Head and Neck Arteriograms

Arteriograms of the head and neck vessels are reported with comprehensive codes (36221-36228) that include both the catheter placement and the diagnostic imaging. The CPT® manual states that these codes include:

- Vessel access
- Catheter placement
- Arterial contrast injections
- Fluoroscopy
- Arterial, capillary, and venous phase imaging, when performed
- Radiological supervision and interpretation
- Closure of the arteriotomy by pressure or closure device

Codes 36221-36228 include any diagnostic angiography performed in the head and neck area, so there are no separate S&I codes to assign. In particular, the CPT® manual states that catheterization code 36218 and imaging code 75774 [Angiography, selective, each additional vessel studied after basic examination, radiological supervision and interpretation (List separately in addition to code for primary procedure)] should not be assigned as part of a diagnostic angiogram of the cervicocerebral vessels.

However, the CPT® manual also states that it may be appropriate to report 36218 and 75774 for diagnostic angiograms of the upper extremities or other vascular beds of the neck and shoulder girdle during the same session as a vertebral arteriogram (36225-36226). For example, catheterization and imaging of the costocervical trunk and the thyrocervical trunk can be coded separately. (See Clinical Examples in Radiology, Winter 2015.) The CCI edits bundle codes 36218 and 75774 into many of the comprehensive cervicocerebral arteriogram codes, and it may be necessary to apply a modifier to show that a separate vascular bed was involved.

Codes 36221-36228 do not include ultrasound guidance for vascular access. From a CPT® coding perspective, it is appropriate to report code 76937 in conjunction with the head and neck arteriogram codes, assuming all of the requirements for the guidance service are met. (See page 119.) Be aware that some Medicare contractors will pay for add-on code 76937 only when it is reported in conjunction with specific base codes. If payment is denied, check your contractor's published policies.

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Please see page 134 for reporting guidelines for diagnostic angiograms performed in conjunction with therapeutic interventions.
Dialysis Circuit Procedures

An arteriovenous dialysis circuit is a surgically created structure for long-term hemodialysis access in patients with end-stage renal disease. There are two types of dialysis circuits, both of which involve the creation of an artificial communication between an artery and a vein.

An arteriovenous fistula (AVF) is a surgically created anastomosis between an artery and a vein. It allows some of the blood to pass directly from the artery into the vein, while the rest continues down the artery to the distal part of the limb. The presence of the fistula greatly increases the blood flow through the vein, since some of the blood is going directly into the vein rather than passing through the distal capillary bed. This increased blood flow causes a series of changes in the vein. In particular, it becomes larger and easier to see through the skin. This process is known as "maturation," and it usually takes about a month.

When the fistula has matured, it is ready for use in dialysis. Two needles are inserted into the patient’s vein just beyond the anastomosis. The needle closest to the anastomosis carries blood to the dialysis machine, and the one that is further away from the anastomosis returns the blood to the patient’s body.

Dialysis Circuit Procedures – Quick Reference Chart

<table>
<thead>
<tr>
<th>Service</th>
<th>With Thrombectomy</th>
<th>Without Thrombectomy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peripheral stent placement</td>
<td>36906</td>
<td>36903</td>
</tr>
<tr>
<td>Peripheral angioplasty (no stent)</td>
<td>36905</td>
<td>36902</td>
</tr>
<tr>
<td>No peripheral stent or angioplasty</td>
<td>36904</td>
<td>36901</td>
</tr>
<tr>
<td>Central stent placement</td>
<td>Add +36908</td>
<td></td>
</tr>
<tr>
<td>Central angioplasty (no stent)</td>
<td>Add +36907</td>
<td></td>
</tr>
<tr>
<td>Embolization</td>
<td>Add +36909</td>
<td></td>
</tr>
</tbody>
</table>

An arteriovenous graft (AVG) is a segment of synthetic blood vessel that is sewn to the artery at one end and to the vein at the other. Dialysis can then be performed by inserting the needles into the graft. A graft does not need to mature, so it can be used much sooner than a fistula. However, grafts have a higher failure rate than fistulas, and for that reason fistulas are preferable as long as the patient has suitable blood vessels available.
Spinal Procedures

This section of the *Navigator®* contains coding guidelines for several spinal procedures frequently performed by interventional radiologists, including lumbar puncture, vertebroplasty, vertebral augmentation, and kyphoplasty. Also, please see the Pain Procedures section, beginning on page 282, for other spinal procedures including epidural injections, facet joint injections, and facet neurolysis.

![Structures of the Spine](image)

*Courtesy National Institute of Arthritis and Musculoskeletal and Skin Diseases*

*National Institutes of Health*

**Lumbar Puncture**

Lumbar puncture (LP) is the insertion of a needle into the subarachnoid space through the skin of the patient’s low back under local anesthesia. LP is often performed at the bedside without imaging guidance. However, in some cases the interventionalist will be asked to perform the puncture under fluoroscopy.

LP may be performed to aspirate cerebrospinal fluid (CSF) for diagnostic or therapeutic purposes or to inject medication into the subarachnoid space. For subarachnoid injection, please see “Epidural Injections,” beginning on page 283. When LP is performed in order to inject chemotherapy drugs into the subarachnoid space, the LP is included in the intrathecal chemotherapy code (96450) and should not be coded separately. (See *Clinical Examples in Radiology*, Winter 2014.)
Aspiration Procedures

In addition to the fine needle aspiration codes (10021-10022), the CPT® code set contains numerous codes for aspiration of fluid from body cavities, cysts and other fluid-containing structures. These procedures may be performed for diagnostic purposes (removal of fluid for cytologic examination), therapeutic purposes (relief of pressure caused by fluid build-up) or both.

Paracentesis

Paracentesis is the aspiration of fluid from the abdominal cavity. It is most often performed for ascites, which is an abnormal accumulation of peritoneal fluid caused by liver disease, cancer or other conditions. Paracentesis may be performed for diagnostic purposes, in which case only a small amount of fluid is removed. Alternatively, large volume paracentesis (removal of up to 6 liters of fluid) may be performed for therapeutic purposes. Following large volume paracentesis the patient may receive an albumin infusion to prevent electrolyte imbalance.

The following codes are used to report paracentesis:

<table>
<thead>
<tr>
<th>CPT® Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>49082</td>
<td>Abdominal paracentesis (diagnostic or therapeutic); without imaging guidance</td>
</tr>
<tr>
<td>49083</td>
<td>. . . with imaging guidance</td>
</tr>
</tbody>
</table>

Remember that aspiration involves removal of the catheter or needle at the conclusion of the procedure. Do not use codes 49082-49083 for drainage procedures in which a catheter is left indwelling.

Code 49083 includes imaging guidance, and ultrasound is the most common guidance modality. Code 49083 includes the limited ultrasound exam performed prior to paracentesis in order to determine the amount and location of the fluid. According to Clinical Examples in Radiology (Winter 2012), “This type of limited sonography is a necessary component of any ultrasound guidance procedure” and should not be coded separately. If the preliminary ultrasound images do not show any fluid, paracentesis will not be performed. In this situation it is appropriate to report a limited ultrasound exam of the abdomen (76705) for the preliminary imaging.

Ultrasound-guided paracentesis, like other ultrasound-guided procedures, requires permanently archived images. (See Clinical Examples in Radiology, March 2014.)

If the patient receives an albumin infusion following the paracentesis, Coding Clinic™ for HCPCS (Third Quarter 2013) states that the infusion is included in the paracentesis procedure. This guidance applies specifically to hospital billing for outpatient services.

**EXAMPLE:** A patient with ascites undergoes aspiration of peritoneal fluid under ultrasound guidance for cytologic examination.

**CODE:** 49083