

# Interventional Radiology Coding Case Studies

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**Week of November 12, 2018**

## **Biliary Drainage Catheter Placement & Stent**

**INDICATION:** Patient with marked intrahepatic and extrahepatic biliary dilatation and likely pancreatic mass. ERCP failed to cannulate the bile duct. The patient has markedly bilirubin.

Percutaneous drainage is requested.

### **PROCEDURES PERFORMED:**

1. Percutaneous puncture of a central hepatic duct.
2. Percutaneous cholangiogram.
3. Second access into a peripheral right lobe duct.
4. Cannulation of the duodenum.
5. Injection of contrast with catheter in the duodenum to confirm intraluminal placement.
6. Primary stenting of severe narrowing of the distal common bile duct using an 8-100 Smart stent.
7. Balloon angioplasty to 6 mm throughout the stent.
8. Placement of a 10-French biliary drainage catheter.
9. IV conscious sedation.

**PROCEDURE DESCRIPTION:** The patient was placed supine on the angiographic table. The right flank was prepped and draped in normal sterile fashion. A generous amount of 1% buffered Lidocaine was infused into the skin and subcutaneous tissues. Through the T8-T9 interspace, a 21-gauge needle was advanced into the hepatic parenchyma. The inner stylet was improved, and a gentle injection of contrast confirmed puncture of a central duct. Contrast agent was then injected to perform a percutaneous transhepatic cholangiogram. There is marked intrahepatic and extrahepatic biliary dilatation. There is minimal reflux of contrast agent into the small bowel.

Next, a 21-gauge needle was then advanced into a peripheral right lobe duct. A 0.018 wire was advanced, and a transition coaxial dilator was inserted. A 0.035 guidewire was used to cannulate the duodenum followed by placement of a 5-French slip catheter. Injection of contrast confirmed placement within the duodenal lumen.

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Next, a 6-French sheath was inserted and primary stenting was performed of the severe narrowing at the distal common bile duct using an 8-100 Smart stent. Balloon angioplasty was performed using a 6-6 balloon. Repeat injection of contrast demonstrated forward flow through the stent and into the duodenum.

Next, a 10-French biliary drain was then inserted. The distal end was coiled within the duodenum. The proximal-most side hole was seen within the intrahepatic right biliary tree.

Injection of contrast through the biliary drain demonstrated appropriate tube positioning with forward flow throughout the tube. The tube was secured to the skin using synthetic suture. The tube was placed to gravity drainage. The patient tolerated the procedure well. There were no immediate complications.

Total fluoroscopy time was 12.2 minutes.

A total of 40 mL of Isovue-370 was injected into the biliary system and small bowel.

The patient received 0.5 mg Versed and 75 mcg fentanyl IV. Moderate sedation was administered by the Interventional Radiology nurse under the supervision of the Interventional Radiology physician utilizing Versed and Fentanyl. The patient was continuously monitored during the procedure by the nurse utilizing automated blood pressure, EKG, and pulse oximetry measurements. There were no untoward effects. Sedation time 53 minutes.

**CONCLUSION:** Marked intrahepatic and extrahepatic biliary dilatation secondary to severe narrowing of the distal common bile duct. A percutaneous transhepatic cholangiogram confirmed these findings. Placement of an 8-100 Smart stent across the narrowing of the distal common bile duct, which underwent angioplasty to 6 mm. Placement of a 10-French biliary drain to internal/external drainage.

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# Interventional Radiology Coding Case Studies CPT Codes

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## **Biliary Drainage Catheter Placement & Stent**

### **Procedure Codes:**

- 47540 Placement of Biliary Drain & Stent
- 99152 Moderate sedation first 15 minutes
- 99153 x3 Moderate sedation each additional 15 minutes
- Q9967 x40 LOCM 300-399 MG/ML

### **Diagnosis Codes:**

- K83.8 Biliary dilatation

### **Comments:**

- Code 47540 describes placement of a stent into the bile duct via a new access with placement of a drainage catheter.
- Balloon dilation for stent placement is included in code 47540. The add-on code +47542 applies to balloon dilation of the ducts separate from stent placement.
- Cholangiography is included in code 47540.
- 53 minutes of moderate conscious sedation noted, billed in 15 minute increments. (99152, 99153)
- *Drugs and supplies are billed by the facility performing the procedure and should not be assigned for professional fee coding.*

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## Applicable Coding Rules:

### Placement of Biliary Stent (47538-47540)

- A stent as described by these codes is a percutaneously placed device (eg, self-expanding metallic mesh stent, plastic tube) that is positioned within the biliary tree and is completely internal with no portion extending outside the body.
- Code 47538 describes placement of a stent into a bile duct via an existing access.
  - ❖ Code 47538 includes accessing the biliary system, catheter manipulations, injection of contrast material, imaging guidance (ultrasound and/or fluoroscopy) and all associated RS&I to complete the procedure and diagnostic imaging (47531-47532).
  - ❖ Code 47538 should not be reported together with 47536 if a biliary drainage catheter (eg, external or internal-external) is replaced after the biliary stent is placed.
  - ❖ Do not report code 47538 with either 47536 or 47537 for the same access.
  - ❖ Balloon dilation is included in code 47538 when performed in the same duct as stent placement.
  - ❖ Do not report 47538 with 43277, 47542, 47555 and 47556 for the same lesion in the same session.
- Code 47539 describes placement of a stent into a bile duct through a new access.
  - ❖ Code 47539 includes accessing the biliary system, catheter manipulations, injection of contrast material, imaging guidance (ultrasound and/or fluoroscopy) and all associated RS&I to complete the procedure and diagnostic imaging (47531-47532).
  - ❖ Balloon dilation is included in code 47538 when performed in the same duct as stent placement.
  - ❖ Do not report 47539 with 43277, 47542, 47555 and 47556 for the same lesion in the same session.
- Code 47540 describes placement of a stent into a bile duct through a new access with placement of an external or internal-external biliary drainage catheter.

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## Applicable Coding Rules (continued):

- ❖ Code 47540 includes accessing the biliary system, catheter manipulations, injection of contrast material, imaging guidance (ultrasound and/or fluoroscopy) and all associated RS&I to complete the procedure and diagnostic imaging (47531-47532).
  - ❖ Code 47540 should not be reported with 47533, 47534 for the same ductal system.
  - ❖ Balloon dilation is included in code 47540 when performed in the same duct as stent placement.
  - ❖ Do not report 47540 with 43277, 47542, 47555 and 47556 for the same lesion in the same session.
- **Multiple Stents.** 47538-47540 are reported once per session when overlapping or serial stents are placed within a single bile duct or bridging more than one ductal segment such as the left hepatic duct and common bile duct through a single percutaneous access. These codes may be reported more than once in the same session for the following circumstances:
- ❖ Placement of side by side (double barrel) stents within a single bile duct
  - ❖ Placement of two or more stents into separate bile ducts through a single percutaneous access
  - ❖ Placement of stent through two or more percutaneous access sites (eg, placement of one stent through the interstices of another stent).
  - ❖ Modifier -59 should be appended in these instances.
- Code +47542 is an add on code that describes balloon dilation of the biliary duct(s) or of ampulla. This may be referred to as “cholangioplasty” or “sphincteroplasty”.
- ❖ Used with codes 47531-47537 and 47541. This balloon dilation is included with 47538-47540 when performed in the same duct as stent placement.
  - ❖ Code +47542 includes all associated RS&I, and procedural imaging guidance (eg, ultrasound and/or fluoroscopy).
  - ❖ For percutaneous balloon dilation of multiple ducts during the same session, report an additional dilation once with +47542 and modifier 59, regardless of number of additional ducts dilated.

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