

CHAMPVA POLICY MANUAL

CHAPTER: 2
SECTION: 20.15
TITLE: STEREOTACTIC RADIOFREQUENCY THALAMOTOMY

AUTHORITY: 38 CFR 17.270(a) and 17.272(a)

RELATED AUTHORITY: 32 CFR 199.4(c)(2) and (c)(3)

TRICARE POLICY MANUAL: Chapter 3, Section 15.8

I. EFFECTIVE DATE

October 1, 1995

II. PROCEDURE CODE(S)

61720

III. DESCRIPTION

A. Thalamotomy with microelectrode mapping is a neurosurgical procedure involving precision placement of a destructive lesion within the thalamus for relief of Parkinsonian resting tremor, intention tremor, or dystonia. The patient is taken to radiology where a CT scan, MRI, and a ventriculogram are done. The CT compatible stereotactic headframe is applied to the patient's head under local anesthesia and mild sedation. The patient then undergoes stereotactic CT scanning to establish the approximate position of the subcortical target structures in reference to the stereotactic frame.

B. The MRI localization system creates reference marks on each image from which stereotactic coordinates are calculated. The precise position of the target structure is established by microelectrode recording and/or subcortical stimulation. The lateral ventricle is tapped stereotactically through a burr hole made 12 cm posterior to the nasion, 2.5 cm from the midline and a contrast ventriculogram is done. The anterior and posterior sites of union are identified. The approximate locations of the various thalamic subnuclei are determined. A small lesion is made within the ventrolateral thalamic nucleus, an area in the brain that contains tremor-generating circuits. The wound is closed and the patient is removed from the stereotactic frame.

IV. DEFINITIONS

A. Dystonias are movement disorders in which sustained muscle contractions cause twisting and repetitive movements or abnormal postures. The movements, which are involuntary and sometimes painful, may affect a single muscle; a group of muscles such as those in the arms, legs, neck, or the entire body. There are three types of dystonia: idiopathic torsion, focal, and tardive. Symptoms for each may include:

1. Idiopathic torsion begins in childhood usually associated with a birth injury (particularly due to lack of oxygen).
2. Focal dystonia, such as writers cramp, blepharospasms, spasmodic torticollis, oro-facial-mandibular dystonia and spasmodic dysphonia affecting one area of the body is more common in adult-onset dystonia.
3. Tardive dystonia can be secondary to reactions to certain drugs, heavy-metal or carbon monoxide poisoning.

B. Tremor is a neurological disorder manifested by rhythmic oscillation of the hands, head, legs, trunk, or voice. The common causes of tremor are essential tremor and Parkinson's disease.

1. Tremor without other neurological signs and symptoms is called essential tremor. Essential hand tremor is typically absent at rest and becomes apparent during sustained posture or activity. Essential tremor can affect persons at any age, gender and race, and in the vast majority of cases, it is inherited.
2. Parkinsonian tremor is present at rest but becomes less apparent during activity. Parkinsonian tremor affects the limbs or chin but not the head or voice.

V. POLICY

A. CHAMPVA may cost share unilateral thalamotomy with microelectrode mapping for destructive lesion in the globus pallidus to treat disabling tremor from either Parkinson's Disease, intention tremor or dystonia, when patients are no longer receptive to other treatments.

B. Indications for a thalamotomy are as follows:

1. Intention tremor:
 - a. Multiple sclerosis
 - b. Post-traumatic
 - c. Familial (essential)
 - d. Post cerebrovascular accident (stroke)

2. Dystonia of arm or leg (also known as focal dystonia)
3. Dystonia musculorum deformans
4. Post-traumatic dystonia
5. Parkinsonism resting tremor

VI. POLICY CONSIDERATIONS

Coverage is provided for:

1. Thalamotomy performed to relieve hypertonic tremor and akinetic rigidity (often seen in Parkinson's disease and stroke patients), and
2. Thalamotomy in young patients with a long history of progressively worsening unilateral tremor and without rigidity or bradykinesia.

VII. EXCLUSIONS

- A. Muscle resection for parkinsonian tremor, intention tremor, or dystonia. [38 CFR 17.272(a)(14)].
- B. Rhizotomy (cutting or interrupting the roots of spinal nerves within the spinal canal) for parkinsonian tremor, intention tremor, or dystonia.
- C. Selective peripheral denervation for parkinsonian tremor, intention tremor, or dystonia.
- D. Fetal tissue transplants for parkinsonian tremor, intention tremor, or dystonia.
- E. For thalamotomy when any of the following are present:
 1. dementia, memory or thought disturbance,
 2. poorly controlled high blood pressure,
 3. gait disturbance, or
 4. significant speech problems.

END OF POLICY