. Surgeons, ERCP, and laparoscopic common bile duct exploration: do we need a standard approach for common bile duct stones? Surg Endosc. 2016 Feb;30(2):414-423. doi: 10.1007/s00464-015-4273-z. Epub 2015 Jun 20. PMID: 26092008.

