Percutaneous Biliary Procedures

CPT® Assistant.

December 2015; Volume 25: Issue 12

Percutaneous Biliary Procedures

The Relativity Assessment Workgroup (RAW) of the American Medical Association/Specialty Society Relative Value Scale (RVS) Update Committee (RUC) identified percutaneous biliary procedure codes, 47500, 47505, 47510, 47511, 47525, 47530, and radiological supervision and management codes, 74305, 74320, 74327, 75980, and 75982, as being reported together greater than 75% of the time. Therefore, in the Current Procedural Terminology (CPT®) 2016 code set, these codes have been deleted, and 14 new codes, including three add-on codes, have been established to describe bundled image-guided percutaneous biliary procedures.

Image-guided percutaneous biliary procedures (eg, transhepatic, transcholecystic) are described by existing code 47490 (percutaneous cholecystostomy) and by new codes 47531-47541. Diagnostic cholangiography is typically performed with percutaneous biliary procedures and, therefore, it is included in codes 47490, 47531- 47541. This article addresses the appropriate reporting of new codes 47531-47544.

47490
Cholecystostomy, percutaneous, complete procedure, including imaging guidance, catheter placement, cholecystogram when performed, and radiological supervision and interpretation

(Do not report 47490 in conjunction with 47531, 47532, 75989, 76942, 77002, 77012, 77021)

(47500, 47505, 47510, 47511, 47525, 47530 have been deleted. To report, see 47531-47541)

47531
Injection procedure for cholangiography, percutaneous, complete diagnostic procedure including imaging guidance (eg, ultrasound and/or fluoroscopy) and all associated radiological supervision and interpretation; existing access

47532
new access (eg, percutaneous transhepatic cholangiogram)

(Do not report 47531, 47532 in conjunction with 47490, 47533, 47534, 47535, 47536, 47537, 47538, 47539, 47540, 47541 for procedures performed through the same percutaneous access)

(For intraoperative cholangiography, see 74300, 74301)

47533

Placement of biliary drainage catheter, percutaneous, including diagnostic cholangiography when performed, imaging guidance (eg, ultrasound and/or fluoroscopy), and all associated radiological supervision and interpretation; external

47534

internal-external

47535

Conversion of external biliary drainage catheter to internal-external biliary drainage catheter, percutaneous, including diagnostic cholangiography when performed, imaging guidance (eg, fluoroscopy), and all associated

47536

Exchange of biliary drainage catheter (eg, external, internal-external, or conversion of internal-external to external only), percutaneous, including diagnostic cholangiography when performed, imaging guidance (eg, fluoroscopy), and all associated radiological supervision and interpretation

(Do not report 47536 in conjunction with 47538 for the same access)

(47536 includes exchange of one catheter. For exchange of additional catheter[s] during the same session, report 47536 with modifier 59 for each additional exchange)

47537

Removal of biliary drainage catheter, percutaneous, requiring fluoroscopic guidance (eg, with concurrent indwelling biliary stents), including diagnostic cholangiography when performed, imaging guidance (eg, fluoroscopy), and all associated radiological supervision and interpretation

(Do not report 47537 in conjunction with 47538 for the same access)

(For removal of biliary drainage catheter not requiring fluoroscopic guidance, see E/M services and report the appropriate level of service provided [eg 99201-99215, 99217, 99218, 99219, 99220, 99221, 99222, 99223, 99224, 99225, 99226, 99231, 99232, 99233])

47538

Placement of stent(s) into a bile duct, percutaneous, including diagnostic cholangiography, imaging guidance (eg, fluoroscopy and/or ultrasound), balloon dilation, catheter exchange(s) and catheter removal(s) when performed, and all associated radiological supervision and interpretation, each stent; existing access

(Do not report 47538 in conjunction with 47536, 47537 for the same percutaneous access)

47539

new access, without placement of separate biliary drainage catheter

47540

new access, with placement of separate biliary drainage catheter (eg, external or internal-external)

(Do not report 47538, 47539, 47540 in conjunction with 43277, 47542, 47555, 47556 for the same lesion in the same session)

(Do not report 47540 in conjunction with 47533, 47534 for the same percutaneous access)

47541

Placement of access through the biliary tree and into small bowel to assist with an endoscopic biliary procedure (eg, rendezvous procedure), percutaneous, including diagnostic cholangiography when performed, imaging guidance (eg, ultrasound and/or fluoroscopy), and all associated radiological supervision and interpretation, new access

(Do not report 47541 in conjunction with 47531, 47532, 47533, 47534, 47535, 47536, 47537, 47538, 47539, 47540)

(Do not report 47541 when there is existing catheter access)

47542

Balloon dilation of biliary duct(s) or of ampulla (sphincteroplasty), percutaneous, including imaging guidance (eg, fluoroscopy), and all associated radiological supervision and interpretation, each duct (List separately in addition to code for primary procedure)

(Use 47542 in conjunction with 47531, 47532, 47533, 47534, 47535, 47536, 47537, 47541)

(Do not report 47542 in conjunction with 43262, 43277, 47538, 47539, 47540, 47555, 47556)

(Do not report 47542 in conjunction with 47544 if a balloon is used for removal of calculi, debris, and/or sludge rather than for dilation)

(For percutaneous balloon dilation of multiple ducts during the same session, report an additional dilation once with 47542 and modifier 59, regardless of the number of additional ducts dilated)

(For endoscopic balloon dilation, see 43277, 47555, 47556)

47543

Endoluminal biopsy(ies) of biliary tree, percutaneous, any method(s) (eg, brush, forceps, and/or needle), including imaging guidance (eg, fluoroscopy), and all associated radiological supervision and interpretation, single or multiple (List separately in addition to code for primary procedure)

(Use 47543 in conjunction with 47531, 47532, 47533, 47534, 47535, 47536, 47537, 47538, 47539, 47540)

(Report 47543 once per session)

(For endoscopic brushings, see 43260, 47552)

(For endoscopic biopsy, see 43261, 47553)

47544

Removal of calculi/debris from biliary duct(s) and/or gallbladder, percutaneous, including destruction of calculi by any method (eg, mechanical, electrohydraulic, lithotripsy) when performed, imaging guidance (eg, fluoroscopy), and all associated radiological supervision and interpretation (List separately in addition to code for primary procedure)

(Use 47544 in conjunction with 47531, 47532, 47533, 47534, 47535, 47536, 47537, 47538, 47539, 47540)

(Do not report 47544 if no calculi or debris are found, even if removal device is deployed)

(Do not report 47544 in conjunction with 43264, 47554)

(Do not report 47544 in conjunction with 47531-47543 for incidental removal of debris)

(For endoscopic removal of calculi, see 43264, 47554)

(For endoscopic destruction of calculi, use 43265)

New codes 47531 and 47532 describe percutaneous diagnostic cholangiography that includes injection(s) of contrast material, all associated radiological supervision and interpretation, and procedural imaging guidance (eg, ultrasound and/or fluoroscopy). Code 47531 includes cholangiography performed through existing access, while code 47532 includes the work of accessing the biliary system with a needle or catheter. Codes 47531 and 47532 may not be reported with codes 47533, 47534, 47535, 47536, 47537, 47538, 47539, 47540, and 47541.

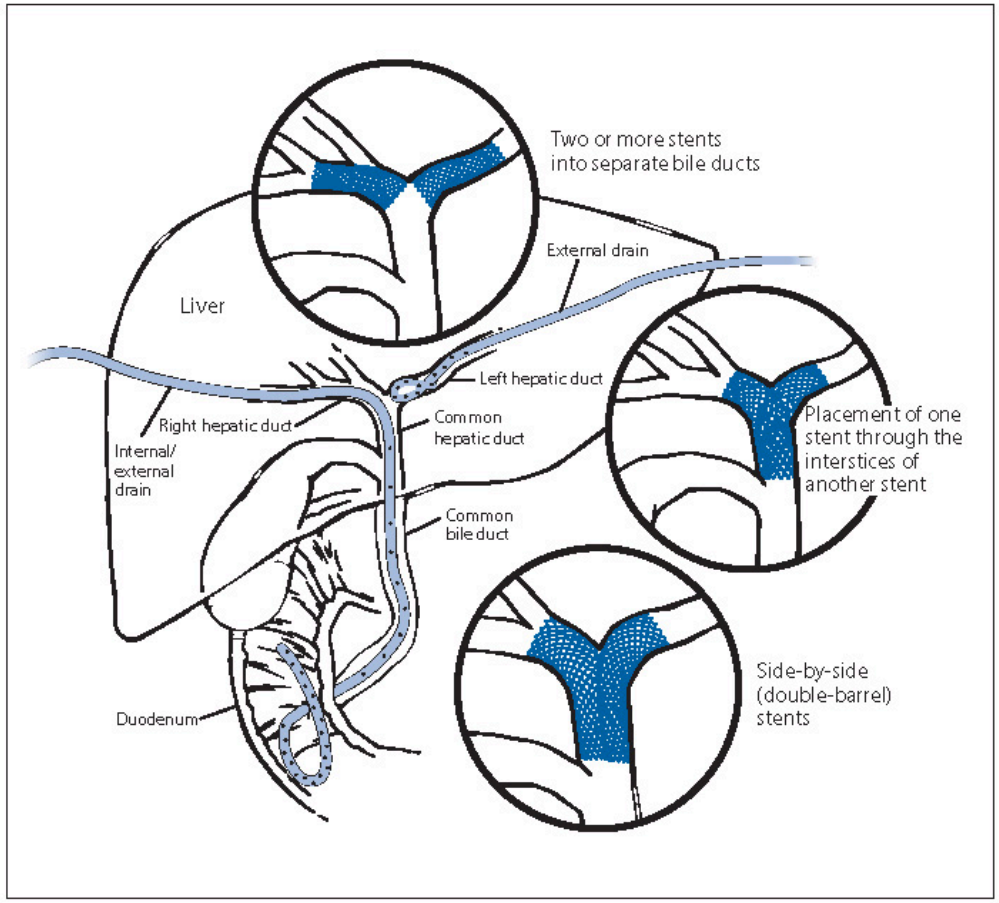
New codes 47533-47537 describe a variety of procedures involving biliary drainage catheters, and it may be reported once for each catheter conversion, exchange, or removal (eg, bilobar, bisegmental). Of note in this code set, an external biliary drainage catheter is a catheter placed into a bile duct that does not terminate in the bowel, which drains bile externally only. An internal-external biliary drainage catheter is a single, externally accessible catheter that terminates in the small intestine, and it may drain bile into the small intestine and/or externally. Biliary stents, as used in this code set and discussed later in this article, are percutaneously placed devices (eg, self-expanding metallic mesh stent, plastic tube) that are positioned within the biliary tree and completely internal, with no portion extending outside the patient. Historically, the term 'stent' has been used to describe any diversionary drainage catheter, however, because of the development of internalized metal prostheses, the use of the term has fallen out of favor when referring to a drainage catheter.

Code 47533 describes the work of placing an external biliary drainage catheter. Code 47534 describes the work of placing an internal-external biliary drainage catheter. The work of converting an external biliary drainage catheter to an internal-external biliary drainage catheter is described by code 47535. Code 47536 describes the work of exchanging any type of biliary drainage catheter. Specifically, code 47536 may be used for the exchange of an external biliary drainage catheter, the exchange of an internal-external biliary drainage catheter, or the conversion of an internal-external biliary drainage catheter to an external biliary drainage catheter. Code 47537 describes the work of removing a biliary drainage catheter over a guide wire when fluoroscopic guidance is required.

New codes 47538, 47539, and 47540 describe the work of placing biliary stents. Code 47538 describes the work involved in placing a biliary stent when pre-existing access exists. Specifically, code 47538 should not be reported in addition to code 47536, as the work of drainage catheter conversion is included in the description of work for this code. Code 47539 describes the work of placing a biliary stent from new biliary access without leaving a biliary drainage catheter behind. Lastly, code 47540 describes the placement of a biliary stent after obtaining new biliary access and also leaving a biliary drainage catheter (either external or internal-external) in place at the end of the procedure. Similarly, code 47540 should not be reported in conjunction with codes 47533 or 47534, as the work of biliary drainage catheter placement is included in the work described by code 47540.

Codes 47538, 47539, and 47540 may be reported only once per session to describe one or more overlapping or serial stent(s) placed within a single bile duct or bridging more than one ductal segment (eg, left hepatic duct and common bile duct) through a single percutaneous access. However, codes 47538-47540 may be reported more than once in the following circumstances, by appending modifier 59, Distinct Procedural Service, to the second code reported: (1) the placement of side-by-side (eg, double-barrel) stents within a single bile duct; (2) the placement of two or more stents into separate bile ducts through a single percutaneous access; or (3) the placement of stents through two or more percutaneous access sites (eg, the placement of one stent through the interstices of another stent, the placement of stents into separate bile ducts using multiple accesses). Figure 1 illustrates situations in which the use of modifier 59 may be used to report placement of more than one stent in the biliary tree.

Figure 1. Percutaneous Biliary Stent(s) and Drain Placement



Coding Tip

It is important to emphasize that codes 47533-47540 include the elements of access, drainage catheter manipulations, diagnostic cholangiography, imaging guidance (eg, ultrasonography and/or fluoroscopy), and all associated radiological supervision and interpretation.

New code 47541 describes the work involved in obtaining a new percutaneous access through the biliary tree and into the small bowel to assist with an endoscopic biliary procedure. Often, these procedures, which are commonly called rendezvous procedures, are performed in conjunction with other procedures (eg, ERCP procedures) that are performed by other providers. Devices placed for the rendezvous procedure may include a guide wire and/or a catheter. However, code 47541 may not be reported if a guide wire is placed through an existing percutaneous biliary access.

As mentioned at the beginning of the article, three new add-on codes have also been established in the CPT 2016 code set to describe additional percutaneous biliary work. Codes 47542, 47543, and 47544 describe procedures that may be performed in conjunction with other procedures in the percutaneous biliary code family (47490, 47531-47540). Codes 47542, 47543, and 47544 do not include access, catheter placement, or diagnostic imaging. Code 47542 describes the work of balloon dilation of biliary ducts or the ampulla; while code 47543 describes the work of endoluminal biopsy of the biliary tree. Code 47544 describes the work of removal of calculi/debris from the biliary ducts and/or gallbladder.

Code 47542 should not be reported with codes 47538-47540, as the work of balloon dilation is included in biliary stent placement. If a balloon dilation is performed only to remove calculi/debris, code 47542 should not be reported; instead, report code 47544.Note that code 47543 may be reported only once per procedure, regardless of how many biopsy specimens are obtained and regardless of the means by which they are obtained. Code 47544 may not be reported if no debris/calculi is present, regardless of whether the removal device is deployed. In addition, it should not be reported for incidental removal of debris, such as during injection of contrast material for cholangiography. (Note that the fourth parenthetical note below code 47544 on page 5 in this article is the **corrected** parenthetical, ie, it does not match the published CPT 2016 codebook. This error will be published as part of the Errata on the CPT website at www.ama-assn.org/ama/pub/physician-resources/solutions-managing-your-practice/coding-billing-insurance/cpt/about-cpt/errata.page.)

Clinical Example (47531)

A 61-year-old male with an obstructive pancreatic head mass presents with worsening liver enzymes and hyperbilirubinemia following recent placement of an internal-external percutaneous biliary drainage catheter.

Description of Procedure (47531)

The existing tube and abdomen surrounding this region is prepared and draped in sterile fashion, and local anesthetic is given. Contrast is injected through the existing tube under fluoroscopic guidance. Multiple radiographs are obtained in multiple projections. The tube is flushed with saline and left in place.

Clinical Example (47532)

A 61-year-old male presents with worsening liver enzymes and hyperbilirubinemia of unknown etiology. Endoscopic retrograde cholangiopancreatography (ERCP) was unsuccessful.

Description of Procedure (47532)

Ultrasound and fluoroscopy are used to identify a safe tract into a peripheral bile duct in the liver. The abdomen and right flank are prepared and draped in sterile fashion, and local anesthetic is given. Under ultrasound and fluoroscopic guidance, multiple needle passes are made. Ultimately a needle is placed into a peripheral bile duct, and contrast is injected to opacify the bile ducts. Multiple radiographs are obtained in multiple projections. The needle is removed. A sterile dressing is applied.

Clinical Example (47533)

A 61-year-old male presents with a new pancreatic head mass, jaundice, hyperbilirubinemia, and an elevated white blood cell count. Percutaneous therapeutic management is performed.

Description of Procedure (47533)

Ultrasound and fluoroscopy are used to identify a potential safe tract into a peripheral bile duct in the liver. The abdomen and right flank are prepared and draped in sterile fashion, and local anesthetic is given. Under ultrasound and fluoroscopic guidance, a needle is placed into a peripheral bile duct, and contrast is injected to ensure biliary placement and identify the level of obstruction. Cholangiography is performed with imaging in multiple projections. A guidewire is passed through the needle into the bile ducts. The tract is dilated with a transitional dilator set, and a combination of diagnostic catheters and guidewires are used to attempt to cross the level of obstruction. The obstruction precludes passage of a guidewire, and ultimately the transitional dilator set is exchanged for an external biliary drainage catheter. The catheter is connected to a gravity drainage bag and anchored at the skin's surface with a retention suture. Sterile dressings are applied. A bile specimen is obtained and sent to the lab for culture.

Clinical Example (47534)

A 61-year-old male presents with a new pancreatic mass, obstructive jaundice, and hyperbilirubinemia. Percutaneous therapeutic management is performed.

Description of Procedure (47534)

Ultrasound and fluoroscopy are used to identify a potential safe tract into a peripheral bile duct in the liver. The abdomen and right flank are prepared and draped in sterile fashion, and local anesthetic is given. Under ultrasound and fluoroscopic guidance, a needle is placed into a peripheral bile duct, and contrast is injected to ensure biliary placement and identify the level of obstruction. Cholangiography is performed with imaging in multiple projections. A bile specimen is obtained and sent to the lab for culture. A guide wire is passed through the needle into the bile ducts. The tract is dilated with a transitional dilator set and a new 0.035 guide wire is used to cross the level of obstruction and terminate in the

small bowel. The tract is serially dilated, and an (8F) internal/external biliary drainage catheter is placed over the guide wire, terminating within the small bowel. Contrast injection administered under fluoroscopic guidance confirms placement in the small bowel and that side holes are positioned appropriately within the bile ducts. The catheter is connected to a gravity drainage bag and anchored at the skin's surface with a retention suture. Sterile dressings are applied.

Clinical Example (47535)

A 61-year-old male presents following the placement of an external biliary drainage catheter, which was recently placed to treat cholangitis in the setting of biliary obstruction. At the time of placement, the level of obstruction could not be crossed with a guidewire or catheter. The patient presents for conversion of his external biliary drainage catheter to an internal-external biliary drainage catheter.

Description of Procedure (47535)

The existing tube, abdomen, and right flank are prepared and draped in sterile fashion, and local anesthetic is given. Under fluoroscopic guidance, a guide wire is placed through the existing tube into the bile ducts. The tube is exchanged for a sheath. Cholangiogram is performed through the sheath. Multiple radiographs in multiple pro-jections are obtained. Under fluoroscopic guidance, a catheter and guide wire are passed through the sheath to cross the level of obstruction. The sheath is exchanged for a new internal-external biliary drainage catheter, which terminates in the small bowel. Contrast injection administered under fluoroscopic guidance confirms placement in the small bowel and that side holes are positioned appropriately within the bile ducts. The catheter is connected to a gravity drainage bag and anchored at the skin’s surface with a retention suture. Sterile dressings are applied.

Clinical Example (47536)

A 61-year-old male presents following the placement of an internal-external biliary drainage catheter for an obstructive pancreatic head mass. The patient has been experiencing fevers and leakage around the existing tube. The patient presents for exchange of the existing internal-external biliary drain.

Description of Procedure (47536)

The existing tube, abdomen, and right flank are prepared and draped in sterile fashion, and local anesthetic is given. Under fluoroscopic guidance, a guide wire is placed through the existing tube into the small bowel. The tube is exchanged for a sheath. Cholangiogram is performed through the sheath. Multiple radiographs in multiple projections are obtained. The sheath is exchanged over the guide wire for a new internal-external biliary drainage catheter. Contrast injection under fluoroscopic guidance confirms placement in the small bowel and that side holes are positioned appropriately within the bile ducts. The catheter is connected to a gravity drainage bag and anchored at the skin's surface with a retention suture. Sterile dressings are applied.

Clinical Example (47537)

A 61-year-old male presents following the placement of biliary stents for obstructive metastatic pancreatic cancer. An external biliary drain was left at the time of stent placement, and the patient presents for removal of the external biliary drainage catheter under fluoroscopic guidance to ensure the indwelling stents are not displaced during removal.

Description of Procedure (47537)

The existing tube, abdomen, and right flank are prepared and draped in sterile fashion, and local anesthetic is given. Cholangiogram is performed through the existing external biliary drain to ensure stent patency before drainage catheter removal. Multiple radiographs in multiple projections are obtained. A guide wire is placed through the existing catheter. The catheter is then removed over the guide wire under fluoroscopic guidance and the guidewire is removed. Sterile dressings are applied.

Clinical Example (47538)

A 61-year-old male presents following the placement of an internal-external biliary drainage catheter for an obstructive pancreatic head mass. Biliary stent placement with removal of the biliary drain is performed.

Description of Procedure (47538)

The existing tube, abdomen, and right flank are prepared and draped in sterile fashion, and local anesthetic is given. Under fluoroscopic guidance, a guide wire is placed through the existing tube into the small bowel. The tube is exchanged for a sheath. Cholangiogram is performed through the sheath. Multiple radiographs in multiple projections are obtained. Over the guide wire, a balloon is placed to dilate the level of obstruction. A biliary stent is then placed under fluoroscopic guidance, crossing the level of obstruction. A new balloon is placed over the guide wire to dilate the stent to the appropriate diameter. Cholangiogram is again performed through the sheath. Multiple radiographs in multiple projections are obtained. The sheath is exchanged for an external biliary drainage catheter. Contrast injection is administered through the new catheter to confirm appropriate placement in the bile ducts. The catheter is capped and anchored at the skin's surface with a retention suture. Sterile dressings are applied.

Clinical Example (47539)

A 61-year-old male presents with a new obstructive pancreatic mass, unresectable extra hepatic metastatic disease, mild jaundice, and hyperbilirubinemia. Percutaneous therapeutic management using an internal biliary stent is performed.

Description of Procedure (47539)

Ultrasound and fluoroscopy are used to identify a potential safe tract into a peripheral bile duct in the liver. The abdomen and right flank are prepared and draped in sterile fashion, and local anesthetic is given. Under ultrasound and fluoroscopic guidance, a needle is placed into a peripheral bile duct and contrast is injected to ensure biliary placement.

Cholangiogram is performed. Multiple radiographs in multiple projections are obtained. A guide wire is passed through the needle. The tract is dilated with a transitional dilator set, and a catheter and guide wire combination is used to cross the level of obstruction and terminate in the small bowel. A sheath is placed over the guide wire. A balloon is used to dilate the level of obstruction. A biliary stent is placed through the sheath over the guide wire, crossing the level of obstruction. A new balloon is again used to dilate the stent to the appropriate diameter. Cholangiogram is again performed through the sheath to ensure stent patency and appropriate placement. Multiple radiographs in multiple projections are obtained. The guide wire and sheath are removed, and the tract is embolized. Sterile dressings are applied.

Clinical Example (47540)

A 61-year-old male presents with a new obstructive pancreatic mass, unresectable extra-hepatic metastatic disease, severe jaundice, and hyperbilirubinemia. Percutaneous therapeutic management using a biliary stent and a biliary drainage catheter is performed.

Description of Procedure (47540)

Ultrasound and fluoroscopy are used to identify a potential safe tract into a peripheral bile duct in the liver. The abdomen and right flank are prepared and draped in sterile fashion, and local anesthetic is given. Under ultrasound and fluoroscopic guidance, a needle is placed into a peripheral bile duct and contrast is injected to ensure biliary placement. Cholangiogram is performed. Multiple radiographs in multiple projections are obtained. A guide wire is passed through the needle. The tract is dilated with a transitional dilator set, and a catheter and guide wire combination is used to cross the level of obstruction and terminate in the small bowel. A sheath is placed over the guide wire. A balloon is placed over the guide wire to dilate the level of obstruction. A biliary stent is placed through the sheath over the guide wire, crossing the level of obstruction. A new balloon is then used to dilate the stent to the appropriate diameter. Cholangiogram is again performed through the sheath to ensure stent patency. Multiple radiographs in multiple projections are obtained. The sheath is exchanged over the guide wire for an external biliary drainage catheter. The catheter is capped and anchored at the skin's surface with a retention suture. Sterile dressings are applied.

Clinical Example (47541)

A 61-year-old male presents with a new obstructive pancreatic mass. ERCP was unsuccessful, and the gastroenterology service has asked for percutaneous guide wire placement through the bile ducts into the small bowel to establish access into the biliary system for subsequent endoscopically-guided interventions.

Description of Procedure (47541)

Ultrasound and fluoroscopy are used to identify a potential safe tract into a peripheral bile duct in the liver. The abdomen and right flank are prepared and draped in sterile fashion, and local anesthetic is given. Under ultrasound and fluoroscopic guidance, a needle is placed into a peripheral bile duct and contrast is injected to ensure biliary placement. Cholangiogram is performed. Multiple radiographs in multiple projections are obtained. A guide wire is passed through the needle. The tract is dilated with a transitional dilator set. A catheter and a 0.035 guide wire are then used to cross the level of obstruction and successfully place a guide wire that extends into the small bowel from the percutaneous access site. A sterile dressing is placed over the guide wire to maintain biliary access for the patient's subsequent endoscopic procedure.

Clinical Example (47542)

A 41-year-old female presents with hyperbilirubinemia six months following cholecystectomy. Magnetic resonance cholangiopancreatography demonstrates biliary strictures in the right hepatic duct with consequent biliary ductal dilation throughout the right hepatic lobe. Percutaneous therapeutic management is performed.

Description of Procedure (47542)

Access to the biliary tree is acquired and a transitional dilator is placed (separately reportable). A guidewire and catheter combination is used to pass the guide wire across the biliary stricture. The transitional dilator set is exchanged for a sheath. A balloon is placed through the sheath over the guidewire and used to dilate the biliary stricture. The balloon is removed. Cholangiography is performed through the sheath to assess adequacy of dilation. An internal-external biliary drainage catheter is placed over the guide wire, terminating in the small bowel (separately reportable). The patient is transported to the recovery room for hemodynamic monitoring and pain control. The procedure is documented in the patient's medical record. The patient's status and the results of the procedure are communicated to the patient and/or the patient's family. Permanent reports are created for the patient's medical record, and copies of the reports are sent to the referring physician.

Clinical Example (47543)

A 61-year-old male presents following the placement of an internal-external biliary drainage catheter placed in the setting of cholangitis, sepsis, and a new pancreatic head mass. The patient's sepsis and cholangitis have resolved, and endoluminal biopsy is now appropriate to assess for metastatic disease.

Description of Procedure (47543)

Removal of the existing drainage catheter over a guide wire is performed (separately reportable). A sheath is placed. Through the sheath, a biopsy device is placed to obtain biopsies from the ipsilateral hepatic duct, common hepatic duct, and common bile duct. Using a new guidewire and catheter combination, the sheath is manipulated into the contralateral hepatic duct. The biopsy device is again placed and specimens are obtained. The biopsy specimens are sent to the laboratory for analysis. A catheter and guide wire combination is then used to obtain access into the small bowel. The sheath is exchanged over the guide wire for a new internal-external biliary drainage catheter (separately reportable).

Clinical Example (47544)

A 61-year-old male presents following the placement of an internal-external biliary drainage catheter placed in the setting of cholangitis. Cholangiogram performed at the time of catheter placement demonstrates multiple filling defects in the common bile duct consistent with cholelithiasis. Calculi are consequently removed via percutaneous access during the procedure.

Description of Procedure (47544)

Removal of the existing tube is performed over a guide wire (tip in small bowel). A sheath is placed over the guide wire. Cholangiogram is performed. The obstructing stone is captured in a basket and crushed into smaller fragments. Through the sheath, a balloon catheter is placed and the balloon is inflated. The balloon catheter is advanced over the guide wire and through the ampulla multiple times, clearing the bile ducts of cholelithiases. The balloon catheter is removed.

Cholangiography is performed through the sheath to assess adequacy of stone removal. The sheath is exchanged over the guide wire and an internal-external biliary drainage catheter is placed (separately reportable).

