

# **Interventional Radiology Coding Case Studies**

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**Week of July 16, 2018**

## **Endovascular Repair**

**INDICATION:** Abdominal aortic aneurysm.

**INTERVENTIONAL RADIOLOGIST:** Dr. H

**VASCULAR SURGEON:** Dr. P

### **PROCEDURAL STEPS**

1. Surgical exposure of the common femoral arteries bilaterally.
2. Seldinger access of the common femoral arteries bilaterally with bilateral iliac sheath placement.
3. Fluoroscopic-guided bifurcated stent graft deployment.
4. Fluoroscopic-guided aortic extension deployment.
5. Fluoroscopic-guided right iliac extension component.
6. Fluoroscopic-guided left iliac extension component.
7. Follow-up aortic and bilateral iliac angioplasties.
8. Follow-up aortogram.

**ANESTHESIA:** General endotracheal.

**TOTAL CONTRAST:** 120 mL Isovue 370.

**TOTAL FLUOROSCOPIC TIME:** 29.6 minutes.

**TECHNIQUE:** After informed consent was obtained, the patient underwent induction of general anesthesia. Using surgical technique, the common femoral arteries were exposed bilaterally. Using Seldinger technique, both common femoral arteries were accessed. A 19-French sheath was placed on the right and a 9-French sheath was placed on the left. Via the left groin sheath, a 6-French snare catheter was passed to the level of the aortic bifurcation. Via the right sheath, an Endologix bifurcated stent graft was passed into the abdominal aorta. The left-sided snare was used to pull the SurePass guidewire out the left groin sheath. Subsequently, under fluoroscopic guidance, the bifurcated stent graft was positioned and deployed in the infrarenal abdominal aorta and anchored at the aortic bifurcation with limbs into the common iliac arteries bilaterally. The device used was an

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Endologix bifurcated graft (BA25-100/116-40). Subsequently, via the left groin sheath, a pigtail catheter was passed into the abdominal aorta to the level of the renal arteries, followed by power injection of contrast for a digital abdominal aortogram.

Via the right groin, an aortic extension piece was then delivered and positioned in the immediate infrarenal abdominal aorta. The suprarenal and infrarenal extension was then deployed under fluoroscopic guidance. The deploying mechanism was then removed. An occlusion balloon catheter (Cook, Coda) was then passed and used to angioplasty the proximal stent at the aortic neck. This was then removed. Via the right groin sheath, a limited right iliac arteriogram was obtained. Over a guidewire, an iliac limb extension was passed and deployed in the common iliac artery to a level just above the takeoff of the hypogastric.

Via the left groin sheath, a guidewire was advanced into the pigtail catheter, which was then repositioned in the intraluminal portion of the stent graft. Over the wire, the catheter and sheath were removed and exchanged for a 16-French sheath through which a left iliac limb extension device was deployed under fluoroscopic guidance. Both iliac limbs were then ballooned using the Coda balloon. Follow-up aortogram was then obtained showing no residual endoleaks. Aortic and limb extension pieces used were also Endologix (A28-28/C95-020, IS20-25/C55SA). Both groin sheaths were then removed and surgical closure of the arteriotomies was then performed by Dr. P.

**FINDINGS:** Imaging obtained during the procedure shows good positioning of the stent graft in the infrarenal abdominal aorta with the suprarenal extension in place. Renal arteries remain patent bilaterally and are unremarkable. There is no evidence of endoleak. The iliac limbs appear unremarkable and are well seated in the common iliac arteries bilaterally. No endoleaks are identified.

**CONCLUSION:** Infrarenal abdominal aortic aneurysm with aneurysmal common iliac arteries bilaterally. Status post percutaneous endovascular aortic aneurysm repair without residual endoleaks demonstrated. Follow-up CTA evaluation in 1 month is recommended.

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# Interventional Radiology Coding Case Studies CPT Codes

**Week of July 16, 2018**

## Endovascular Repair (AAA)

### Procedure Codes:

#### Interventional Radiologist

- 34705 Placement of bifurcated endoprosthesis
- +34709 Aortic (suprarenal) extension\*\*\*

#### Vascular Surgeon

- +34812-50 Open exposure/closure of bilateral femoral arteries

*Note that CPT designates +34812 as an add on code, so claims with only code 34812 most likely will be denied.*

#### Facility Coding

- 34705 Placement of bifurcated endoprosthesis
- +34709 Aortic (suprarenal) extension
- +34182-50 Open exposure/closure of bilateral femoral arteries
- Q9967 x120 LOCM, 300-399 mg/ml iodine concentration, per ml

### Diagnosis Codes:

- I71.4 Abdominal Aortic Aneurysm

### Comments:

- The correct codes to report will depend on for whom you are submitting billing.
- Code 34705 is assigned for placement of the Endologix bifurcated stent graft.
- Add-on code +34709 is assigned for placement of the aortic extension. \*\*\*Note it would be prudent to verify with the interventional radiologist where the extension terminates. To assign +34709 the extension must terminate in the abdominal aorta proximal to the renal arteries.\*\*\* The iliac extensions are not coded separately. Please refer to the coding rules section below.
- Modifier -62 is not appended to codes 34705 or 34709, nor are they reported by the vascular surgeon, because the physicians were not noted as co-surgeons for those portions of the procedure.

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## Comments (continued):

- Add-on code +34812 is assigned for bilateral open femoral artery exposure.
- Angiography and angioplasty is bundled with the endovascular repair codes and not separately coded.
- Drugs and supplies are billed by the facility performing the procedure and should not be assigned for professional fee coding.

## Applicable Coding Rules:

### Endovascular Repair Abdominal Aorta & Iliac Arteries

- Endovascular repair codes describe placement of an endograft (endovascular graft, endoprosthesis, stent graft) to treat an abdominal aortic aneurysm (AAA), pseudoaneurysm, dissection, penetrating ulcer, or traumatic disruption in the infrarenal abdominal aorta with or without extension into the iliac arteries.
- When endovascular repair is performed the following components are coded separately:
  - ❖ Exposure of access vessels (+34812, +34820, +34833, +34834, +34713, +34714, +34715, +34716)
  - ❖ Selective catheterizations (36245-36248)
  - ❖ Extensive repair of an artery (35226, 35286, 35371)
    - CPT guidance differs from the NCCI Policy Manual. In 2017 the NCCI Policy Manual, Chapter 5 added the following language: *“Repair and closure of a blood vessel utilized for vascular access during the performance of a procedure is an included component of that procedure. Repair of the blood vessel (e.g., CPT codes 35201-35286) should not be reported separately.”*
  - ❖ Other interventions (PTA/stent/embolization) outside of the target treatment zone:
    - ❖ The target treatment zone is defined as the vessels that contain an endograft(s) either the main body, docking limb[s] and/or extension[s]) deployed during the same operative session.
    - Example: When an endograft terminates in the common iliac artery, any additional treatment of the common iliac artery is not reported separately.



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## Applicable Coding Rules (continued):

- Only additional treatment in the external and/or internal iliac artery is reported when performed.
- ❖ Intravascular ultrasound (+37252, +37253)
- ❖ Conscious sedation (99151-99157)
- Endovascular repair surgical codes include the following components:
  - ❖ Pre-procedure sizing and device selection
  - ❖ Device positioning, manipulation and deployment
  - ❖ Non-selective catheterizations (36140, 36200)
  - ❖ Diagnostic angiography of aorta and branches
  - ❖ All radiological supervision and interpretation (RS&I): intraprocedural imaging (angiography, rotational CT), fluoroscopic guidance, roadmapping, completion angiography
  - ❖ Placement of extensions in the aorta from the renal arteries to the iliac bifurcation
  - ❖ Treatment zone PTA/stent deployment within target treatment zone. The treatment zone is defined as those vessels that contain an endograft(s) (main body, docking limb[s] and/or extension[s]) deployed during the same operative session prior to and after endograft placement
  - ❖ Closure of arteriotomy

### Catheterization Codes

- When performing endovascular repair procedures the catheter must be manipulated through the arterial system to perform the procedure. Selective catheterization codes may be reported in accordance with the rules for reporting selective catheterization. Non-selective catheterizations (36140, 36200) are bundled into the endovascular repair codes.

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## **Applicable Coding Rules (continued):**

- Endovascular repair procedures are typically performed by placing the catheter in the aorta, either via unilateral access or via bilateral access. These catheterizations of the aorta (36200) are bundled with the endovascular codes 34701-34711.

### **Diagnostic Angiography**

- An initial diagnostic angiogram of the aorta and iliofemoral arteries is included with the endovascular repair codes and should not be reported separately.
- Diagnostic angiography is reported only when it takes place in vessels outside of the targeted treatment zone. Diagnostic angiography should only be reported separately in accordance with guidelines established for reporting with transcatheter procedures.

### **Endovascular Repair Codes**

- Endovascular repair codes are assigned for treatment of an aneurysm, pseudoaneurysm, dissection, penetrating ulcer or traumatic disruption with an endograft.
- Endovascular repair codes are assigned based on the vascular anatomy involved, the type of endoprosthesis that is placed and whether or not the vessel being treated has ruptured.
  - ❖ Endoprosthesis types: aorto-aortic tube (34701-34702), an aorto-uni-iliac device (34703-34704), or an aorto-bi-iliac device (34705 - 34706).
  - ❖ “Rupture” as noted in the code descriptions refers to clinical and/or radiographic evidence of acute hemorrhage.
    - If a decompressive laparotomy is performed at the same time as repair of a rupture, assign code 49000. Surgical decompression is achieved by opening the abdominal wall and abdominal fascia to create more space for the abdominal viscera.
    - A chronic, contained rupture (pseudoaneurysm) is not considered a rupture for coding purposes.
- Codes 34705 and 34706 describe an endovascular repair with an aorto-bi-iliac endograft which has two limbs to cover both common iliac arteries.

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## **Applicable Coding Rules (continued):**

- ❖ For codes 34705 and 34706 the treatment zone is defined as the infrarenal aorta and both common iliac arteries
- ❖ Code 34706 is assigned when there is clinical and/or radiographic evidence of acute hemorrhage.

### **Open Arterial Exposure/Percutaneous Access**

- Often times when performing an endovascular repair, access may be gained through a cut-down approach when a vessel is too small in diameter to accommodate the endograft. When this open arterial exposure is utilized, it is coded separately.
- The codes used to describe open exposure of access vessels, i.e., femoral or iliac artery(s), include both the work of exposing the vessel and closing of the exposure site(s).
- Add-on code +34812 is assigned when open access is via the femoral artery for delivery of the endoprosthesis.
- Open exposure add-on codes are reported twice for bilateral open exposure. Do not utilize modifier -50 to report a bilateral procedure.

### **Placement of Extension Prosthesis**

- Extensions are placed when the main endoprosthesis is not long enough to reach beyond the termination of the aneurysm or if an endoleak is identified at the proximal or distal end of the device.
- Extensions may be placed at the time of initial endovascular repair or may be placed at a later date as necessary.
  - ❖ Code +34709 is assigned at the time of initial endograft placement in conjunction with code range 34701-34708.
  - ❖ Codes 34710 and +34711 are reported for delayed placement of extensions at a later date.

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## **Applicable Coding Rules (continued):**

### **Placement of Extension Prosthesis – Initial Repair (+34709)**

- Code +34709 describes placement of an extension prosthesis distal to (below) the common iliac arteries or proximal to (above) the renal arteries. Extensions must terminate either in the internal iliac, external iliac or common femoral arteries or be placed in the abdominal aorta above the renal arteries.
  - ❖ Endograft extensions that terminate in the common iliac arteries are included in codes 34703, 34704, 34705, 34706, 34707, 34708 and are not reported separately.
  - ❖ Code +34709 is not reported for placement of a docking limb that extends into the external iliac artery.
  - ❖ Code +34709 is reported once per vessel treated, not per cuff. Do not code for more than one extension per vessel.
  - ❖ When performed, treatment zone angioplasty/stenting is bundled with code +34709.
  - ❖ For an endograft placed into a renal artery that is being covered by a proximal extension, see codes 37236-37237.

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