MASSACHUSETTS

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Medical Policy

Alcohol Injections for Treatment of Peripheral Morton Neuromas

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Policy Number: 642

BCBSA Reference Number: 2.01.97 (For Plan internal use only)

NCD/LCD: N/A

Related Policies

Ablation Procedures for Peripheral Neuromas #719

Policy

Commercial Members: Managed Care (HMO and POS), PPO, and Indemnity Medicare HMO Blue℠ and Medicare PPO Blue℠ Members

Alcohol injections are considered **INVESTIGATIONAL** for treatment of Morton neuroma.

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**.

	Outpatient
Commercial Managed Care (HMO and POS)	This is **not** a covered service.
Commercial PPO and Indemnity	This is **not** a covered service.
Medicare HMO Blue℠	This is **not** a covered service.
Medicare PPO Blue℠	This is **not** a covered service.

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 CPT code is considered investigational for the condition listed for Commercial Members: Managed Care (HMO and POS), PPO, Indemnity, Medicare HMO Blue and Medicare PPO Blue:

CPT Codes

CPT codes:	Code Description
64632	Destruction by neurolytic agent, plantar common digital nerve

Description

Neuroma

A neuroma is a growth or tumor consisting of nerve tissue that develops as part of a normal reparative process following nerve injury. The injury may be due to chronic irritation, pressure, stretch, poor repair of nerve lesions or previous neuromas, laceration, crush injury, or blunt trauma.[1] Neuromas typically appear 6 to 10 weeks after trauma, with most presenting within 1 to 12 months after injury or surgery. They may gradually enlarge over 2 to 3 years and may or may not be painful. Pain from a neuroma may be secondary to traction on the nerve by scar tissue, compression of the sensitive nerve endings by adjacent soft tissues, ischemia of the nervous tissue, or ectopic foci of ion channels that elicit neuropathic pain. Patients may describe the pain as low-intensity dull pain or intense paroxysmal burning pain, often triggered by external stimuli such as touch or temperature. Neuroma formation has been implicated as a contributor of neuropathic pain in residual limb pain, postthoracotomy, postmastectomy, and postherniorrhaphy pain syndromes. They may coexist with phantom pain or can predispose to it.

Morton Neuroma

Morton neuroma is a common and painful compression neuropathy of the common digital nerve of the foot that may also be referred to as interdigital neuroma, interdigital neuritis, or Morton metatarsalgia.[1,2,3] It is histologically characterized by perineural fibrosis, endoneurial edema, axonal degeneration, and local vascular proliferation. Thus, some investigators do not consider Morton neuroma to be a true neuroma; instead, they consider it to be an entrapment neuropathy occurring secondary to compression of the common digital nerve under the overlying transverse metatarsal ligament. The incidence and prevalence of Morton neuroma are not clear, but it appears 10-fold more often in women than in men, with an average age at presentation of around 50 years.[4]

The pain associated with Morton neuroma is usually throbbing, burning, or shooting, localized to the plantar aspect of the foot. It is typically located between the 3rd and 4th metatarsal heads, although it may appear in other proximal locations.[1,2] The pain may radiate to the toes and can be associated with paresthesia. The pain can be severe, and the condition may become debilitating to the extent that patients are apprehensive about walking or touching their foot to the ground. It is aggravated by walking in shoes with a narrow toe box or high heels that cause excessive pronation and excessive forefoot pressure; removal of tight shoes typically relieves the pain.

Diagnosis

Although a host of imaging methods are used to diagnosis Morton neuroma, including plain radiographs, magnetic resonance imaging, and ultrasonography, objective findings are unique to this condition and are primarily used to establish a clinical diagnosis.[1] Thus, a patient's toes often show splaying or divergence. Patients may describe the feeling of a "lump" on the foot bottom or a feeling of walking on a rolled-up or wrinkled sock. Clinical examination with medial and lateral compression may reproduce the painful symptoms with a palpable "click" on interspace compression (Mulder sign).[5]

Treatment

Management of patients diagnosed with Morton neuroma typically starts with conservative approaches, such as the use of metatarsal pads in shoes and orthotic devices that alter supination and pronation of the affected foot.[3] These approaches are aimed at reducing pressure and irritation of the affected nerve. They may provide relief, but they do not alter the underlying pathology. There is little evidence supporting the effectiveness or comparative effectiveness of these practices.[2,6,7] In a case series, Bennett et al (1995) evaluated a 3-stage protocol of private practice patients (N=115) who advanced from stage I (education plus footwear modifications, and a metatarsal pad) to stage II (steroid injections with local anesthetic or local anesthetic alone) and into stage III (surgical resection) if treated while in stages I and II did not bring relief within 3 months.[6] Overall, 97 (85%) of 115 patients believed that pain had been reduced with the treatment program. However, twenty-four (21%) patients eventually required surgical excision of the nerve and 23 (96%) of those had satisfactory results.

Ablation Techniques
Alternative approaches to treat refractory Morton neuroma include minimally invasive procedures aimed at in situ destruction, including intralesional alcohol injections.[2] Dehydrated ethanol has been shown to inhibit nerve function in vitro, has high affinity for nerve tissue, and causes direct damage to nerve cells via dehydration, cell necrosis, and precipitation of protoplasm, leading to neuritis and a pattern of Wallerian degeneration. Technically, ethanol is a sclerosant that causes chemical neurolysis of the nerve pathology but is considered an ablative procedure for this evidence review. The use of ultrasound guidance during this procedure has been shown to increase surgical accuracy, improve outcomes, and shorten procedure duration.

Summary
Morton neuroma is a common and painful compression neuropathy of the dorsal foot that is also referred to as intermetatarsal neuroma, interdigital neuroma, interdigital neuritis, and Morton metatarsalgia. Morton neuroma is usually treated with conservative measures, surgery, or minimally invasive procedures. Alcohol injection is a minimally invasive alternative to open surgery to treat Morton neuroma. Alcohol causes chemical neurolysis through dehydration, necrosis, and precipitation of the treated area, ultimately destroying the lesion after multiple injections.

Summary of Evidence: For individuals who have Morton neuroma who receive intralesional alcohol injection(s), the evidence includes retrospective case series. Relevant outcomes are symptoms, resource utilization, and treatment-related morbidity. The body of evidence is limited, consisting of case series reporting on the treatment response of patients with refractory Morton neuroma. The available series have generally reported that some patients experience pain relief and express satisfaction with the procedure. Some evidence has suggested that surgery after failed cases of alcohol injections is more complex and challenging than in untreated patients due to the presence of fibrosis. There is a lack of controlled trials comparing alcohol injections with alternative therapies, and there are no controlled studies comparing outcomes for alcohol injections with those for surgery in surgical candidates. The evidence is insufficient to determine that the technology results in an improvement in the net health outcome.

Policy History
Date	Action
8/2021	Annual policy review. Description, summary, and references updated. Policy statements unchanged.
8/2020	Annual policy review. Description, summary, and references updated. Policy statements unchanged.
8/2019	Annual policy review. Title changed to Alcohol Injections for Treatment of Peripheral Morton Neuromas. Policy statement unchanged.
7/2018	Annual policy review. Description, summary, and references updated. Policy statements unchanged.
7/2017	Annual policy review. New references added.
7/2016	Annual policy review. New references added.
9/2015	New medical policy describing investigational indications. Effective 9/1/2015.

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. Rajput K, Reddy S, Shankar H. Painful neuromas. Clin J Pain. Sep 2012; 28(7): 639-45. PMID 22699131
2. Jain S, Mannan K. The diagnosis and management of Morton's neuroma: a literature review. Foot Ankle Spec. Aug 2013; 6(4): 307-17. PMID 23811947
3. Thomas JL, Blitch EL, Chaney DM, et al. Diagnosis and treatment of forefoot disorders. Section 3. Morton's intermetatarsal neuroma. J Foot Ankle Surg. Mar-Apr 2009; 48(2): 251-6. PMID 19232980
4. Wu KK. Morton's interdigital neuroma: a clinical review of its etiology, treatment, and results. J Foot Ankle Surg. Mar-Apr 1996; 35(2): 112-9; discussion 187-8. PMID 8722878
5. MULDER JD. The causative mechanism in morton's metatarsalgia. J Bone Joint Surg Br. Feb 1951; 33-B(1): 94-5. PMID 14814167
6. Bennett GL, Graham CE, Mauldin DM. Morton's interdigital neuroma: a comprehensive treatment protocol. Foot Ankle Int. Dec 1995; 16(12): 760-3. PMID 8749346
7. Pasquali C, Vulcano E, Novario R, et al. Ultrasound-guided alcohol injection for Morton's neuroma. Foot Ankle Int. Jan 2015; 36(1): 55-9. PMID 25367249
8. Perini L, Perini C, Tagliapietra M, et al. Percutaneous alcohol injection under sonographic guidance in Morton's neuroma: follow-up in 220 treated lesions. Radiol Med. Jul 2016; 121(7): 597-604. PMID 26883232
9. Musson RE, Sawhney JS, Lamb L, et al. Ultrasound guided alcohol ablation of Morton's neuroma. Foot Ankle Int. Mar 2012; 33(3): 196-201. PMID 22734280
10. Hughes RJ, Ali K, Jones H, et al. Treatment of Morton's neuroma with alcohol injection under sonographic guidance: follow-up of 101 cases. AJR Am J Roentgenol. Jun 2007; 188(6): 1535-9. PMID 17515373
11. Fanucci E, Masala S, Fabiano S, et al. Treatment of intermetatarsal Morton's neuroma with alcohol injection under US guide: 10-month follow-up. Eur Radiol. Mar 2004; 14(3): 514-8. PMID 14531002
12. Morgan P, Monaghan W, Richards S. A systematic review of ultrasound-guided and non-ultrasound-guided therapeutic injections to treat Morton's neuroma. J Am Podiatr Med Assoc. Jul 2014; 104(4): 337-48. PMID 25076076
13. Dockery GL. The treatment of intermetatarsal neuromas with 4% alcohol sclerosing injections. J Foot Ankle Surg. Nov-Dec 1999; 38(6): 403-8. PMID 10614611
14. The Association of Extremity Nerve Surgeons Clinical Practice Guidelines, v. 2.0. 2020. Available at: https://www.aens.us/images/aens/AENS%20CPG%20-%202.0%20-%20FINAL.pdf. Accessed May 27, 2021.