

Dr. Z's Medical Coding Series  
**ICD-10-PCS**  
**Coding Companion**  
For Interventional Radiology

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2025  
Tenth Edition

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# Carotid Cervical Angiography

## PROCEDURE:

Carotid cervical angiography involves imaging of the carotid vasculature in the cervical (or neck) region. This includes the carotid bifurcation, where most atheromatous disease occurs. The imaging procedure may be unilateral or bilateral.

## CLINICAL INDICATIONS:

For evaluation of atherosclerotic carotid artery stenosis (primary or recurrent), stroke, TIA, fibromuscular dysplasia (FMD), aneurysm, aneuritis, dissection, and trauma.

## CODES:

PROCEDURE DESCRIPTION	ICD-10-PCS CODE*
Fluoroscopy of Right Common Carotid Artery using Low Osmolar Contrast	B3131ZZ
Fluoroscopy of Left Common Carotid Artery using Low Osmolar Contrast	B3141ZZ
Fluoroscopy of Bilateral Common Carotid Arteries using Low Osmolar Contrast	B3151ZZ
Fluoroscopy of Right External Carotid Artery using Low Osmolar Contrast	B3191ZZ
Fluoroscopy of Left External Carotid Artery using Low Osmolar Contrast	B31B1ZZ
Fluoroscopy of Bilateral External Carotid Arteries using Low Osmolar Contrast	B31C1ZZ
Fluoroscopy of Right Internal Carotid Artery using Low Osmolar Contrast	B3161ZZ
Fluoroscopy of Left Internal Carotid Artery using Low Osmolar Contrast	B3171ZZ
Fluoroscopy of Bilateral Internal Carotid Arteries using Low Osmolar Contrast	B3181ZZ

*To report use of high osmolar, other, or no contrast, revise the 5th character of the imaging code as appropriate.*

## REPORTING INSTRUCTIONS:

1. Separately report each differently named vessel imaged (e.g., common carotid and external carotid) by laterality.

2. Unlike CPT coding, angiography of the cervicocerebral arch (B31Q1ZZ) is reported separately in ICD-10-PCS if performed and findings are documented.

3. **Do not** report right and left carotid cervical angiography separately, as there is a bilateral code available for each separately named carotid artery.

4. Selective imaging and non-selective imaging are reported with the same codes.

5. The carotid bifurcation is reported to “bilateral internal carotid arteries”.

## EXAMPLE(S):

1) A patient with carotid stenosis evident on Doppler has diagnostic angiography performed from a right femoral approach with catheter placement in the right common carotid artery and left common carotid artery with imag-

ing of both carotids (B3151ZZ). The intracranial vessels are not evaluated.

2) Same patient as example #1, however, the imaging of the cervical carotids bilaterally is performed by an aortic arch injection, rather than selectively (B3151ZZ).

Note: Selectivity is not relevant to PCS coding.

3) Patient with symptomatic right internal carotid stenosis (high risk for carotid endarterectomy) on ultrasound presents for possible carotid stent. Diagnostic imaging via an arch injection shows normal anatomy without proximal stenoses. This is followed by bilateral selective common carotid injections from a right femoral approach with imaging of the carotid bifurcations showing 90% right proximal internal carotid artery stenosis and 20% left proximal internal carotid artery plaque (B3181ZZ).

4) Via femoral approach, selective right common carotid catheter placement and cervical carotid imaging are performed. The left common carotid is unable to be selected due to origin plaque, so the left cervical carotid is imaged (B3151ZZ) via a cervicocerebral arch injection.

#### REFERENCES:

*ICD-10-PCS: The Complete Official Codebook, ICD-10-PCS Official Guidelines for Coding and Reporting 2023, Guidelines P.2.1b, P.2.2c, L.4.3*

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# Vascular Interventional Coding ICD-10

## Overview

This chapter will cover percutaneous vascular interventional procedures. The sections are divided up by procedure and consist of coding instructions and examples that are pertinent to that specific procedure. However, there are a number of coding instructions that apply to all sections throughout Chapter 7. Rather than duplicate these common instructions in each section, we have compiled a list of them for your review. It is imperative that you familiarize yourself with the instructions provided in the first two sections (“Coding Rules for Diagnostic Imaging and Imaging Guidance” and “Coding Rules for Vascular Interventional Procedures”) before proceeding, as this information is critical for accurate coding. First we’ll cover the overview of coding rules specific to diagnostic imaging and imaging guidance, followed by coding tips related to the interventional itself.

### Coding Rules for Diagnostic Imaging and Imaging Guidance

Although not required, it is recommended that imaging codes be separately reported. Imaging codes are reported by modality used. All case examples presume the use of low osmolar contrast unless otherwise specified. Below we have provided a table containing the pertinent diagnostic imaging and imaging guidance codes for Chapter 7, followed by coding rules. These imaging coding tips are applicable to all sections in this chapter. As you progress through Chapter 7, refer back to this section for information specific to imaging codes.

**CODES:**

PROCEDURE DESCRIPTION	ICD-10 PCS CODE
<i>Fluoroscopy—Arterial</i>	
Fluoroscopy of Abdominal Aorta using Low Osmolar Contrast	B4101ZZ
Fluoroscopy of Thoracic Aorta using Low Osmolar Contrast	B3101ZZ
Fluoroscopy of Thoraco-Abdominal Aorta using Low Osmolar Contrast	B31P1ZZ
Fluoroscopy of Aorta and Bilateral Lower Extremity Arteries using Low Osmolar Contrast	B41D1ZZ

# Percutaneous Transcatheter Renal Sympathetic Denervation

## PROCEDURE:

For patients with severe or malignant refractory hypertension, a procedure has been developed that utilizes any method of ablation of the sympathetic nerves around the outer wall of the proximal right and/or left main renal artery. Disruption of these nerves can result in substantial decrease in blood pressure in patients with difficult-to-control hypertension. A diagnostic angiogram is usually performed, followed by placement of a specialized catheter (eg, OneShot™ renal denervation device, Simplicity™ RF ablation catheter) for application of transmural thermal (radiofrequency ablation) energy to destroy the nerves around the renal artery. Other techniques that have been shown to be effective in destroying these nerves include alcohol injections (via the Perigrine catheter) and ultrasound disruption of the nerves at this location.

## CLINICAL INDICATIONS:

Refractory severe or malignant hypertension.

## CODES:

PROCEDURE DESCRIPTION	ICD-10-PCS CODE
Destruction of Abdominal Sympathetic Nerve, Percutaneous Approach	015M3ZZ



## CODING INSTRUCTIONS:

1. Denervation is reported to the root operation “destruction”.

The renal plexus is coded to the body part “abdominal sympathetic nerve”.

The ICD-10-PCS code book lists the abdominal sympathetic nerve (singular) rather than nerves. Therefore, it is appropriate to code separately for each separate nerve treated.

- Renal artery ablation for control of hypertension is coded to the body part “abdominal sympathetic nerve”.
- Code for each body part imaged that has a separate ICD-10-PCS body part value.

## EXAMPLE(S):

*Example:* A patient with resistant hypertension on despite multiple drug therapy. Via right femoral approach, a 6F renal sheath is placed. Aortography (no finding, no code), followed by selective bilateral renal angiography (B4181ZZ), shows widely patent renal arteries. A Simplicity RF ablation catheter is advanced through a guiding sheath into each proximal renal artery. Two-minute RF ablation is performed (015M3ZZ, 015M3ZZ) while deflecting the catheter in each vessel to reach the appropriate regions of the vessels. Catheter and sheath are removed.



**REFERENCES:**

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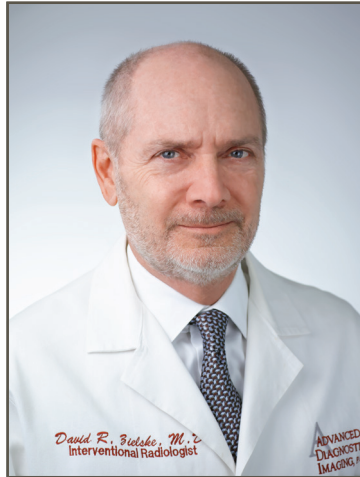
*ICD-10-PCS: The Complete Official Codebook, ICD-10-PCS Official Guidelines for Coding and Reporting 2023, Guidelines B3.1b, B3.2b, B3.2c*

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# Dr. Z's Medical Coding Series

## ICD-10-PCS Coding Companion

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Code more accurately  
Avoid coding compliance problems  
Ensure proper reimbursement