Indications for Procedure: Cardiogenic shock, heart failure

Procedure Performed:
- Insertion of Impella CP percutaneously inserted left ventricular assist device
- LHC (LVEDP) 25–28 mm Hg
- Left femoral angiogram
- PTA of left common and external iliac artery

Description of Procedure: The patient was brought emergently to the cardiac catheterization suite from the Emergency Department.

8 Fr Sheath was placed in LFA and a left femoral angiogram was done.

The iliac artery was ballooned with a 4 by 20 and then 6 by 20 Mustang balloon.

Subsequently after serial dilations, a 14 Fr sheath was placed in the LFA.

A 0.035 super-stiff Amplatz wire was advanced into the proximal portion of descending aorta.

Serial dilatations of the left arteriotomy site were performed with 10 and 12 Fr dilators. A 14 Fr sheath was then advanced into the left common femoral artery. An angled pigtail catheter 5 Fr was advanced through 5 Fr sheath and then used to cross the aortic valve with a 0.035 J-wire. The J-wire was then exchanged for a 0.018 steel core wire. The pigtail catheter was removed and the steel core wire was left at the apex of the left ventricle. The Impella CP catheter had been prepped on a separate sterile bedside table. The catheter was brought onto the operative field.

The catheter was advanced over the guidewire into the left ventricle. The catheter was confirmed to be in proper position by fluoroscopy. Percutaneous left ventricular support was then initiated. The catheter was noted for 3 L per minute. The femoral sheath was sutured into place and a sterile occlusive dressing applied. There were no complications.

The patient remained critically ill during that procedure, but had no further deterioration in her clinical status. She was transported in stable condition to the cardiac recovery unit for ongoing management of the percutaneous left ventricular assist device.

What are the CPT® and ICD-10-CM codes reported?

CPT® Codes: 37246-LT, 33990, 33968

ICD-10-CM Code: I50.9
Rationales:

CPT®: The note documents a percutaneous insertion of an Impella CP left ventricular assist device, left femoral angiogram, and percutaneous transluminal angioplasty of the left common and external iliac, and intra-aortic balloon pump (IABP) explant were performed. The angioplasty is not diagnostic; therefore, it is not reported. This is not a revascularization of the iliac artery (37220), because codes in this section are for occlusive disease only. There is no mention of angioplasty for occlusive disease; therefore, you must use 37246 for angioplasty for nonocclusive disease. This is hard to find in the CPT® Index, because angioplasty of the iliac artery is listed under the revascularization codes for occlusive disease. Look in the CPT® Index for Percutaneous Transluminal Angioplasty/Artery and Iliac is not listed. You must choose from the list 37246, 37247. The correct code is 37246 for the lower extremity artery for nonocclusive disease. Nonselective or selective catheterization is to be reported with 37246; however, this is included in the insertion of the Impella device, so it is not reported. Modifier LT is appended to denote the left side.

The Impella is a ventricular assist device. Next in the CPT® Index, look for Ventricular Assist Device (VAD)/Insertion/ Percutaneous referring you to 33990, 33991. Report 33990 for arterial access only. This code includes radiologic supervision and interpretation, which covers the iliac angiography that was performed.

In the CPT® Index, look for Removal/Balloon Assist Device/Intra-Aortic Balloon referring you to either 33968 or 33971. Code 33968 describes percutaneous removal of intra-aortic balloon assist device. Code 33971 describes removal of intra-aortic balloon assist device including repair of femoral artery, with or without graft. The documentation does not indicate femoral artery repair; therefore, the appropriate code selection is 33968.

ICD-10-CM: In the ICD-10-CM Alphabetic Index, look for the condition, which is Shock. Under Shock, review the indented terms for the specific kind of shock. Cardiogenic shock is listed, with code R57.0. Confirmation in the Tabular List shows us nothing to contradict the use of this code. Cardiogenic shock is a condition in which a suddenly weakened heart isn't able to pump enough blood to meet the body's needs. The condition is a medical emergency and is fatal if not treated right away. Cardiogenic shock is a life-threatening medical condition resulting from an inadequate circulation of blood due to ventricles not functioning effectively.

Chapter 18, codes starting with the letter R, includes symptoms, signs, abnormal results of clinical or other investigative procedures, and ill-defined conditions regarding which no diagnosis classifiable elsewhere is recorded. Signs and symptoms that point to a specific diagnosis have been assigned to a category in other chapters of the classification.

In the ICD-10-CM Alphabetic Index, look for Failure/heart. This indexes to I50.9. In the Tabular List, confirm the diagnosis and follow additional guidelines. Because the documentation does not specify the type of heart failure, this code matches the documentation.

Heart failure occurs when the heart muscle is weak and cannot pump enough blood to meet the body's need for oxygen.

The chapter specific guidelines have an excludes2 for (R00–R94).

Cardiogenic shock R57.0 is a symptom of the more specific diagnosis of heart failure. Do not report signs and symptoms when a more specific diagnosis is documented.