Medical Policy
Stereotactic Radiofrequency Pallidotomy for the Treatment of Parkinsons Disease

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Policy Number: 626
BCBSA Reference Number: 7.01.16A
NCD/LCD: NA

Related Policies
None

Policy
Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity Medicare HMO BlueSM and Medicare PPO BlueSM Members

Stereotactic radiofrequency unilateral pallidotomy may be MEDICALLY NECESSARY for patients who must meet ALL of the following selection criteria:
• The patient has a diagnosis of idiopathic Parkinson’s disease, AND
• The patient’s disease was previously responsive to levodopa therapy but is now medically intractable, AND
• The patient has severe levodopa-induced dyskinesia or disease characterized particularly by severe bradykinesia, rigidity, tremor, dystonia, or by marked “on-off” fluctuations, AND
• The patient does not have evidence of dementia, AND
• The patient is fully informed of the risks and benefits of the surgery, including the specific mortality and morbidity experience of the center at which the procedure is to be performed.

Stereotactic radiofrequency unilateral pallidotomy is NOT MEDICALLY NECESSARY for:
• elderly or severely debilitated patients,
• patients who have significant cognitive deficits or
• patients who have medical conditions that would increase their risk of intracerebral hemorrhage.

Stereotactic bilateral radiofrequency pallidotomy is INVESTIGATIONAL.

Prior Authorization Information
Inpatient
For services described in this policy, precertification/preauthorization **IS REQUIRED** for all products if the procedure is performed **inpatient**.

**Outpatient**

For services described in this policy, see below for products where prior authorization **might be required** if the procedure is performed **outpatient**.

<table>
<thead>
<tr>
<th>Outpatient</th>
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<tbody>
<tr>
<td>Commercial Managed Care (HMO and POS)</td>
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<tr>
<td>Commercial PPO and Indemnity</td>
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<td>Medicare HMO Blue^SM</td>
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<td>Medicare PPO Blue^SM</td>
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**CPT Codes / HCPCS Codes / ICD Codes**

Inclusion or exclusion of a code does not constitute or imply member coverage or provider reimbursement. Please refer to the member’s contract benefits in effect at the time of service to determine coverage or non-coverage as it applies to an individual member.

Providers should report all services using the most up-to-date industry-standard procedure, revenue, and diagnosis codes, including modifiers where applicable.

**CPT Codes**

<table>
<thead>
<tr>
<th>CPT codes:</th>
<th>Code Description</th>
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<tr>
<td>61720</td>
<td>Creation of lesion by stereotactic method, including burr hole(s) and localizing and recording techniques, single or multiple stages; globus pallidus or thalamus</td>
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**Description**

Parkinson's disease is a degenerative disease that includes symptoms of resting tremor, rigidity, and bradykinesia. The condition usually appears after age 40 and progresses slowly over many years. Drug treatment with levodopa can usually restore smooth motor function for up to 5–10 years after onset of Parkinson's disease by permitting surviving dopaminergic cells to bypass a rate-limiting enzyme, tyrosine hydroxylase, and thus produce enough dopamine to maintain adequate motor function. Eventually, more dopaminergic cells die, leading to progressive disability.

Stereotactic radiofrequency pallidotomy is an ablative procedure during which a radiofrequency electrode is used to create thermal lesions within an anatomically and physiologically defined region of the globus pallidus. Pallidotomy is used to relieve the symptoms of Parkinson's disease. Pallidotomy may be performed in two ways: using stereotactic techniques and monopolar electrode stimulation for identification of the target region; and using electrophysiologic microelectrode mapping of the target region in addition to stereotactic methods. The difference in performing pallidotomy with or without microelectrode mapping is in how the target in the posteroventral globus pallidus is identified.

**Summary**

Results of small randomized trials and cohort studies have reported that unilateral stereotactic radiofrequency pallidotomy with microelectrode mapping is a relatively safe and effective method of managing symptoms of advanced Parkinson's disease refractory to pharmacological management. These studies have demonstrated that this procedure may be medically necessary in these situations.

Although there was initial interest in bilateral stereotactic radiofrequency pallidotomy, this procedure has been abandoned due to severe motor and psychiatric complications. Bilateral pallidotomy is also associated with a higher incidence of neurologic adverse effects, particularly speech complications. For these reasons it is considered investigational.

**Policy History**

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Information Pertaining to All Blue Cross Blue Shield Medical Policies
Click on any of the following terms to access the relevant information:
Medical Policy Terms of Use
Managed Care Guidelines
Indemnity/PPO Guidelines
Clinical Exception Process
Medical Technology Assessment Guidelines

References
1. 1996 TEC Assessment: Tab 18