

New Embolization Codes for 2014

Clinical scenarios that show how to use the revised codes for various procedures.

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The following are illustrative case examples demonstrating use of the new embolization codes (37241-37244) introduced in 2014.

SCENARIO 1

A superficial arteriovenous (AV) malformation of the foot (predominantly arterial) is embolized with ethanol. The lesion is accessed via direct needle injection. Contrast injection with diagnostic imaging is performed prior to embolization.

Coding

- 37242: Arterial embolization
- 36140: Nonselective needle placement, extremity artery
- 75710-59: Arteriography, extremity, radiological supervision and interpretation (RS&I)

Discussion

Unlike the now-deleted embolization code 37204, the new codes do not depend on placement of a catheter into the lesion and may be used in cases in which the lesion is accessed by direct needle puncture. If this same procedure were performed with placement of an intracath into the lesion, the coding would be the same. If ultrasound guidance were used to facilitate accurate needle placement, 76937 could also be reported. Note that the use of 76937 requires documentation of vessel patency, concurrent real-time ultrasound imaging of the puncture, and permanent image(s) saved to the patient record.

SCENARIO 2

A superficial venous malformation of the arm is embolized with ethanol via direct needle injection. Diagnostic imaging with contrast injection is performed before embolization.

Coding

- 37241: Venous embolization
- 36005: Venous puncture for extremity venography
- 75820: Unilateral extremity venogram, RS&I

Discussion

Although vascular malformations of the extremities are correctly reported with 37241, the venous embolization code, it is not correct to use the venous embolization code for sclerosis or treatment of extremity venous insufficiency using a sclerosant. This includes treatment of spider veins and varicose veins. At the time of development of the new embolization codes, specific discussion of these entities led to the agreement that 37241 would not be used to report treatment of these veins, and the codes were valued based on the decision that 37241 would not replace or be substituted for the existing codes for sclerosis or ablation of varicose and spider veins.

If venography is not performed, 36000 should be used to describe the puncture of the vein.

SCENARIO 3

A superficial venous malformation of the face is embolized with ethanol via direct needle injection. Diagnostic imaging with contrast injection is performed before embolization.

Coding

- 37241: Venous embolization
- 36000: Venous puncture
- 76499: Unlisted diagnostic radiographic procedure

Discussion

Although there is a code for embolization of the head and neck, noncentral nervous system lesions (61626), that code specifies that the embolization be performed through a catheter (transcatheter). In this case, the embolization is performed via a direct needle puncture, so 61626 is not applicable. There is no specific code for venography of the face, so an unlisted code would be used to describe the diagnostic study. Code 36005 also describes puncture of a vein for venography, but its code descriptor specifies extremity anatomy, so it is not applicable in this scenario.

SCENARIO 4

For pelvic congestion syndrome, a diagnostic venogram is obtained from a right common femoral venous puncture,

with selective catheterization and diagnostic venography of the left renal vein, left ovarian vein, bilateral hypogastric veins, and bilateral external iliac veins. A large, varicose left ovarian vein is shown with reflux into enlarged uterine veins. The left ovarian vein is embolized with coils and sotradecyl.

Coding

- 37241: Venous embolization
- 36012X3: Selection of left renal/ovarian, left hypogastric, left external iliac veins
- 36011: Selection of right hypogastric vein
- 75822-59: Bilateral extremity venogram
- 75831-59: Left renal/ovarian venogram

SCENARIO 5

A patient presents with a 2-cm hepatocellular carcinoma in the right hepatic lobe. The patient is not a surgical candidate based on the presence of multiple additional small lesions identified on early arterial phase magnetic resonance imaging and is scheduled for chemoembolization. Hepatic angiography is performed from selective catheterization of the common hepatic artery, including rotational angiography. Three additional branches of the right hepatic artery are subselected and studied, documenting that one of these supplies flow to the tumor. Chemoembolization of this branch is performed with doxorubicin or ethiodized oil and gel foam slurry. Final angiography shows no evidence of residual tumor blush. Hemostasis is achieved using manual compression.

Coding

- 37243: Embolization of tumor
- 36247: Third-order selection of right hepatic artery branch (note second-order selective common hepatic artery is included in 36247, so is not separately reported)
- 36248X2: Third-order selection of two additional right hepatic branches
- 75726-59: Visceral arteriogram, RS&I
- 75774-59X3: Each additional vessel after basic RS&I for supraseductive angiogram
- 96420: Chemotherapy administration, intra-arterial, push technique

Discussion

If additional tumors are also embolized, including in the left lobe of the liver, 37243 would be reported once for the procedure because the liver is a single organ/single surgical field. Additional selective catheterization codes would be reported for the additional vessels selected, studied, and/or treated. Unlike the former embolization code 37204, the new codes include follow-up angiography, so no additional codes are reported for the follow-up or final angiography.

SCENARIO 6

A patient on hemodialysis has a poorly functioning AV access and is found to have a large collateral vein siphoning flow from the dominant outflow vein. This is treated with coil embolization, accessing the AV fistula and selectively catheterizing the collateral vein.

Coding

- 36011: First-order selective catheterization of venous branch
- 37241: Venous embolization

Discussion

If multiple veins must be embolized to treat the AV fistula, the additional catheterizations are separately reported. The embolization code, 37241, is reported only once regardless of the number of vessels treated or the number of coils placed because the AV fistula is considered a single surgical site/territory. If diagnostic imaging is not performed, 36147 should not be additionally reported because the selective catheterization code 36011 includes the work of accessing the AV fistula.

SCENARIO 7

A patient presents to the emergency room with acute hematuria, hypotension, and anemia. A CT scan shows a large hypernephroma of the left kidney. The patient is taken to the angiography suite, where diagnostic angiography and embolization are performed. Flush angiography and right renal arteriography are performed with first-order selective catheterization to exclude any pathology of the right kidney. Left renal arteriography is performed, initially with first-order selective catheterization and then proceeding to selection and study of additional third-order branches to adequately identify the supply to the tumor. The vessels supplying the tumor are embolized with polyvinyl alcohol. Final angiography shows closure of the tumor vasculature and no active extravasation. The arteriotomy is closed with a closure device.

Coding

- 37244: Embolization for active hemorrhage
- 36253: Unilateral superselective renal angiography (left)
- 36251: Unilateral first-order selective renal angiography (right)

Discussion

Code 37244 is used instead of 37243 because this is an acute setting of active hemorrhage, and the most acute indication is used to determine the appropriate embolization code. Diagnostic angiography is performed, so no additional catheterization codes are reported because any and all catheterizations in the renal distributions are included

in the work of the diagnostic renal angiography codes. Vessel closure by any method is included in each of the new embolization codes.

If a significant contribution of flow to the tumor is seen from vessels other than the renal artery, it may be necessary to embolize some or all of those branches to control bleeding. In that case, 37244 would include embolization of those additional branches because it is treating the same surgical field/organ, but additional selective catheterization codes and additional diagnostic angiography codes may be used to describe the additional work.

SCENARIO 8

A patient is brought to the emergency room in hypotensive shock after a motor vehicle accident. A CT scan shows a splenic fracture with a large amount of blood in the splenic bed and evidence of active extravasation. Multiple pelvic fractures are also identified, with a large amount of blood present in the pelvis and evidence of active extravasation. An interventionist is consulted for treatment of hemorrhages.

Diagnostic angiography. Third-order selective catheterization of splenic artery confirms arterial injury with active extravasation. Pelvic angiography documents arterial injury with small pseudoaneurysms in both hypogastric arteries but no active extravasation seen at the time of injections.

Embolization. The splenic artery and both hypogastric arteries are superselectively catheterized to the level of the arterial injuries, and the vessels are closed with coil embolization at all three levels.

Coding

- 37244: Embolization of splenic artery for acute hemorrhage
- 37244-59: Embolization of bilateral hypogastric arteries for acute hemorrhage
- 36247x3: Third-order selective catheterization, splenic artery and bilateral hypogastric arteries
- 75726: Splenic arteriogram RS&I
- 75736X2: Bilateral superselective pelvic arteriogram RS&I

Discussion

The spleen and pelvis are two separate surgical fields, and embolization may be reported twice in this case. The second embolization is reported with the -59 modifier to designate that it is a separate procedure. Despite not showing active extravasation from the pelvic arteries at the moment of arteriography, the CT scan documented active bleeding in this area, and 37244 is used to report both embolizations.

SCENARIO 9

A patient with a 5.5-cm isolated right common iliac artery aneurysm presents for endovascular therapy. Before placement of an ilio-iliac endograft, the hypogastric artery

is embolized, allowing extension of the endograft into the proximal external iliac artery. The case is performed percutaneously with bilateral groin punctures, with placement of a pigtail catheter into the aorta from the left groin. The right hypogastric artery is subselected from the right femoral puncture and embolized with coils and vascular occluders. The sheath is then advanced into the aorta from the right groin, and the endograft is positioned and deployed. The right arteriotomy is closed with two suture devices, and the left arteriotomy is closed with manual compression.

Coding

- 34900: Endograft repair of iliac artery
- 37242: Embolization of artery
- 36245: First-order selective catheterization, right hypogastric artery
- 36200: Catheter placement into aorta from left femoral artery

Discussion

The work of embolizing the hypogastric artery is not included in the work described by 34900, endovascular repair of the iliac artery. Diagnostic angiography was performed before repair using computed tomography angiography, allowing accurate measurements to be made. Additional diagnostic angiography is not reported with 34900, and in this case, the imaging performed was used for roadmapping and monitoring of the embolization and endovascular repair.

SCENARIO 10

A large wide-mouthed renal artery aneurysm is embolized. To create a latticework to allow stable positioning of coils within the aneurysm, a stent is first placed across the mouth of the aneurysm. Working through the interstices of the stent, coils are deployed to fill the aneurysm sac.

Coding

- 37242: Arterial embolization

Discussion

The appropriate selective catheterization code(s) are reported (36245-8) if diagnostic angiography is not performed. If diagnostic angiography is performed, the selective catheterization(s) are included in the renal diagnostic angiography code(s). In this case, stent placement is performed as part of the embolization procedure and is not separately reported. ■

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