Clinical scenarios illustrating the use of codes for interventions involving the superficial femoral artery and popliteal artery.

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The following clinical scenarios provide examples of how to code for interventions for the superficial femoral artery (SFA) and popliteal artery.

**SCENARIO 1**
A right SFA occlusion is accessed using a contralateral left femoral puncture. The lesion is crossed with a guidewire, treated with a stent, and fully opened with ballooning.

**Coding**
- 37226—Stent placement, SFA (includes all ballooning)

**Discussion**
The lower extremity revascularization codes 37221–37235 include all the work of opening the vessel. Each of these codes includes any balloon angioplasty used for treatment of the vessel, whether done as a stand-alone procedure for a lesion, a predilation of a lesion prior to stenting or atherectomy, or to fully open lesions treated with atherectomy and/or stenting. Even if multiple lesions are treated within a vessel, a single code is reported for any and all treatments used for a single vessel. Note that for coding purposes, the definition of a single femoropopliteal vessel includes the entire ipsilateral common femoral, profunda femoral, superficial femoral, and popliteal artery segment for codes 37221–37235. Report the code representing the highest-order therapy used in the vessel. All imaging guidance, angiography associated with the therapy, and completion angiography are included in the work of these codes. The codes also include all work associated with accessing the vessel and crossing the lesion. Catheterization codes are not separately reported. Moderate sedation is included in the work of this family of codes.

Ultrasound (US) guidance for puncture of the access vessel may be reported using 76937. This code includes evaluation of the access vessel with US as well as real-time visualization of the needle puncture with US, and these elements need to be included in the documentation in the patient’s permanent record. Diagnostic angiography may be separately reported if a complete and truly diagnostic study is performed and documented. Criteria for determining whether the study is reportable as a diagnostic study is found in the CPT Manual in the angiography section (75600–75971). Angiography confirming previously diagnosed pathology, road mapping, and fluoroscopic and angiographic guidance of the intervention are included in the work of each therapeutic code and are not separately reported with diagnostic angiography codes.

**SCENARIO 2**
A right SFA occlusion is accessed using an antegrade right femoral approach, crossed with guidewire using a subintimal approach, and the true lumen is reentered with a reentry device. The occlusion is treated with balloon angioplasty and stenting.

**Coding**
- 37226—Stent placement, SFA (includes all ballooning)

**Discussion**
All of the work of crossing the lesion is included in the therapeutic code, regardless of what devices are required
to cross the lesion. No additional codes are reported for the additional work associated with the use of the reentry device.

**SCENARIO 3**
A right SFA occlusion is accessed using a contralateral femoral approach, crossed with a guidewire, and then treated with atherectomy and balloon angioplasty.

**Coding**
- 37225—Atherectomy, SFA (includes all ballooning)

**SCENARIO 4**
A right SFA occlusion is accessed using a contralateral femoral approach, crossed with a guidewire, and then treated with drug-eluting stent.

**Coding**
- 37226—Stent placement, SFA (includes all ballooning)

**Discussion**
The same code is used for stent placement regardless of the type of stent used, including, for instance, bare-metal self-expanding, bare-metal balloon-expandable, covered stent, or drug-eluting stent.

**SCENARIO 5**
A right SFA occlusion is accessed using an antegrade ipsilateral approach. Multiple attempts to cross the lesion are unsuccessful. Pedal puncture is performed using US guidance, and a guidewire is eventually negotiated through the occlusion in a retrograde fashion. The guidewire is advanced into the right femoral sheath and pulled through, allowing passage of an antegrade catheter and then the wire through the occlusion. The occlusion is then treated with atherectomy, balloon angioplasty, and stenting.

**Coding**
- 37227—Atherectomy, stent, and balloon angioplasty of SFA
- 76937—US guidance for vascular access (include documentation of assessment of the access vessel using US and US guidance of needle puncture in the permanent record)

**Discussion**
Note that despite the need to use two separate accesses, additional catheterization codes are not reported because 37227 includes all work of accessing and crossing the lesion.

**SCENARIO 6**
A right SFA aneurysm is accessed using a contralateral femoral puncture and treated with a covered stent.

**Coding**
- 37236—Arterial stent placement
- 36247—Third-order selective catheterization, right SFA

**Discussion**
The coding for stent placement for an aneurysm in lower extremity vessels is reported using arterial stent codes rather than the lower extremity revascularization family of codes (which is used to report treatment of lower extremity occlusive disease). Code 37236 does not include access to the lesion, so additional coding for catheterization and crossing the lesion is necessary.

**SCENARIO 7**
A right SFA and popliteal aneurysm is accessed using a contralateral left femoral puncture and treated with a covered stent.

**Coding**
- 37236—Arterial stent placement
- 36247—Third-order selective catheterization right SFA and popliteal artery

**Discussion**
If the aneurysm is a single aneurysm involving both the SFA and popliteal artery and treated with a continuous covered stent, a single therapeutic code is reported. If there are distinctly separate aneurysms that are treated with separate stents, 37237 (each additional artery treated with stenting) could also be reported for placement of the second stent. The definition of “femoropopliteal vessel” for the lower extremity revascularization family of codes (37224–37227), which defines the entire segment of common femoral, profunda femoral, superficial femoral, and popliteal artery as a single vessel, does not extend to arterial stent codes 37236 and 37237. These codes are reported once per each anatomic vessel treated.

**SCENARIO 8**
A right popliteal aneurysm is accessed using an antegrade femoral puncture and treated with a covered stent. In addition, a focal stenosis of the proximal right SFA is treated with stenting.

**Coding**
- 37236—Arterial stent placement
- 36246—Second-order selective catheterization, popliteal artery
Discussion
In the case that both occlusive and aneurysmal disease are treated within the same vessel segment, the therapy for the dominant part of the disease should be reported. In this case, the aneurysm was considered the dominant disease. Although 37236 reports treatment of the popliteal artery only, use of 37226 in addition to reporting stenting of the SFA stenosis would result in duplicate reporting of the popliteal artery stent placement because 37226 includes all stenting performed in the SFA and popliteal arteries. If the occlusive disease was considered the dominant pathology being treated, the entire procedure would be reported with 37226.

SCENARIO 9
A focal right SFA stenosis in mid-thigh and focal, high-grade stenosis of the distal popliteal artery are accessed using a contralateral left femoral puncture. The lesions are both treated with stenting and balloon angioplasty.

Coding
• 37226—Stent placement, SFA/popliteal (includes all ballooning)

Discussion
Even though two separate lesions are treated, 37226 includes all of the work of stenting and ballooning used to open the entire segment of femoropopliteal artery in a single leg. No additional code is reported for a separate lesion(s) in the same segment leg for any part of the common, deep, superficial femoral and popliteal artery segments.

SCENARIO 10
A focal right SFA stenosis in mid-thigh and focal, high-grade stenosis of the distal popliteal artery are accessed using contralateral left femoral puncture. The SFA lesion is treated with stenting and balloon angioplasty. The popliteal lesion is treated with balloon angioplasty alone.

Coding
• 37226—Stent placement, SFA/popliteal (includes all ballooning)

Discussion
When more than one therapy is used to treat multiple lesions in the same vessel segment, the highest-level therapy code is reported. Only a single code may be reported for the entire vessel, regardless of how many different therapies are applied. For hierarchical purposes, the numbering of the CPT codes in the lower extremity revascularization family is somewhat anomalous, because the level of complexity is: atherectomy + stent (37227) > atherectomy (37225) > stent (37226) > angioplasty (37244).

SCENARIO 11
A focal right SFA stenosis in the mid-thigh and focal occlusion of the mid-popliteal artery are accessed using a contralateral left femoral puncture. The SFA lesion is treated with stenting and balloon angioplasty. The popliteal occlusion is treated with atherectomy and balloon angioplasty.

Coding
• 37228—Atherectomy and stent placement, SFA/popliteal (includes all ballooning)

Discussion
In this case, even though neither of the two separate lesions was treated with both atherectomy and stent placement, the code describing use of both modalities is reported because both therapies were used to treat that vessel.

SCENARIO 12
A focal right SFA stenosis and stenosis of the tibioperoneal trunk are accessed using a contralateral left femoral artery puncture. The SFA lesion is crossed with a wire and treated with balloon angioplasty. The stenosis of the tibioperoneal trunk is treated with balloon angioplasty.

Coding
• 37224—Balloon angioplasty, SFA
• 37228—Balloon angioplasty, tibial-peroneal artery

Discussion
Both of these codes include the work of catheterization of the vessels. The work to catheterize the tibioperoneal trunk includes the work of crossing the SFA lesion. This “duplication” of work is accounted for by applying the multiple surgical reduction, which pays a reduced rate for the second surgical code.

SCENARIO 13
Bilateral SFA lesions are accessed using bilateral antegrade punctures. A right SFA occlusion is opened with stenting. A left SFA stenosis is opened with stenting.

Coding
• 37226-50—Stent placement, SFA, bilateral

Discussion
Not all carriers recognize the -50 modifier for bilateral procedures. Some carriers may want this reported as 37226, 37226-50. Others may want it reported as 37226,
37226-59. However, a modifier is required to notify the carrier that bilateral lesions have been treated. Reporting 37226 twice in the same leg will result in denial of the second code.

**SCENARIO 14**

Bilateral SFA lesions are accessed using bilateral antegrade punctures. A right SFA occlusion is opened with stenting. A left SFA stenosis is opened with atherectomy, balloon angioplasty, and ultimately stenting.

**Coding**

- 37227—SFA atherectomy, balloon, and stent
- 37226-59—SFA stent

**Discussion**

In this case, because the treatment performed in each leg is different, modifier -50 for a bilateral procedure is not appropriate. The -59 modifier is used to denote that separate procedures were performed in different legs.

**SCENARIO 15**

Bilateral SFA lesions are accessed using bilateral antegrade punctures. A right SFA occlusion is opened with stenting. A left popliteal stenosis is opened with atherectomy and balloon angioplasty.

**Coding**

- 37225—Femoral/popliteal atherectomy (includes all ballooning)
- 37226-59—SFA stent

**SCENARIO 16**

Long-segment right SFA disease is accessed using a contralateral left femoral approach. The lesion is opened with stent placement and ballooning, using a total of four separate stents to treat the lesion.

**Coding**

- 37226—Stent placement, SFA (includes all ballooning)

**Discussion**

A single therapeutic code is reported for the entire vessel, regardless of how many stents are required for the therapy.

**SCENARIO 17**

A right SFA occlusion is accessed using an antegrade ipsilateral approach. Multiple attempts to cross the lesion are unsuccessful. Ultimately, no therapy is performed.

**Coding**

- 36245—First-order selective catheterization, SFA

**Discussion**

Despite all the additional work and equipment used, if the lesion is not treated, no therapeutic code would be reported. If a diagnostic study was also performed and documented and meets all the requirements for reporting a diagnostic study, additional code(s) for the diagnostic study may be reported.

Katharine L. Krol, MD, FSIR, FACR, is an interventional radiologist and has recently retired from active clinical practice. She has stated that she has no financial interests related to this topic.

**CONTACT US**

If you have any questions or topics you would like Dr. Krol to address in a future column, please contact us at evteditorial@bmctoday.com.