

NERVOUS SYSTEM

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I. CPT¹ PROCEDURE CODES

61000 - 61626, 61680 - 61860, 61863 - 62284, 62290 - 63048, 63055 - 64484, 64505 - 64560, 64565 - 64580, 64595, 64600 - 64650, 64680 - 64999, 95961, 95962, 95970 - 95975, 95978, 95979

II. DESCRIPTION

A. The nervous system consists of the central and peripheral nervous systems. The central is comprised of the brain and spinal cord and the peripheral includes all the other neural elements. The nervous system is the organ system which along with the endocrine system, correlates the adjustments and reactions of an organism to internal and environmental conditions.

B. Therapeutic embolization is a type of procedure that is commonly performed by interventional radiologist to occlude blood vessels. A microcatheter or balloon is threaded into a vein, or artery for the purposes of embolization, blocking a pathologic vascular channel.

C. Stereotactic implantation of depth electrodes is an invasive procedure in which needle-like electrodes are implanted through burr holes in the skull into the depths of specific brain areas to localize a seizure focus in patients who are candidates for surgery or to implant a brain stimulator in the thalamus to control tremors.

D. Psychosurgery is brain surgery directed at destroying normal and healthy brain tissue in order to relieve mental and psychic symptoms that other treatment modalities such as drug therapy and psychotherapy have been ineffectual in treating, for the purpose of changing or controlling behavior.

E. The Guglielmi Detachable Coil (GDC) is an extremely fine wire made from platinum, one of the softest metals, at the end of a longer stainless steel wire. In a controlled manner, the surgeon uses a micro-catheter to thread each coil through blood vessels to the aneurysm site. Application of a very-low-voltage electric current detaches and releases the coil into the aneurysm. Once in place, the GDC coils fill the aneurysm, isolating it from circulation to reduce the likelihood of rupture and hemorrhagic stroke. By applying a low voltage direct

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current to a stainless steel wire at the base of the coil, the platinum coil is detached. This applied current not only detaches the coil but also promotes electrothrombosis within the aneurysm.

III. POLICY

A. Services and supplies required in the diagnosis and treatment of illness or injury involving the nervous system are covered.

B. Therapeutic embolization (CPT² procedure code 61624) may be covered for the following indications. The list of indications is not all inclusive. Other indications are covered when documented by reliable evidence as safe, effective and comparable or superior to standard care (proven).

1. Cerebral Arteriovenous Malformations (AVMs).
2. Vein of Galen Aneurysm.
3. Inoperable or High-Risk Intracranial Aneurysms.
4. Dural Arteriovenous Fistulas.
5. Meningioma.

C. Implantation of depth electrodes is covered. Implantation of a U.S. Food and Drug Administration (FDA) approved vagus nerve stimulator as adjunctive therapy in reducing the frequency of seizures in adults and adolescents over 12 years of age, which are refractory to anti-epileptic medication is covered. Battery replacement is also covered.

D. Spinal cord and deep brain stimulation are covered in the treatment of chronic intractable pain. Coverage includes:

1. The accessories necessary for the effective functioning of the covered device.
2. Repair, adjustment, replacement and removal of the covered device and associated surgical costs.

E. The GDC may be cost-shared for embolizing unruptured intracranial aneurysms that, because of their morphology, their location, or the patient's general medical condition, are considered by the treating neurosurgical team to be:

1. Very high risk for management by traditional operative techniques; or
2. Inoperable; or

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3. For embolizing other vascular malformation such as AVMs and arteriovenous fistulae of the neurovasculature, to include arterial and venous embolizations in the peripheral vasculature.

F. Thoracic epidural steroid injections for the treatment of pain due to symptomatic thoracic disc herniations may be considered for cost-sharing when a patient meets all of the following criteria:

1. Pain is radicular; and
2. Pain is unresponsive to conservative treatment.

G. Non-pulsed Radiofrequency (RF) denervation (CPT³ procedure codes 64622, 64623, 64626, 64627) for the treatment of chronic cervical and lumbar facet pain is covered when the following criteria are met:

1. No prior spinal fusion surgery in the vertebral level being treated, and
2. Low back (lumbosacral) or neck (cervical) pain, suggestive of facet joint origin as evidenced by absence of nerve root compression as documented in the medical record on history, physical and radiographic evaluations; and the pain is not radicular, and
3. Pain has failed to respond to three months of conservative management which may consist of therapies such as nonsteroidal anti-inflammatory medications, acetaminophen, manipulation, physical therapy, and a home exercise program, and
4. A trial of controlled diagnostic medial branch blocks under fluoroscopic guidance has resulted in at least a 50% reduction in pain; and
5. If there has been a prior successful RF denervation, a minimum time of six months has elapsed since prior RF treatment (per side, per anatomical level of the spine).

IV. EXCLUSIONS

A. N-butyl-2-cyanoacrylate (Histacryl Bleu®), iodinated poppy seed oils (e.g., Ethiodol®), and absorbable gelatin sponges are not FDA approved.

B. Transcutaneous, percutaneous, functional dorsal column electrical stimulation in the treatment of multiple sclerosis or other motor function disorders is unproven.

C. Deep brain neurostimulation in the treatment of insomnia, depression, anxiety, and substance abuse is unproven.

D. Psychosurgery is not in accordance with accepted professional medical standards and is not covered.

E. Endovascular GDC treatment of wide-necked aneurysms and rupture is unproven.

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F. Cerebellar stimulators/pacemakers for the treatment of neurological disorders are unproven.

G. Dorsal Root Entry Zone (DREZ) thermocoagulation or microcoagulation neurosurgical procedure is unproven.

H. Extraoperative electrocortigraphy for stimulation and recording in order to determine electrical thresholds of neurons as an indicator of seizure focus is unproven.

I. Neuromuscular Electrical Stimulation (NMES) for the treatment of denervated muscles is unproven.

J. Stereotactic cingulotomy is unproven.

K. Sacral nerve neurostimulator (CPT⁴ procedure codes 64561, 64581, 64585, and 64590). See [Chapter 4, Section 14.1](#) for coverage policy for the urinary system and the Sacral Nerve Root Stimulation (SNS).

L. Laminoplasty, cervical with decompression of the spinal cord, two or more vertebral segments with reconstruction of the posterior bony elements (CPT⁴ procedure codes 63050 and 63051).

M. Balloon angioplasty, intracranial, percutaneous (CPT⁴ procedure code 61630) is unproven.

N. Transcatheter placement of intravascular stent(s) intracranial (e.g., atherosclerotic or venous sinus stenosis) including angioplasty, if performed (CPT⁴ procedure code 61635) is unproven.

O. Balloon dilation of intracranial vasospasm, initial vessel (CPT⁴ procedure code 61640) each additional vessel in same family (CPT⁴ procedure code 61641) or different vascular family (CPT⁴ procedure code 61642) is unproven.

P. Sphenopalatine ganglion block (CPT⁴ procedure code 64505) for the treatment of chronic migraine headaches and neck pain is unproven.

Q. **RF denervation** (CPT⁴ procedure codes 64626, 64627) for the treatment of **thoracic facet** pain is unproven. Pulsed **Radiofrequency Ablation (RFA)** for spinal pain is unproven.

R. Implantation of Occipital Nerve Stimulator for the treatment of chronic intractable migraine headache is unproven.

S. Cryoablation of Occipital Nerve (CPT⁴ procedure code 64640) for the treatment of chronic intractable headache is unproven.

T. Spinal cord and deep brain neurostimulation in the treatment of chronic intractable headache or migraine pain is unproven.

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U. Thermal Intradiscal Procedures (TIPs) (CPT⁵ procedure codes 22526, 22527, 62287, and Healthcare Common Procedure Coding System (HCPCS) code S2348) are unproven. TIPs are also known as: Intradiscal Electrothermal Annuloplasty (IEA), Intradiscal Electrothermal Therapy (IDET), Intradiscal Thermal Annuloplasty (IDTA), Percutaneous Intradiscal Radiofrequency Thermocoagulation (PIRFT), Coblation Percutaneous Disc Decompression, Nucleoplasty (also known as Percutaneous RF Thermomodulation or Percutaneous Plasma Discectomy), Radiofrequency Annuloplasty (RA), Intradiscal Biacuplasty (IDB), Percutaneous (or Plasma) Disc Decompression (PDD), Targeted Disc Decompression (TDD), Cervical Intradiscal RF Lesioning.

V. EFFECTIVE DATES

A. January 1, 1989, for PAVM.

B. April 1, 1994, for therapeutic embolization for treatment of meningioma.

C. July 14, 1997, for GDC.

D. The date of FDA approval of the embolization device for all other embolization procedures.

E. June 1, 2004, for Magnetoencephalography.

F. June 10, 2008, for thoracic epidural steroid injections.

G. January 1, 2009, for non-pulsed RF denervation for the treatment of chronic cervical and lumbar facet pain.

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