Anthem

Clinical UM Guideline

Subject: Cervical Traction Devices for Home Use
Guideline #: CG-DME-05
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Description

This document addresses the different devices used in the home for cervical traction, including “over-the-door” and pneumatic devices.

Intermittent cervical traction is an accepted technology for treatment of a variety of musculoskeletal disorders of the neck, including but not limited to neck muscle spasm (such as whiplash), radiculopathy, discogenic pain and degenerative changes.

Clinical Indications

Medically Necessary:

An “over the door” home cervical traction device is considered **medically necessary** provided **both** of the criteria below are met:

- The individual has a musculoskeletal or neurologic impairment requiring traction equipment;**and**
- The appropriate use of a home cervical traction device has been demonstrated to the individual and that individual is able to tolerate the selected device.

Not Medically Necessary:

Other designs of home cervical traction units, including but not limited to, pneumatic devices, frames attached to headboards, or freestanding units are considered **not medically necessary.**

Coding

The following codes for treatments and procedures applicable to this document are included below for informational purposes. Inclusion or exclusion of a procedure, diagnosis or device code(s) does not constitute or imply member coverage or provider reimbursement policy. Please refer to the member's contract benefits in effect at the time of service to determine coverage or non-coverage of these services as it applies to an individual member.

When services may be Medically Necessary when criteria are met:

HCPCS	
E0860	Traction equipment, over door, cervical

ICD-10 Diagnosis	
	All diagnoses

When services are Not Medically Necessary:
For the procedure code listed above when criteria are not met.

When services are also Not Medically Necessary:
For the following procedure codes; or when the code describes a procedure designated in the Clinical Indications section as not medically necessary.

HCPCS	
E0840	Traction frame, attached to headboard, cervical traction
E0849	Traction equipment, cervical, free-standing stand/frame, pneumatic, applying traction force to other than mandible
E0850	Traction stand, free-standing, cervical traction
E0855	Cervical traction equipment not requiring additional stand or frame
E0856	Cervical traction device, with inflatable air bladder(s)

ICD-10 Diagnosis	
	All diagnoses

Discussion/General Information

Neck pain is a common occurrence that affects many people during their lifetime. The American College of Rheumatology (ACR, 2015) noted that on an annual basis, approximately 30% of the population experiences an occurrence of neck pain. Typically, neck pain is acute and improves within 1 to 2 weeks with conservative treatments, which may include heat, ice, massage, stretching and pain relievers. The majority of neck pain resolves within 8 to 12 weeks (ACR, 2015; van der Heijden, 1995). However, almost half of individuals with neck pain will have residual pain or experience frequent reoccurrences (Cohen, 2015).

Traction is a treatment modality in which opposite forces are applied to separate parts of the body to stretch soft tissues, and/or separate bony structures. It has been proposed that cervical traction results in an expansion of the intervertebral spaces, an increase in joint mobility, and stretching of muscles and ligaments adjacent to the vertebral bodies, potentially improving the clinical outcomes in those with neck pain. After 2 minutes of sustained traction, the intervertebral spaces begin to widen. Forces between 20 and 50 pounds are frequently used to achieve intervertebral separation. Continuous or static traction can be applied in a steady amount for specific time periods. Intermittent or cyclical traction involves traction being applied and released multiple times during one treatment session. Duration of cervical traction can range from a few minutes to 20 to 30 minutes, once or twice weekly to multiple times per day. In addition to office-based traction, individuals with long-standing pain may benefit from home-based traction.

A variety of cervical traction devices are available for use in the home. The most commonly used device employs an over the door

design, in which an individual wears a chin strap harness attached to a counterweight that is suspended over a door using a pulley system. The counterweight pulls the chin harness upwards, extending the neck. Over-the-door units are designed to deliver no more than 20 pounds of tension. Variations of this device using the counterweight and pulley system include frames which attach to a headboard or freestanding units.

Pneumatic devices are designed to be used in the supine position with the device beneath the head and shoulders and a strap or straps holding the head in place. User controlled pumps or bellows allow the individual to increase the tension, pulling the head away from the body. This extends the neck, stretches the affected muscles and increases the intervertebral spaces. Pneumatic devices typically can deliver up to 50 pounds of tension.

When used with other standard modalities, traction may result in greater improvements in mobility and pain compared to standard therapy alone (van der Heijden, 1995; Zylbergold, 1985). While the quality of existing evidence is low, involving small studies with limited follow-up and generally inconclusive results, the totality of data is generally supportive (Graham, 2006; Graham; 2008; Young, 2009). The use of “over the door” home cervical traction devices is a generally accepted modality for the treatment of musculoskeletal or neurologic impairment requiring traction equipment.

In a meta-analysis of seven randomized controlled trials (RCTs), Yang and associates (2017) evaluated the effectiveness of intermittent cervical traction (ICT) in relieving neck pain. A total of seven RCTs (n=402) were included in the analysis. The ICT groups reported lower pain scores immediately following the treatment course, there was no difference at the final follow-up (standard mean differences [SMD]=-0.57; 95% confidence interval [CI], -1.46 to 0.32; I^2=83%). The authors concluded that ICT might result in short-term neck pain.

In an RCT, Fritz and colleagues (2014) evaluated the effectiveness of cervical traction in the treatment of cervical radiculopathy. A total of 86 adults with a primary complaint of neck pain with pain or numbness were randomized to one of three treatment groups: exercise, exercise and mechanical traction in the clinical setting or exercise with a home over-door traction device. Median symptom duration was 53 days with 33 (38.4%) individuals reporting presence of symptoms greater than 6 weeks and 11 (12.8%) reporting the presence of symptoms for greater than 1 year. Participants received 10 physical therapy sessions over 4 weeks, with follow-up assessments completed at 4 weeks, 6 months and 12 months by a researcher blinded to the individual treatment groups. All participants were given the same exercise regimen. Intention-to-treat analyses for the primary outcome (neck disability index [NDI] score) at 6 months showed lower scores in mechanical traction compared to exercise group only (mean difference 13.3; 95% CI: 5.6, 21.0; p=0.001) and over-door traction group (mean difference 8.1; 95% CI: 0.8, 15.3; p=0.031). At 12 months, lower NDI scores persisted in the mechanical traction verses exercise group (mean difference 9.8; 95% CI: 0.2, 19.4; p=0.046). Mechanical traction showed lower neck pain intensity scores compared to the exercise only group at 6 months (mean difference 1.9; 95% CI: 0.7, 3.2; p=0.003) and the over-the-door traction group (mean difference 1.2; 95% CI: 2.4, 0.03; p=0.045). At 6 months, arm pain scores were lower for the over-the-door group compared to the exercise only group (mean difference 2.2; 95% CI: 0.8, 3.7; p=0.004). There were no differences in arm pain between groups at 12 months. Individuals reporting a successful outcome based on a global rating score were 53 (61.6%) at 4 weeks, 32 (37.2%) at 6 months and 35 (40.7%) at 12 months. These results generally favored the traction groups as compared to exercise only group; however, they were not statistically significant at any of the follow-up. The authors noted that the addition of cervical traction to a standard exercise program resulted in lower NDI and pain intensity scores in individuals with cervical radiculopathy, particularly in those individuals who received mechanical traction in the office setting. However, results showed additional benefit in the over-door traction group over the exercise only group as well, especially in those who were comfortable with the device.

Pneumatic devices are able to provide more pounds of tension, or force, versus the over-the-door traction devices. However, there is also a lack of consensus in the published literature regarding optimum and safe tension amounts, duration and frequency of traction. Currently there is a paucity of evidence to show that pneumatic devices provide additional clinical benefit over the standard over-door traction devices.

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Index

The use of specific product names is illustrative only. It is not intended to be a recommendation of one product over another, and is not intended to represent a complete listing of all products available.

History

Status	Date	Action
Reviewed	05/11/2023	Medical Policy & Technology Assessment Committee (MPTAC) review. Updated Discussion, References and Index sections.
Reviewed	05/12/2022	MPTAC review. Updated Discussion and References sections.
Reviewed	05/13/2021	MPTAC review. Updated Discussion and References sections. Reformatted Coding section.
Reviewed	05/14/2020	MPTAC review. Updated References and Websites sections.
Reviewed	06/06/2019	MPTAC review. Updated References and Websites sections.
Reviewed	07/26/2018	MPTAC review. Updated Discussion, References and Website sections.
	05/02/2018	The document header wording updated from “Current Effective Date” to “Publish Date.”
Reviewed	08/03/2017	MPTAC review. Updated Discussion, References and Website sections.
Revised	08/04/2016	MPTAC review. Revision to Clinical Indications criteria from “he/she” to “that individual”. Updated Rationale, References and Website sections. Updated formatting in Clinical Indications section. Removed ICD-9 codes from Coding section.
Reviewed	08/06/2015	MPTAC review. Updated Rationale, References and Website sections.
	01/01/2015	Updated Coding section with 01/01/2015 HCPCS change to descriptor for E0856.
Reviewed	08/14/2014	MPTAC review. Updated References and Website sections.
Reviewed	08/08/2013	MPTAC review. Updated References, Discussion and Website sections.
Reviewed	08/09/2012	MPTAC review. Updated References, Discussion and Website sections.
Reviewed	08/18/2011	MPTAC review. Updated References, Coding, Discussion and Website sections.
Reviewed	08/19/2010	MPTAC review. Updated References, Discussion and Website sections.
Reviewed	08/27/2009	MPTAC review. Updated References and Discussion. Removed Place of Service Section.
Reviewed	08/28/2008	MPTAC review. Updated References and Discussion.
Reviewed	01/01/2008	Updated coding section with 01/01/2008 HCPCS changes.
Reviewed	08/23/2007	MPTAC review. Description and References updated.
Reviewed	09/14/2006	MPTAC review. References updated. Coding updated; removed HCPCS K0627 deleted 12/31/04.
	11/17/2005	Added reference for Centers for Medicare and Medicaid Services (CMS) – National Coverage Determination (NCD).
Revised	09/22/2005	MPTAC review. Revision based on Pre-merger Anthem and Pre-merger WellPoint Harmonization.

Pre-Merger Organizations	Last Review Date	Document Number	Title
Anthem BCBS West Region	09/22/2004	DME.215	Cervical Traction Devices

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