

CODING EDUCATION CORNER (2016, May)

Neurosurgery/Spinal Orthopedics

Hello, for May's newsletter we will review improvement of documentation for coding arteriovenous malformations (AVMs) and dural repairs. Specifically, we will discuss (1) when it is appropriate to bill a dural repair and (2) what vital information is needed to appropriately code them. For appropriate coding, we will first distinguish a complex intracranial arteriovenous malformation from a simple intracranial arteriovenous malformation.

Complex Arteriovenous Malformations		Simple Arteriovenous Malformations	
61686	Surgery of intracranial arteriovenous malformation; infratentorial	61684	Surgery of intracranial arteriovenous malformation; infratentorial
61682	Surgery of intracranial arteriovenous malformation; supratentorial	61680	Surgery of intracranial arteriovenous malformation; supratentorial
61692	Surgery of intracranial arteriovenous malformation; dural	61690	Surgery of intracranial arteriovenous malformation; dural

Simply documenting the approach can assist the coder to decipher whether an AVM is supra- or infratentorially located. However, determining a dural AVM is a bit more complicated. To assist the medical coder assign the appropriate code, the surgeon should *specifically document that it is a dural AVM*.

Complex AVMs have features that include a size greater than 3 cm, involvement of eloquent cortex, or deep venous drainage. When considering an eloquent site, the coders look for areas involving the following: Sensorimotor, language, visual cortex, hypothalamus, thalamus, brain stem, cerebellar nuclei, or regions directly adjacent to these structures.

Please note that the coding criteria for complex AVMs mirror Spetzler Martin Grading Scale: Grade 1: *Simple*, Grade 2: *Simple*, Grade 3 and higher: *Complex*

Size	Location	Venous Drainage
Size (<3 cm) 1 Medium (3-6 cm) 2 Large (>6 cm) 3	Non-Eloquent Site 0 Eloquent Site 1	Superficial 0 Deep 1

Op Note Coding Example:

Careful microdissection was performed to open the fissure widely. Medial dissection was performed over the optic nerves (**visual cortex/eloquent site = 1**) to expose the **4 cm (Medium size = 2)** arteriovenous malformation. The medial striate artery was identified. Many of its branches were seen flowing to the AVM with **deep venous drainage (deep venous drainage = 1)**. These were separated from the vessel. They were cauterized one by one and cut. The draining vein was preserved. All the vessels were separated from the AVM and one by one cauterized and cut. Once all of the feeding vessels were cut, the lesion was lifted out of the brain on the vein. The vein was cauterized and cut and the AVM was removed.

Grade 4: Complex – the documentation states **size** (4 cm), **location** (optic nerve), **venous drainage** (deep)

Documenting the **size** of the AVM (*pre-resection—not post-resection—when it is in pieces, and/or not in its original shape*), **eloquence** of the brain area involved, and **presence** of deep venous drainage helps the coders determine the appropriate code for the procedure.

Dural Repairs:

- **63707** - Repair of dural/cerebrospinal fluid leak, *not requiring laminectomy*
- **63709** - Repair of dural/cerebrospinal fluid leak or pseudomeningocele, *with laminectomy*
- **63710** Dural graft, spinal

Coding Tips:

1. It is **not appropriate to report** the above codes to repair a small intraoperative dural laceration or leak (*incidental durotomy*).
2. We would **not report** any of the above codes with any procedure that is inherently intradural (*e.g., laminectomy for neoplasm*).
3. Code 63710 **requires** the use of non-autologous graft material.
4. May separately report dural repair codes with open treatment of spine fracture codes (22325-22328).

It is important to document the indication for this procedure when it is an incidental dural tear or laceration as it helps to accurately report the correct codes. Below are some diagnoses codes associated with incidental dural tears:

- **G97.41** - accidental puncture or laceration of dura during procedure
- **G97.48** - accidental puncture or laceration of other nervous system organ or structure during a nervous system procedure
- **G97.49** accidental puncture and laceration of other nervous system organ or structure complicating during other procedure

Coding Example 1: Neurosurgery is called to the OR to repair an incidental durotomy for the Orthopedics team during the same operative session.

The coding choices are:

1. 63707 - **repair not requiring laminectomy**
2. 63709 - **repair requiring laminectomy**

IMPORTANT: If the definitive procedure for the Orthopedics team includes a laminectomy and the incidental durotomy is repaired with a laminectomy at the same site and at the same level as the definitive procedure, then the neurosurgeon cannot report the repair with a laminectomy! The repair would be reported with **63707**. (Specifying that the durotomy was incidental to another procedure would allow the proper collaboration for accurate coding)

If the neurosurgeon is called in to perform an incidental dural repair by another specialty, the procedure is reportable but it may or may not get paid.

Coding Example 2: One week postop, a patient is taken back to OR for a dural repair using thrombin glue and/or suture(s). Correct CPT Coding: **63707-78**

Coding Example 3: Five days postop, a patient returns to the operating room for repair of CSF leak-dural rent goes above the lamina so laminectomy is required using thrombin glue and/or suture(s). Correct CPT Coding: **63709-78**

References: AMA/CPT -2016; AMA CPT Assistant June 2013; AAOS/ KZA: Managing Coding and Reimbursement Challenges for Orthopedics'; AANS/KZA: Managing Coding and Reimbursement Challenges for Neurosurgery