Medical Policy

Anesthetics for the Treatment of Chronic Pain and Major Depressive Disorder (MDD)

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Policy Number: 291
BCBSA Reference Number: 5.01.16
NCD/LCD: N/A

Related Policies
- Repetitive transcranial magnetic stimulation (rTMS), (#297)
- Outpatient Electroconvulsive Therapy (ECT), (#319)

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

Intravenous infusion of anesthetics (eg, ketamine or lidocaine) for the treatment of chronic pain, including, but not limited to chronic neuropathic pain, chronic daily headache, and fibromyalgia, is INVESTIGATIONAL.

Inhaled, oral or intravenous ketamine for the treatment of major depressive disorder (MDD) including treatment resistant depression (TRD) 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>Commercial Managed Care (HMO and POS)</th>
<th>Outpatient</th>
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<tr>
<td>This is not a covered service.</td>
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<tr>
<th>Commercial PPO and Indemnity</th>
<th>Outpatient</th>
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<th>Medicare HMO BlueSM</th>
<th>Outpatient</th>
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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.

The following codes are included below for informational purposes only; this is not an all-inclusive list.

According to the policy statement above, the following HCPCS code considered investigational for the conditions listed for Commercial Members: Managed Care (HMO and POS), PPO, Indemnity, Medicare HMO Blue and Medicare PPO Blue:

HCPCS Codes

<table>
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<tr>
<th>HCPCS codes</th>
<th>Code Description</th>
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<tr>
<td>J2001</td>
<td>Injection, lidocaine hydrochloride for intravenous infusion, 10 mg</td>
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Description

CHRONIC PAIN

Neuropathic pain is often disproportionate to the extent of the primary triggering injury and may consist of thermal or mechanical allodynia, dysesthesia, and/or hyperalgesia. Allodynia is pain that occurs from a stimulus that normally does not elicit a painful response (e.g., light touch, warmth). Dysesthesia is a constant or ongoing unpleasant or electrical sensation of pain. Hyperalgesia is an exaggerated response to normally painful stimuli. In the latter, symptoms may continue for a period of time that is longer (e.g., ≥6 months) than clinically expected after an illness or injury. It is proposed that chronic neuropathic pain results from peripheral afferent sensitization, neurogenic inflammation, and sympathetic afferent coupling, along with sensitization and functional reorganization of the somatosensory, motor, and autonomic circuits in the central nervous system (CNS). Therefore, treatments focus on reducing activity and desensitizing pain pathways, thought to be mediated through N-methyl-D-aspartate (NMDA) receptors in the peripheral and CNS. Sympathetic ganglion blocks with lidocaine have been used for a number of years to treat sympathetically maintained chronic pain conditions, such as CRPS (previously known as reflex sympathetic dystrophy). Test infusion of an anesthetic has also been used in treatment planning to assess patient responsiveness to determine whether medications, such as oral mexiletine or oral ketamine, may be effective. A course of IV lidocaine or ketamine, usually at subanesthetic doses, has also been examined. This approach for treating chronic neuropathic pain differs from continuous subcutaneous or IV infusion of anesthetics for the management of chronic pain conditions, such as terminal cancer pain, which are not discussed in this policy.

Chronic daily headache is defined as a headache disorder that occurs more than 15 days a month for at least 3 months. Chronic daily headache includes chronic migraine, new daily persistent headache, hemicranias continua, and chronic tension-type headache.

Courses of IV anesthetic agents may be given in the inpatient or outpatient setting as part of a pain management program, with the infusion of a subanesthetic dose preceded by a bolus infusion to achieve desired blood levels sooner. Lidocaine, which prevents neural depolarization through effects on voltage-dependent sodium channels, is also used systemically for the treatment of arrhythmias. Adverse effects (AEs) for lidocaine are common, can be mild to moderate, and include general fatigue, somnolence, dizziness, headache, periorbital and extremity numbness and tingling, nausea, vomiting, tremors, and changes in blood pressure and pulse. Severe adverse effects may include arrhythmias, seizures, loss of consciousness, confusion, or even death. Lidocaine should only be given intravenously to patients with
normal conduction on electrocardiography and normal serum electrolyte concentrations to minimize the risk of cardiac arrhythmias.

Ketamine is an antagonist of the NMDA receptor and a dissociative anesthetic. It is the sole anesthetic agent approved for diagnostic and surgical procedures that do not require skeletal muscle relaxation. Respiratory depression may occur with overdosage or too rapid a rate of administration of ketamine; it should be used by or under the direction of physicians experienced in administering general anesthetics. Ketamine is a schedule III controlled substance. Psychological manifestations vary in severity from pleasant dream-like states to hallucinations and delirium and can be accompanied by confusion, excitement, aggression, or irrational behavior. The occurrence of AEs with IV anesthetics may be reduced by the careful titration of subanesthetic doses. However, the potential benefits of pain control must be carefully weighed against the potential for serious, harmful AEs.

DEPRESSION

Inhaled, oral and intravenous infusion of Ketamine has been studied as a rapid release antidepressant for individuals with major depressive disorder (MDD). Conservative forms of treatment for MDD include antidepressant use which can take weeks or months to produce changes in symptoms. Ketamine differs from antidepressant medications in that it targets neuronal activity by blocking the biochemical receptor glutamate, producing an immediate reduction in depressive symptoms.

Summary

Chronic Pain

Intravenous (IV) infusion of lidocaine or ketamine has been investigated for the treatment of migraine and chronic daily headache, fibromyalgia, and chronic neuropathic pain. Chronic neuropathic pain disorders include phantom limb pain, postherpetic neuralgia, complex regional pain syndromes (CRPSs), diabetic neuropathy, and pain related to stroke or spinal cord injuries. For this application, 1 or more courses of IV infusion would be administered over a period of several hours or several days.

Intractable pain presents a great challenge to patients and their healthcare providers. Recent evidence, primarily from outside of the United States, suggests that IV courses of ketamine may provide at least temporary relief to some chronic pain patients. However, the intense treatment protocols, severity of adverse effects, and limited durability raises questions about the overall health benefit of this procedure. Additional clinical trials are needed to evaluate the long-term safety of repeat courses of IV anesthetics. Therefore, this treatment is considered investigational.

Depression

The evidence for ketamine use in MDD includes randomized controlled trials and multiple case series evaluating depression rating scores before and after treatment, quality of life measures, administration guidelines and appropriate dosing recommendations. Different methods of administration have been studied for ketamine treatment in MDD including inhaled, oral and intravenous infusion (IV). In most cases, patients were given a dose of IV ketamine in an office setting under the care of a licensed psychiatrist every 3 to 4 weeks. Patients reported reduction in symptoms lasting a period of 3 or 4 weeks when given intravenous infusion. A percentage of patients experienced side effects including mania, confusion, hallucinations, excitement, and aggressive behavior. Study limitations include small sample sizes, inconsistent study design, lack of placebo comparator and lack of randomization. Results were inconsistent across studies.

While studies have shown that ketamine can produce immediate changes in depressive symptoms for patients with MDD, longer term data documenting safety and efficacy is needed to permit conclusions about the medical necessity of this treatment. Appropriate dosing guidelines, patient selection criteria and appropriate administration of this drug are also needed to prove safety and efficacy. Therefore, this treatment is considered investigational.
**Policy History**

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<td>6/2014</td>
<td>Updated Coding section with ICD10 procedure and diagnosis codes, effective 10/2015.</td>
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<tr>
<td>12/2013</td>
<td>New references from BCBSA National medical policy.</td>
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<tr>
<td>12/3/2010</td>
<td>New policy effective 12/02/1020 describing ongoing non-coverage.</td>
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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**

**Treatment of Chronic Pain**


Treatment of Depression

Endnotes

1 Based on expert opinion