MASSACHUSETTS

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Medical Policy

Endoscopic Retrograde Cholangiopancreatography (ECRP) with Laser or Electrohydraulic Lithotripsy

Table of Contents

Policy Number: 209

BCBSA Reference Number: NA
NCD/LCD: NA

Related Policies

None

Policy[1]

Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity Medicare HMO Blue[SM] and Medicare PPO Blue[SM] Members

ECRP with laser or electrohydraulic lithotripsy of obstructing common bile duct stones may be **MEDICALLY NECESSARY** when conventional methods of stone removal, including sphincterotomy and retrieval with a basket or balloon, and mechanical lithotripsy have been unsuccessful or are contraindicated.

ECRP with laser or electrohydraulic lithotripsy of obstructing common bile duct stones is **NOT MEDICALLY NECESSARY** for indications other than those described above.

Prior Authorization Information

Inpatient

- For services described in this policy, precertification/preauthorization **IS REQUIRED** for all products if the procedure is performed **inpatient**.

Outpatient

- For services described in this policy, see below for products where prior authorization **might be required** if the procedure is performed **outpatient**.

	Outpatient
Commercial Managed Care (HMO and POS)	Prior authorization is **not required**.
Commercial PPO and Indemnity	Prior authorization is **not required**.
Medicare HMO Blue[SM]	Prior authorization is **not required**.
Medicare PPO Blue[SM]	Prior authorization is **not required**.

CPT Codes / HCPCS Codes / ICD Codes

Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.

Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.

The following codes are included below for informational purposes only; this is not an all-inclusive list.

The above medical necessity criteria MUST be met for the following codes to be covered for Commercial Members: Managed Care (HMO and POS), PPO, Indemnity, Medicare HMO Blue and Medicare PPO Blue:

CPT Codes

CPT codes:	Code Description
43265	Endoscopic retrograde cholangiopancreatography (ERCP); with destruction of calculi, any method (eg, mechanical, electrohydraulic, lithotripsy)

The following ICD Diagnosis Codes are considered medically necessary when submitted with the CPT codes above if medical necessity criteria are met:

ICD-10 Diagnosis Codes

ICD-10-CM Diagnosis codes:	Code Description
K80.42	Calculus of bile duct with acute cholecystitis without obstruction
K80.30	Calculus of bile duct with cholangitis, unspecified, without obstruction
K80.31	Calculus of bile duct with cholangitis, unspecified, with obstruction
K80.32	Calculus of bile duct with acute cholangitis without obstruction
K80.33	Calculus of bile duct with acute cholangitis with obstruction
K80.34	Calculus of bile duct with chronic cholangitis without obstruction
K80.35	Calculus of bile duct with chronic cholangitis with obstruction
K80.36	Calculus of bile duct with acute and chronic cholangitis without obstruction
K80.37	Calculus of bile duct with acute and chronic cholangitis with obstruction
K80.40	Calculus of bile duct with cholecystitis, unspecified, without obstruction
K80.41	Calculus of bile duct with cholecystitis, unspecified, with obstruction
K80.43	Calculus of bile duct with acute cholecystitis with obstruction
K80.44	Calculus of bile duct with chronic cholecystitis without obstruction
K80.45	Calculus of bile duct with chronic cholecystitis with obstruction
K80.46	Calculus of bile duct with acute and chronic cholecystitis without obstruction
K80.47	Calculus of bile duct with acute and chronic cholecystitis with obstruction
K80.50	Calculus of bile duct without cholangitis or cholecystitis without obstruction
K80.51	Calculus of bile duct without cholangitis or cholecystitis with obstruction
K80.60	Calculus of gallbladder and bile duct with cholecystitis, unspecified, without obstruction
K80.61	Calculus of gallbladder and bile duct with cholecystitis, unspecified, with obstruction
K80.62	Calculus of gallbladder and bile duct with acute cholecystitis without obstruction
K80.63	Calculus of gallbladder and bile duct with acute cholecystitis with obstruction
K80.64	Calculus of gallbladder and bile duct with chronic cholecystitis without obstruction
K80.65	Calculus of gallbladder and bile duct with chronic cholecystitis with obstruction

K80.66	Calculus of gallbladder and bile duct with acute and chronic cholecystitis without obstruction
K80.67	Calculus of gallbladder and bile duct with acute and chronic cholecystitis with obstruction
K80.70	Calculus of gallbladder and bile duct without cholecystitis without obstruction
K80.71	Calculus of gallbladder and bile duct without cholecystitis with obstruction
K80.81	Other cholelithiasis with obstruction

Description

Endoscopic retrograde cholangiopancreatography is the standard approach for removing common bile duct stones. In order to facilitate bile duct stone extraction, the biliary sphincter is incised with a sphincterotome utilizing a technique referred to as biliary papillotomy or sphincterotomy. Following biliary sphincterotomy, common bile duct stones are extracted using basket or balloon extraction techniques. This approach is successful in approximately 85% of individuals.

Following successful endoscopic sphincterotomy, a variety of factors may hinder stone extraction, including large stone size, hard consistency, and location. To facilitate extraction of large bile duct stones, several adjuvant techniques have been developed to reduce stone size prior to endoscopic removal. Mechanical lithotripsy remains the best initial option for fragmenting these large stones increasing the overall success rate of stone removal to greater than 90%.

Summary

For the small number of cases (<10%) that cannot be successfully treated with conventional techniques, the use of laser or electrohydraulic lithotripsy can increase the success rate to almost 100%. Laser lithotripsy is accomplished using a catheter that contains a thin fiber optic cable that enables direct visualization of the large stone(s), thereby allowing the endoscopist to aim the laser or electrohydraulic fiber directly at the stone resulting in stone fragmentation when activated. The fragments can then be removed by traditional extraction methods. In these cases, the use of laser lithotripsy may be medically necessary.

Policy History

Date	Action
5/2020	Policy updated with literature review through April 2020, references added. Policy statements unchanged.
2/2018	Coding information clarified.
11/2015	Added coding language.
6/2014	Updated Coding section with ICD10 procedure and diagnosis codes. Effective 10/2015.
11/2011-4/2012	Medical policy ICD 10 remediation: Formatting, editing and coding updates. No changes to policy statements.
10/2011	Reviewed - Medical Policy Group - Gastroenterology, Nutrition, and Organ Transplantation. No changes to policy statements.
11/2010	Reviewed - Medical Policy Group - Gastroenterology, Nutrition, and Organ Transplantation. No changes to policy statements.
7/2010	New policy effective 7/1/2010, describing covered and non-covered indications.

Information Pertaining to All Blue Cross Blue Shield Medical Policies

Click on any of the following terms to access the relevant information:
Medical Policy Terms of Use
Managed Care Guidelines
Indemnity/PPO Guidelines
Clinical Exception Process
Medical Technology Assessment Guidelines

References

1. Siegel JH, Ben-Zvi JS, Pullano WE. Endoscopic electrohydraulic lithotripsy. GIE 1990; 36:134-6.
2. Josephs LG, Birkett DR. Electrohydraulic lithotripsy (EHL) for the treatment of large retained common bile duct stones. The American Surgeon 1990; 56:232-4.
3. Arya N, Nelles SE, Haber GB, Kim Yr, Kortan PK. Electrohydraulic lithotripsy in 111 patients: A safe and effective therapy for difficult bile duct stones. Amer J Gastroenterol 2004; 99:2330-4.
4. Moon JR, Cha SW, Ryu CB, Kim YS, Hong SJ, Cheon YK et al. GIE 2004; 60:562-6.
5. Jakobs R, Adamek HE, Maier M, Kromer M, Benz C, Martin WR, Reimann JF. Fluoroscopically guided laser lithotripsy versus extracorporeal shock wave lithotripsy for retained bile duct stones: a prospective randomized study. Gut 1997; 40:678-82.
6. Harris VJ, Sherman S, Trerotola SO, Snidow JJ, Johnson MS, Lehman GA. Complex biliary stones: Treatment with a small choledochoscope and laser lithotripsy. Radiology 1996; 199:71-7.
7. Amit P Maydeo, Rungsun Rerknimitr, James Y Lau. Cholangioscopy-guided Lithotripsy for Difficult Bile Duct Stone Clearance in a Single Session of ERCP: Results from a Large Multinational Registry Demonstrate High Success Rates. Endoscopy, 51 (10), 922-929, Oct 2019.
8. Buxbaum J, Sahakian A, Ko C. Randomized trial of cholangioscopy-guided laser lithotripsy versus conventional therapy for large bile duct stones (with videos). Gastrointest Endosc. 2018 Apr;87(4):1050-1060.

Endnotes

[1] Based on expert opinion