

Coding for Peripheral Vascular Disease (PVD)

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Practical Tools for Seminar Learning

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Goals and Objectives



- ♦ Review the ICD-9-CM coding classification to report select PVD diagnoses
- ♦ Identify vascular families and review component coding guidelines
- ♦ Provide an overview of terminology used in peripheral arterial vascular interventional radiology (IVR), including non-selective and selective vascular catheter placement, diagnostic angiography, and therapeutic procedures
- ♦ Review CPT and IVR coding guidelines related to outpatient procedures
- ♦ Review key documentation elements for IVR procedures
- ♦ Discuss challenging coding cases related to outpatient peripheral vascular procedures consistent with CPT coding guidelines

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Introduction – Coding For Peripheral Vascular Disease (PVD)

- ♦ In healthcare today, emerging technologies are continuously introduced and this is prevalent in the peripheral vascular arena with evolving endovascular techniques to treat peripheral vascular disease (PVD)
- ♦ PVD also referred to as PAD (peripheral artery disease)
- ♦ Caused by narrowing (stenosis) and/or obstruction of peripheral arteries resulting in acute and/or chronic ischemia:
 - Atherosclerosis
 - Embolus/Thrombus
 - Inflammation

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Introduction – Coding For Peripheral Vascular Disease (PVD)

- ◆ This presentation will focus on the most prevalent procedures being performed for PVD/PAD and the related CPT procedure code assignments:
 - Diagnostic angiography
 - Percutaneous transluminal (balloon) angioplasty, peripheral artery
 - Percutaneous transluminal atherectomy, peripheral artery
 - Transcatheter stenting, percutaneous (peripheral)

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Introduction – Coding For Peripheral Vascular Disease (PVD)

- ◆ Common associated ICD-9-CM diagnosis codes (**not** exhaustive):
 - 440 Atherosclerosis
 - 440.0 of aorta
 - 440.1 of renal artery
 - 440.2 of native arteries of the extremities (except of extremity bypass graft)
 - 440.20 unspecified
 - 440.21 with intermittent claudication
 - 440.22 with rest pain (includes claudication)
 - 440.23 with ulceration (includes claudication and rest pain)
 - 440.24 with gangrene (includes claudication, rest pain, and ulcer)

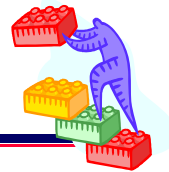
4

Introduction – Coding For Peripheral Vascular Disease (PVD)

- ♦ **Common associated ICD-9-CM diagnosis codes (not exhaustive):**
 - **440.3 of bypass graft of extremities**
 - 440.30 of unspecified graft
 - 440.31 of autologous vein bypass graft
 - 440.32 of nonautologous biological bypass graft
 - **440.8 of other specified arteries**
 - **443.9 Peripheral vascular disease, unspecified**

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Peripheral IVR – Component Coding



- ♦ **The fundamental element of IVR/CVIR coding is understanding the “building blocks” or components and basic guidelines.**
- ♦ **CPT codes are used to represent the work performed during peripheral IVR procedures.**
- ♦ **Typically, there are two components to a peripheral IVR procedure requiring two CPT codes, the surgical component and the imaging or radiology component.**

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Highlighting Key Terms and Definitions

- ♦ **Antegrade – with the flow (of blood)**
- ♦ **Ipsilateral – same side (as access)**
 - **Example: Via a right common femoral puncture, the catheter is manipulated into the right superficial femoral artery and a diagnostic right lower extremity angiography is performed.**
- ♦ **Retrograde – against the flow (of blood)**
- ♦ **Contralateral – opposite side (of access), i.e. catheter movement selectively to the opposite extremity**
 - **Example: Via a right common femoral puncture, the catheter is manipulated into the abdominal aorta and over the bifurcation into the left external iliac artery, where a diagnostic left lower extremity angiography is performed.**

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Highlighting Key Terms and Definitions

- ♦ **Bifurcation – a split (forking) into two branches, or the site where such division occurs**
 - **Aorta into the bilateral common iliac arteries**
 - **Each common carotid into internal and external carotid arteries**
- ♦ **Vascular families – vessels which are fed by a primary branch of the aorta, vena cava, or vessel punctured; a vessel and all of its branches that originate from it**

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- ♦ Appendix L, pg. 618



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Appendix L - Vascular Families

Note: Assignment of branches to first, second, and third order in this table makes the assumption that the starting point is catheterization of the aorta. This categorization would not be accurate, for instance, if a femoral or carotid artery were catheterized directly in an antegrade direction. Arteries highlighted in bold are those more commonly reported during arteriographic procedures.

First Order	Second Order Branch	Third Order Branch	Beyond Third Order Branches	
Innominate	R. common carotid	R. internal carotid	<ul style="list-style-type: none"> R. ophthalmic R. p. communicating R. middle cerebral R. a. cerebral 	
		R. external carotid	<ul style="list-style-type: none"> R. superior thyroid R. ascending pharyngeal R. facial R. lingual R. occipital R. p. auricular R. superficial temporal R. internal maxillary R. middle meningeal 	
	R. subclavian & axillary	R. vertebral	Basilar	
		R. internal thoracic (internal mammary)		
		R. thyrocervical trunk	<ul style="list-style-type: none"> R. inferior thyroid R. suprascapular R. transverse cervical 	
		R. costocervical trunk	<ul style="list-style-type: none"> R. highest intercostal R. deep cervical 	
		R. lateral thoracic		
		R. thoracoacromial		
	R. humeral circumflex (A/P)			
	R. subscapular	R. circumflex scapular		
R. brachial				
			<ul style="list-style-type: none"> R. ulnar R. radial 	

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Vascular Families

- ♦ Code each vascular family separately
- ♦ Code each vascular family to the highest order of selectivity within that vascular family
 - Lesser order selectivity within the same vascular family is included in the coding of the higher selectivity
- ♦ When multiple second or third order vessels within the same vascular family are catheterized, code to the highest order for the initial selective catheter placement
 - For each additional second or third order vessel catheterized within the same vascular family, assign the CPT code for each additional second or third order
 - An “initial” selective catheter placement code can only be reported once per vascular family

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Arterial Vascular Catheterization: Non-Selective vs. Selective

- ♦ Catheter placements represent the surgical component of a diagnostic interventional radiology procedure
 - Do code catheter placement in addition to any therapeutic interventional procedure performed, i.e., angioplasty, atherectomy, etc.
- ♦ Precedence is placed on selective catheterization over non-selective via the same access/puncture site
- ♦ Both a non-selective and selective catheter placement can be coded...only if there are two separate/distinct puncture sites or two separate patient encounters on the same DOS

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Arterial Vascular Catheterization: Non-Selective vs. Selective

- ◆ **Key phrases to look for in documentation when coding catheter placements of the correct order vessel:**
 - Into, engaged, placed in
 - At, proximal to the opening, to the ostium
- ◆ **Catheter placement depends on access site(s), any anatomical variations, final catheter placement, and each vessel catheterized, i.e., catheter movement.**
- ◆ **The terms “ipsilateral,” “contralateral,” “antegrade,” & “retrograde” provide insight into non-selectivity vs. selectivity.**

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Arterial Vascular Catheterization: Non-Selective vs. Selective

- ◆ **Non-selective:**
 - Catheter does not leave the vessel entered (direct puncture/“stick”) or is advanced to the aorta, but no further
 - Injections performed through the sheath at an access point are considered non-selective
- ◆ **Selective:**
 - Once a catheter is placed in the aorta from any access point, any catheter movement beyond the aorta is considered selective
 - Implies a branch off of the vessel entered is catheterized
 - Each bifurcation (division or forking into two branches) traversed (when moving away from the aorta) increases the level of selectivity

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Summary of Catheterization Rules

1. Know catheter starting, or insertion, point (puncture site) and end position;
2. Code each vascular family separately;
3. Code to the highest degree of selectivity within a vascular family;
4. Selective catheter placement take precedence over non-selective when performed from the same puncture site;
5. Code for each catheter placement from each separate puncture site;
6. Code to the intent of the study;
7. If performing both a diagnostic and therapeutic study in the same setting, be certain to code separately for each portion, when appropriately documented; and
8. Only one (1) second or third order vessel within a vascular family can be coded/charged. Use the applicable "each additional" CPT code/charge, when appropriate.

PHYSICIAN DOCUMENTATION IS ESSENTIAL TO ACCURATELY APPLYING ALL OF THESE RULES

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Special Note: Separate Catheter Placement with Intervention

- ♦ **Code separately for catheter placement (except when CPT specifically includes ("bundles") in a procedure's code description, i.e. CPT 37210 – Uterine Fibroid Embolization (UFE)).**
 - **If the same access site is used for both a diagnostic and a therapeutic service on the same occasion, then the access is only coded once. If multiple vascular access sites are necessary, then each access site is coded separately.**

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Supervision and Interpretation (S&I) CPT Codes

- ♦ **Supervision & interpretation (S&I) CPT codes are:**
 - Used to describe the imaging or technical component of the exam
 - Descriptions may be unilateral or inherently bilateral
 - Assigned based upon the vessels that are **IMAGED**, not the vessels that are catheterized

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Supervision and Interpretation (S&I) CPT Codes

- ♦ **If the S&I CPT code is designated as “selective”, the catheter **MUST** be placed in that vessel or one of its branches.**
 - The minimum required is the tip of the catheter enters the ostia (opening) and “engages” the vessel in order to consider it an imaged vessel
 - Documentation **MUST** support that the vessel was engaged
- ♦ **May report multiple S&I CPT codes from the same catheter placement**

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Supervision and Interpretation (S&I) CPT Codes

- ◆ There must be images taken and physician documentation providing a description of the findings to support coding for the procedure per the imaging CPT code descriptions' terminology of "radiological supervision and interpretation"
- ◆ The imaging procedure must have contributed to the study and not be incidental or have no clinical justification by itself
- ◆ The intent, medical necessity, and findings are the primary documentation elements needed to support reporting an imaging procedure CPT code

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Correct Reporting of Bilateral Extremity Angiography

- ◆ When a complete diagnostic right and left extremity angiogram are performed in the same encounter, it is considered a bilateral exam (**75716**) and cannot be reported on the same claim as two separate unilateral exams (**75710**)
 - Ipsilateral access/puncture (non-selective)
 - Contralateral access/puncture
 - Selective catheter movement

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Correct Reporting of Bilateral Extremity Angiography

- ♦ CPT codes **75710** and **75716** do not require selective catheter placement per their CPT code descriptions.
- ♦ **What about Angio-seal placement?**
 - “Lower extremity angiography is performed via the access site to assess for potential Angio-seal placement.” This **CANNOT** be separately coded/charged

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Placement of Vascular Occlusive Devices



- ♦ Vascular occlusive devices facilitate closure and quickly seal the arterial puncture sites following catheterization procedures resulting in less bleeding
- ♦ CMS requires HCPCS code **G0269** be reported when a closure device is used in the outpatient setting
 - Not separately payable as a procedure (“packaged”)
 - Actual supply code may be reimbursed. The device itself has a supply HCPCS code **C1760**, Closure device, vascular (implantable/insertable).
- ♦ Post-procedural hemostasis is considered an intrinsic part of the procedure

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Additional Selective Imaging Beyond Basic Exam

- ♦ To code CPT **75774**, it is required that additional imaging beyond the basic exam is performed after an additional level of catheter selectivity is documented for the exam.
- ♦ It is **not** appropriate to assign when images are obtained to “complete” the initial “runoff” exam, i.e. step-table, even if more selective catheter placement is performed.
- ♦ Documentation of the clinical indication for needing to do so, e.g. poor visualization, occlusive disease, anatomical variants, etc., as well as imaging findings is also required.

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Selective Pelvic Angiography

75736 Angiography, pelvic, selective or supraseductive, radiological supervision and interpretation

- ♦ In order to use CPT code **75736**, the catheter has to be selectively placed in the internal iliac artery (or a higher order vessel) or in a branch vessel that comes off of the aorta or iliac artery and supplies the pelvis.
- ♦ CPT code for pelvic angiography is unilateral. If both sides are imaged, CPT **75736** would be coded two times with a modifier **-59** added to the second code.

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Selective Pelvic Angiography

- ♦ Vessels included in selective pelvic angiography are: internal iliac/hypogastric, uterine, ovarian, inferior gluteal, internal pudendal superior gluteal and iliolumbar arteries.
- ♦ Reasons for pelvic angiography could be dysfunctional uterine bleeding (DUB), fibroids, testicular issues, trauma, AVM, or aneurysm (not an inclusive list).

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IVR Procedural Coding Guidelines

- ♦ Diagnostic angiography prior to intervention ***may*** be coded separately if:
 - No prior catheter-based angiographic/venographic study is available and **a full diagnostic study is performed**, and the decision to intervene is based on the diagnostic study, OR
 - A prior study is available, but **as documented in the medical record**:
 - The patient's condition with respect to the clinical indication has changed since the prior study, OR
 - There is inadequate visualization of the anatomy and/or pathology, OR
 - There is a clinical change during the procedure that requires new evaluation outside the target area of intervention.

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IVR Procedural Coding Guidelines

- ♦ It should **not** be separately coded if performed to:
 - Confirm known disease
 - Measure, or “size,” the vessel
 - Maneuver the catheter to the lesion (also known as “roadmapping” or guiding shots)
 - Validate final catheter placement
 - Assess the post-intervention results (i.e., “follow-up angiography”)
- ♦ Diagnostic angiography performed at the time of an interventional procedure is **NOT** separately reportable if it is specifically included in the CPT code descriptor for the interventional procedure.

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IVR Procedural Coding Guidelines

- ♦ Code an intervention per vessel treated, not per lesion/stenosis treated within a single vessel. Separate vessels include:
 - Common iliac artery (CIA), internal iliac, and external iliac artery (EIA)/common femoral artery (CFA)
 - Superficial femoral (SFA), profunda femoral, and popliteal
 - Anterior tibial, posterior tibial, and peroneal arteries
- ♦ If intervention is performed on multiple vessels within the groupings above for separate and distinct lesions, i.e., the SFA and popliteal, even though it may be the same CPT code, each may be separately reported. Modifier **-59** should also be assigned.

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IVR Procedural Coding Guidelines

- ♦ If a lesion that is intervened on crosses two vessels, or is “contiguous,” i.e., the common iliac and external iliac, this is considered a “bridging” lesion potentially, depending on the extent of the lesion, and should be considered one therapeutic intervention.
 - This is dependent on physician documentation and could require physician query to clarify. If the lesion is documented as extensive, crossing entirely through both vessels both proximally and distally, it may warrant capturing treatment in both vessels via separate CPT coding.

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CMS NCCI: Peripheral Atherectomy (w/PTA)

**4/2009, CMS NCCI Policy Manual,
Version 14.3.1, Chapter V:**

- ♦ 16. When percutaneous angioplasty of a vascular lesion is followed at the same session by a percutaneous or open atherectomy, generally due to insufficient improvement in vascular flow with angioplasty alone, only the most comprehensive atherectomy that was performed (generally the open procedure) is reported (see sequential procedure policy, Chapter I, Section M).

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CMS NCCI: Peripheral Atherectomy (w/PTA)

- ♦ **M. Sequential Procedure:**
 - **An initial approach to a procedure may be followed at the same encounter by a second, usually more invasive approach. There may be separate CPT codes describing each service. The second procedure is usually performed because the initial approach was unsuccessful in accomplishing the medically necessary service. These procedures are considered "sequential procedures". Only the CPT code for one of the services, generally the more invasive service, should be reported.**

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Physician Documentation

- ♦ Be sure when coding multiple interventions on one lesion that the documentation supports the additional procedures being performed.
 - Verify that the documentation indicates that the outcome was suboptimal, resulted in recoiling, rupture, or dissection of the vessel, or had another poor conclusion resulting in the need for additional intervention
 - Pre-dilation or post-dilation of a vessel during stent placement should not be coded as angioplasty and stent placement.
 - Although the physician might not always state that the vessel was pre-dilated with a balloon catheter, that was likely the intent unless documentation supports that therapeutic angioplasty was planned and performed prior.
 - It may appear by the dictation that angioplasty was performed and then a stent was placed when it was actually done to prepare the vessel for the stent insertion.

IN THESE INSTANCES, PHYSICIAN CLARIFICATION SHOULD BE SOUGHT TO CONFIRM MEDICAL NECESSITY AND THE INTENT OF INTERVENTION

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Physician Documentation

- ♦ Keep in mind that the physician holds the key to correct coding through proper documentation
- ♦ The complexity of IVR requires:
 - Concise clinical documentation that must be reviewed to support the CPT code assignment
 - Thorough documentation and understanding of Anatomy and Physiology to obtain correct code assignment
 - Understanding of coding rules and official guidance
- ♦ Compliance risk exists when there is not clinical documentation to support code assignment and its associated reimbursement

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Physician Documentation

- ♦ Physician documentation should include:
 - History and medical necessity
 - The approach, i.e., access site(s)
 - Specific vessels catheterized and why
 - (Furthest) Vessels visualized and interpreted
 - Complete and detailed description of the findings of each angiographic exam performed and any pathology identified (i.e., separate/bridging lesions and where, degree of stenosis, etc.)
 - Catheter movement and end position(s)
 - Presence of any abnormal/variant anatomy
 - Detailed description of all procedures for which pathology and devices used in each vascular family
 - All (if any) therapeutic procedures performed and why

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Case Study #1

- ♦ PREOPERATIVE DIAGNOSES:
 - LLE rest pain and ischemic ulceration of the RLE, s/p right-to-left femoral/femoral bypass
- ♦ POSTOPERATIVE DIAGNOSES:
 1. LLE rest pain and ischemic ulceration of the RLE, s/p right-to-left femoral/femoral bypass
 2. Stenosed RCFA to 80%.
 3. 90% stenoses in the right mid-posterior tibial and distal peroneal arteries.
 4. Occluded LSFA in several places. Runoff to the LLE through a reconstituted L popliteal artery and two-vessel runoff to the foot.

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Case Study #1

OPERATION:

1. Access to the vascular system through the right brachial artery;
2. Manipulation of guidewire and catheter to the abdominal aorta;
3. Abdominal aortogram;
4. Catheter to the aortic bifurcation and aortoiliac pelvic angiogram;
5. Catheter to the right common iliac artery and angiogram of the right iliac system, right-to-left femoral/femoral bypass and both groins;

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Case Study #1

- 6. Catheter to the right common femoral artery past the takeoff of the femoral/femoral bypass and selective angiogram of the right lower extremity;**
- 7. Catheter to the right superficial femoral artery with further angiogram of the right leg;**
- 8. Manipulation of guidewire and catheter into the right-to-left femoral/femoral bypass and selective angiogram of the left lower extremity with delayed pictures of left tibial peroneal trunk area;**

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Case Study #1

- 9. Balloon angioplasty of the right common femoral artery;**
- 10. Stenting of the right common femoral artery for a flow-limiting dissection;**
- 11. Balloon angioplasty of the right peroneal artery;**
- 12. Balloon angioplasty and cryotherapy of the right posterior tibial artery; and**
- 13. Completion Angiograms.**

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Case Study #1

DESCRIPTION OF PROCEDURE:

- ♦ The right brachial artery was accessed and a guidewire was manipulated through the arteries of the right upper extremity to the aortic arch and down the descending aorta to the abdominal aorta.
- ♦ A side-holed pigtail catheter was placed in the abdominal aorta and the abdominal aortogram was done that showed the arteries here to be patent including the renals, mesenterics, and distal aorta. The aorta itself occluded right at the origin of the left iliac system and there was flow only through the right. The right iliac system is of good quality all the way down to the external iliac.

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Case Study #1

- ♦ The right common femoral artery was found to be stenosed to about 80% right before the anastomosis to the femoral/femoral bypass.
- ♦ The right-to-left femoral/femoral bypass is patent. The right distal common femoral artery was patent to the right SFA and the profunda was also open with some areas of stenosis in the right SFA that did not need to be treated.
- ♦ The catheter and guidewire were then manipulated into the right SFA for lower extremity angiography showing an intact popliteal, but total occlusion of the anterior tibial proximally. There was a 90% lesion in the mid-posterior tibial as well as a 90% lesion in the distal peroneal vessel.

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Case Study #1

- ◆ The catheter and guidewire were moved back to the common femoral artery and manipulated into the femoral/femoral bypass, parking the catheter at the end of the femoral/femoral bypass to perform an angiogram of the distal end of the femoral/femoral bypass and the arteries of left lower extremity.
- ◆ The common femoral artery and profunda are patent. They are of good quality. The superficial femoral arteries are occluded all the way from its insertion origin down to the distal SFA. Here the artery reconstitutes to the popliteal artery below the knee. Runoff to the left lower extremity is through two small tibial vessels.

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Case Study #1

- ◆ Since the area of stenosis in the right common femoral artery was found to be significant and was compromised and flowed through both the right lower extremity and also the fem-fem bypass, this area of stenosis was angioplastied using the 7-mm in diameter noncompliant balloon x 40 in length.
- ◆ Completion angiograms showed improvement of the artery in diameter, but there was an area of dissection that was contributing to poor flow. A self-expanding 8-mm x 6-cm stent was placed to cover the dissection area. Completion angiogram showed a very nice, homogeneous flow and widely patent artery.

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Case Study #1

- _____ →
- _____ ↗
- _____ ↗
- (no code – repeat PTA of same lesion by different modality)
- ◆ Using a Quick-Cross catheter, access was obtained in the posterior tibial artery and primary balloon angioplasty performed. The guidewire and catheter were subsequently placed into the peroneal artery, where angioplasty was also performed.
 - ◆ Follow-up angiography revealed the peroneal vessel to be widely patent. However, there was significant recoil and restenosis of the posterior tibial vessel. A polar catheter was inserted and two inflations performed with follow-up angiography revealing there to be no significant residual stenosis. A good pulse was palpable following the procedure.
 - ◆ Since we achieved the desired results, the catheters, guidewires, and sheath were removed from the right brachial artery and pressure applied. There was no hematoma formation or any other complications.
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Answers – Case Study #1

Answers:

37205
 75960
 35473 RT
 75962
 35470 RT
 75964
 36247
 35470 59 RT
 75964
 36248
 36248
 75625
 75716 59

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Case Study #1 Questions



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Case Study #2

- ♦ **Procedure:** Abdominal aortography with iliofemoral runoff; selective injections into the left and right common iliacs, and right popliteal artery; Laser atherectomy, right SFA; Angioplasty and stenting, left external iliac.
- ♦ **Preoperative diagnosis:** Arteriosclerotic peripheral vascular disease with significant claudication.
- ♦ **Postoperative Diagnosis:**
 1. High grade disease in right SFA artery
 2. High grade stenosis of the left external iliac artery
 3. Total occlusion of the anterior and posterior tibial vessels bilaterally
- ♦ **Access:** Left femoral artery

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Case Study #2

- ◆ Description: Using 2% Marcaine, local anesthesia was obtained over the left common femoral artery. Via modified Seldinger technique, the short 6- French sheath was inserted. Angiography was performed through the sheath to visualize the left lower extremity.
- ◆ The pigtail catheter was then advanced above the renal arteries, where aortography was performed to visualize the aorta, renal, and iliac vessels. This catheter was removed and exchanged for the IMA catheter, where selective injection in the right common iliac was made followed by placement a multipurpose catheter in the right external iliac.
- ◆ Because of the stenosis in the SFA and inability to completely visualize the distal runoff, the Quick-Cross catheter was advanced to the popliteal and an additional injection made to visualize the distal runoff. It was determined the patient had significant disease, which warranted revascularization.

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Case Study #2

- ✓ ◆ Findings: The abdominal aorta is a normal sized vessel without high grade disease. The renal arteries have no significant disease bilaterally.
- ◆ Left-sided circulation: The left common iliac was patent to the external iliac, which had an 80% ostial stenosis. There was mild disease of the internal iliac. The common femoral and profunda were intact, but there were tandem stenoses of moderate severity in the mid- SFA. The popliteal was patent, but the anterior and posterior tibials were occluded with flow to the foot seen via the peroneal.
- ✓ ◆ Right-sided circulation: The common, external, and internal iliacs were patent. The common femoral and profunda were intact, but there were severe 90% stenoses along the course of the SFA. The popliteal was intact. The posterior and anterior tibials were occluded and the peroneal was patent to the foot.

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Case Study #2

- ◆ Description: The short 6-French sheath was exchanged for a long 7-French sheath. The SFA lesion was easily crossed with a Terumo wire and a quick-cross catheter placed. Using the turbo laser atherectomy catheter, two passes were made along the superficial femoral artery into the popliteal vessel. Follow-up angiography revealed a satisfactory result with less than a 20% residual stenosis and no hemodynamic gradient.
- ◆ The sheath was then pulled back to the left external iliac, where predilation was performed with balloon angioplasty followed by placement of a 14 mm stent. The stent was then post-dilated to 16 mm and follow-up angiography showed excellent results.
- ◆ Following the procedure all catheters were removed. The patient was transferred to the recovery room in stable condition. The sheath was withdrawn and hemostasis obtained with FemoStop.

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Answers – Case Study #2

Answers:

37205
75960
35493 RT
75992
36247
75774
75625
75716 59

50

References and Resources



- ♦ AMA 2009 CPT Code Book
- ♦ *AMA CPT Assistant*
- ♦ *AHA Coding Clinic for HCPCS*
- ♦ CMS National Correct Coding Initiative (NCCI) Policy Manual and Transmittals
- ♦ SIR – Society of Interventional Radiology
- ♦ Medical Learning, Inc. (Medlearn) Interventional Radiology Coder and IVR/CVIR Case Studies
- ♦ ZHealth Publishing's 2009 IVR Coding Reference

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Thank You

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- ♦ For questions specific to this presentation, email: Amy.Czajkowski@chw.edu



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Audience Questions



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Appendix

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***Appendix A –
Key Terms and Definitions***

***Appendix A –
Key Terms and Definitions***

- ♦ **Angiography – imaging of blood vessels with the use of various contrast media injected via a catheter**
- ♦ **Antegrade – with the flow (of blood)**
- ♦ **Atherectomy – mechanical removal of atherosclerotic plaque from an artery with a catheter equipped with a rotating or directional burr (rotablation or shaving), cutter, or photoablation ability, i.e., Fox Hollow, Silver Hawk, Rotablator, Laser, etc. Note: It does not extend to the tunica intima as endarterectomy does.**

Appendix A – Key Terms and Definitions

- ♦ **Atherectomy – Types of:**
 - **Rotational:** uses an abrasive burr near the tip of the catheter to grind the plaque into small particles that float harmlessly away in the bloodstream.
 - **Directional:** the catheter window is positioned over the blockage and a rotating blade shaves the plaque and collects it in the catheter tip.
 - **Extraction:** uses an abrasive burr near the tip of the catheter to grind the plaque into small particles that are collected on the tip and extracted.
 - **Laser:** a “laser” catheter is typically used for atherectomy, thus, “laser angioplasty” should be coded/charged as an atherectomy.

Appendix A – Key Terms and Definitions

- ♦ **Bifurcation – a split (forking) into two branches, or the site where such division occurs**
 - Aorta into the bilateral iliac arteries
 - Each common carotid into internal and external carotid arteries
- ♦ **Bovine Origin – variant arch anatomy where the left common carotid artery arises as a branch off of the right innominate artery instead of directly off the aortic arch. In doing so, it becomes a part of the same vascular family as the right common carotid artery.**
- ♦ **Closure Device – used to seal an access site when performing percutaneous procedures, i.e., Angioseal, Perclose, Vasoseal, Starclose, Boomerang, etc.**

Appendix A – Key Terms and Definitions

- ♦ **Contralateral – opposite side**
- ♦ **CPT – Current Procedural Terminology**
- ♦ **First Order – primary vascular branch off of the aorta, vena cava, or branch of the vessel that was accessed**
- ♦ **“Great Vessels” – referring to those vessels originating directly off of the aortic arch supplying the head, neck, and upper extremities**
- ♦ **Guiding Angiogram – imaging that is performed to identify where a vessel origin or lesion is; this would NOT be considered a “diagnostic” angiogram and should not be charged/coded as one; sometimes referred to as road-mapping.**

Appendix A – Key Terms and Definitions

- ♦ **HCPCS – Healthcare Common Procedure Coding System**
- ♦ **Interventional Radiology – non-surgical treatment using contrast media and radiologic imaging to guide instruments (catheters, balloons, etc) through the body’s blood vessels and other organs**
- ♦ **Intima (tunica intima vasorum or Bichat’s tunic) – the innermost layer of the blood vessels**
 - **Tunica media is middle layer**
 - **Tunica externa is outer layer**
- ♦ **Ipsilateral – same side**
- ♦ **Lysis – destruction or breakdown of cells by a specific lysin (any substance or agent that can cause lysis, i.e. tissue plasminogen activator (TPA))**

Appendix A – Key Terms and Definitions

- ♦ **Lumen** – the space within the blood vessel that blood flows through
- ♦ **Non-selective catheter placement** – catheter movement into the aorta from any access point or the access point itself without any manipulation or further catheter movement
- ♦ **Percutaneous** – procedure performed by needle puncture through the skin
- ♦ **Percutaneous Transluminal Angioplasty** – a therapeutic procedure performed to repair arteries narrowed by atherosclerosis by dilation or widening of the blood vessel mechanically with various types of catheters (primarily utilizing a balloon, i.e., micro/compliant/non-compliant, cryoplasty/Polar, cutting balloon, etc.)

Appendix A – Key Terms and Definitions

- ♦ **Retrograde** – against the flow (of blood)
- ♦ **Selective catheter placement** – catheter that is maneuvered into: a branch off of the vessel entered, a branch off of the aorta, or a branch off of the vena cava
- ♦ **Stent** – a metallic, mesh-type tubular device inserted into a stenosed or occluded vessel to create blood flow within the vessel; may be self-expanding or balloon-expandable
- ♦ **Supraselective** – catheterization of a second or higher order vessel

Appendix A – Key Terms and Definitions

- ♦ **Thrombus** – a stationary blood clot along the wall of a blood vessel, frequently causing vascular obstruction.
- ♦ **Thrombectomy (embolectomy)** – “excision” or removal of thrombus (blood clot) from a blood vessel (vein or artery); can be by various techniques: balloon catheter placed beyond the thrombus, inflated, and pulled back retrogradely out of the vessel, maceration technique (break up, typically with a balloon catheter), or use of a specific thrombectomy device or catheter that disrupts, fragments, and/or removes the clot by suction

Appendix A – Key Terms and Definitions

- ♦ **Thrombolysis (clot busting)** – the breakdown (lysis) of blood clots by the use of pharmaceuticals. The catheter is guided to the site. The drug is then infused through the catheter until the clot is dissolved. If necessary, periodic angiograms are taken to monitor the progression of the treatment and determine whether the procedure needs to be repeated
- ♦ **Transcatheter Embolization (embotherapy)** – therapeutic introduction of a substance into a vessel in order to occlude it
- ♦ **Vascular families** – vessels which are fed by a primary branch of the aorta, vena cava, or vessel punctured; a vessel and all of its branches that originate from it

Appendix B – CPT Codes

Arterial Vascular Catheter Placement Codes

36120	Introduction of needle or intracatheter; retrograde brachial artery
36140	Introduction of needle or intracatheter; extremity artery
36200	Introduction of catheter, aorta
36245	<u>Selective catheter placement</u> , arterial system; each first order abdominal, pelvic, or lower extremity artery branch, within a vascular family
36246	initial second order abdominal, pelvic, or lower extremity branch, within a vascular family
36247	initial third or more selective abdominal, pelvic, or lower extremity artery branch, within a vascular family
+ 36248	additional second order, third order, and beyond, abdominal, pelvic, or lower extremity artery branch, within a vascular family (List in addition to code for initial second or third order vessel as appropriate)

Aortography

- 75600** Aortography, thoracic, without serialography, radiological supervision and interpretation
- 75605** Aortography, thoracic, by serialography, radiological supervision and interpretation
- 75625** Aortography, abdominal, by serialography, radiological supervision and interpretation
- 75630** Aortography, abdominal plus bilateral iliofemoral lower extremity, catheter, by serialography, radiological supervision and interpretation
- 75650** Angiography, cervicocerebral, catheter, including vessel origin, radiological supervision and interpretation

Lower and Upper Extremity Angiography

- 75710** Angiography, extremity, unilateral, radiological supervision and interpretation
- 75716** Angiography, extremity, bilateral, radiological supervision and interpretation
- + 75774** Angiography, selective, each additional vessel studied after basic examination, radiological supervision and interpretation (List separately in addition to code for primary procedure.)

Peripheral Balloon Angioplasty (PTA) – Surgical Component

- 35470** Transluminal balloon angioplasty, percutaneous; tibioperoneal trunk or branches, each vessel
- 35471** Renal or visceral artery
- 35472** Aortic
- 35473** Iliac
- 35474** Femoral-popliteal
- 35475** Brachiocephalic trunk or branches, each vessel

Peripheral Balloon Angioplasty (PTA) – Technical/Imaging Component

- 75962** Transluminal balloon angioplasty, peripheral artery, radiological supervision and interpretation
- + 75964** Transluminal balloon angioplasty, each additional peripheral artery, radiological supervision and interpretation (List separately in addition to code for primary procedure)
(Use [75964](#) in conjunction with [75962](#))
- 75966** Transluminal balloon angioplasty, renal or other visceral artery, radiological supervision and interpretation
- + 75968** Transluminal balloon angioplasty, each additional visceral artery, radiological supervision and interpretation (List separately in addition to code for primary procedure)
(Use [75968](#) in conjunction with [75966](#))

Peripheral Atherectomy – Surgical Component

35490	Transluminal peripheral atherectomy, percutaneous; renal or other visceral artery
35491	Aortic
35492	Iliac
35493	Femoral-popliteal
35494	Brachiocephalic trunk or branches, each vessel
35495	Tibioperoneal trunk and branches

Peripheral Atherectomy – Technical/Imaging Component

75992	Transluminal atherectomy, peripheral artery, radiological supervision and interpretation
+ 75993	Transluminal atherectomy, <u>each additional</u> peripheral artery, radiological supervision and interpretation (List separately in addition to code for primary procedure) (Use 75993 in conjunction with 75992)
75994	Transluminal atherectomy, <u>renal</u> , radiological supervision and interpretation
75995	Transluminal atherectomy, <u>visceral</u> , radiological supervision and interpretation
+ 75996	Transluminal atherectomy, <u>each additional visceral artery</u> , radiological supervision and interpretation (List separately in addition to code for primary procedure) (Use 75996 in conjunction with 75995)

Peripheral Intravascular Stent Placement

- 37205** Transcatheter placement of an intravascular stent(s), (except coronary, carotid, and vertebral vessel), percutaneous; initial vessel (For radiological supervision and interpretation, use [75960](#))
- + 37206** Each additional vessel (List separately in addition to code for primary procedure) (Use [37206](#) in conjunction with [37205](#)) (For radiological supervision and interpretation, use [75960](#))
- 75960** Transcatheter introduction of intravascular stent(s), (except coronary, carotid, and vertebral vessel), percutaneous and/or open, radiological supervision and interpretation, each vessel



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