HOME TRACTION THERAPY

Policy Number: REHAB 016.23 T2 **Effective Date**: December 1, 2018

Instructions for Use

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Related Policies

- Electrical Stimulation for the Treatment of Pain and Muscle Rehabilitation
- Mechanical Stretching Devices
- Motorized Spinal Traction

APPLICABLE LINES OF BUSINESS/PRODUCTS

This policy applies to Oxford Commercial plan membership.

NON-COVERAGE RATIONALE

Home traction therapy is unproven and not medically necessary for treating low back and neck disorders with or without radiculopathy due to insufficient evidence of efficacy.

APPLICABLE CODES

The following list(s) of procedure and/or diagnosis codes is provided for reference purposes only and may not be all inclusive. Listing of a code in this policy does not imply that the service described by the code is a covered or non-covered health service. Benefit coverage for health services is determined by the member specific benefit plan document and applicable laws that may require coverage for a specific service. The inclusion of a code does not imply any right to reimbursement or guarantee claim payment. Other Policies may apply.

HCPCS Code	Description
E0830	Ambulatory traction device, all types, each
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, freestanding, cervical traction
E0855	Cervical traction equipment not requiring additional stand or frame
E0856	Cervical traction device, with inflatable air bladder(s)
E0860	Traction equipment, overdoor, cervical
E0941	Gravity assisted traction device, any type

DESCRIPTION OF SERVICES

Traction is the act of drawing or pulling and relates to forces applied to the body to stretch a given part or to separate 2 or more parts. Traction is intended for individuals with musculoskeletal or neurological impairments of the spine; the objective is to relieve pain, relax muscle spasms, and decompress spinal structures. The type of traction used depends on the individual's age, weight and medical condition.

CLINICAL EVIDENCE

Lumbar Traction

A Cochrane systematic review was conducted for the purpose of determining the effectiveness of traction in the management of low back pain with or without sciatica (Clarke et al., 2007). The study included randomized controlled trials involving traction to treat acute, subacute or chronic nonspecific low-back pain with or without sciatica. The review included 25 studies. The studies included 2206 patients with 1045 receiving traction. Five of these trials were considered high quality. The authors concluded that traction is probably not effective, and traction as single treatment for low back pain is not supported by the studies. In addition, the authors note that future research on traction for patients with low back pain should distinguish between symptom pattern and duration and should be carried out according to the highest methodological standards.

Wegner et al. (2013) published an update to a 2007 Cochrane review (Clarke et al., 2007) that assessed the effects of traction compared to placebo, sham traction, reference treatments and no treatment in people with low back pain (LBP). The review included 32 randomized controlled trials with 2,762 participants involving traction to treat acute (less than four weeks' duration), subacute (four to 12 weeks' duration) or chronic (more than 12 weeks' duration) non-specific LBP with or without sciatica. The review found for individuals with mixed symptom patterns (acute, subacute and chronic LBP with and without sciatica) there was low- to moderate-quality evidence that traction may make little or no difference in pain intensity, functional status, global improvement or return to work when compared to placebo, sham traction or no treatment. The review noted that for people with LBP with sciatica and acute, subacute or chronic pain, there was low- to moderate-quality evidence that traction probably has no impact on pain intensity, functional status or global improvement. Regarding chronic LBP without sciatica, the review found that there was moderate-quality evidence that traction probably makes little or no difference in pain intensity when compared with sham treatment. The authors concluded that the findings indicate that traction, either alone or in combination with other treatments, has little or no impact on pain intensity, functional status, global improvement and return to work among people with LBP. The review found that there is only limited-quality evidence from studies with small sample sizes and moderate to high risk of bias and that the effects shown by these studies are small and not clinically relevant.

Cervical Traction

Fritz et al. (2014) reported on a randomized controlled trial of 86 patients that compared exercise, with mechanical traction during treatment sessions or exercise with over-door traction provided during treatment session and at home. Patients with neck pain and signs of radiculopathy were randomized to 4 weeks of treatment with exercise, exercise with mechanical traction, or exercise with over-door traction. All patients were scheduled to receive 10 individual physical therapy sessions over a 4-week treatment. The primary outcome measure was Neck Disability Index and secondary outcome measure was neck and arm pain intensity—assessment was performed at four weeks, six months, and 12 months. Intention-to-treat analysis found lower Neck Disability Index scores at six months in the mechanical traction group compared to the exercise group and over-door traction group, and at 12 months in the mechanical traction group compared to the exercise group. Secondary outcomes favored mechanical traction. Limitations of the study included: the rate of loss to follow; several patients crossed over to a different treatment during the first 4 weeks; there were several baseline differences among the treatment groups (e.g., duration of symptoms).

In a prospective case series, Cai et al. (2011) evaluated potential prognostic variables and the validity of a clinical prediction rule for improvement in spondylosis neck pain after home cervical traction in 103 consecutive patients with cervical pain. The patients used a traction device with an adjustable cervical halter with a traction force equaling 10% to 15% of their body weight. They were instructed to pull the rope of the pulley system until the determined traction force was reached. The patients were instructed to perform 2 traction treatments for 20 minutes daily for 2 weeks, reinforced by a treatment diary. Standard physical examination of the cervical spine was conducted before intervention. Data on the Numerical Pain Scale (NPS) score, Neck Disability Index (NDI), Fear-Avoidance Beliefs Questionnaire (FABQ) scores, and a global rating of perceived improvement were collected before and after treatment. A positive treatment response was defined as 50% improvement between pre- and post-treatment of NPS or NDI, or rated as much improved or completely recovered in the global rating scheme. Forty-seven patients had a positive response to home cervical traction, while 56 did not. This study is limited by its short-term follow-up and lack of controls.

Young et al. (2009) conducted a randomized controlled trial of 81 patients with cervical radiculopathy. The patients received manual therapy, exercise, and intermittent cervical traction or they received manual therapy, exercise, and sham intermittent cervical traction. The results suggested that the addition of mechanical cervical traction to a multimodal treatment program of manual therapy and exercise yields no significant additional benefit to pain, function, or disability in patients with cervical radiculopathy.

A Cochrane review of 7 randomized controlled trials (n=958) by Graham et al. (2008) assessed the effects of mechanical traction for neck disorders. Outcomes included pain, function, disability, global perceived effect, patient

satisfaction, and quality of life measures. The review found no statistically significant difference between continuous traction and placebo traction in reducing pain or improving function for chronic neck disorders with radicular symptoms. The authors concluded that there was no evidence to clearly support or refute the use of either continuous or intermittent traction for neck disorders. Further studies are needed to assess the safety and efficacy of traction for neck disorders.

Olivero and Dulebohn (2002) conducted a retrospective review of 81 patients receiving halter cervical traction for the treatment of cervical radiculopathy. All patients experienced at least 6 weeks of symptoms before undergoing a trial of traction that consisted of wearing a cervical collar and home-based halter cervical traction: 8 to 12 pounds, applied for 15 minutes, 3 times a day for 3 to 6 weeks. Sixty-three (78%) of 81 patients responded to therapeutic traction, experiencing significant or total pain relief, 3 could not tolerate the traction, and traction failed in 15 patients. Three of the 63 patients who responded to traction therapy, suffered recurrence of their symptoms and required surgery. The authors concluded that 75% of patients with at least a 6 week history of cervical radiculopathy will benefit from home-based halter traction therapy. The study is limited by small sample size and lack of a comparison group.

Swezey et al. (1999) reported that a brief (3-5 min), over-the-door home cervical traction modality provided symptomatic relief in 81% of patients (n=58) with mild to moderately severe (Grade 3) cervical spondylosis syndromes. Five patients discontinued treatment after reporting transient symptom aggravation with traction. No serious or sustained adverse events were recorded. The author noted that prospective, randomized assessment of cervical traction for this and other methods is needed.

There is insufficient evidence in the published, peer-reviewed scientific literature to demonstrate that home traction is effective treatment. In general, studies have been of poor methodological quality, with small sample sizes and lack of randomization. Further randomized controlled clinical trials are needed.

Ongoing Studies

No registered ongoing studies using home cervical or lumbar traction for treatment of neck and/or back pain were identified on the ClinicalTrials.gov online database, which is sponsored by the National Institutes of Health.

Professional Societies

The North American Spine Society (NASS)

The NASS evidence-based clinical guideline for the diagnosis and treatment of cervical radiculopathy from degenerative disorders notes that regarding the role of traction in the treatment of cervical radiculopathy from degenerative disorders that cervical halter traction and combinations of medications, physical therapy, injections and traction have been associated with improvements in patient reported pain in uncontrolled case series. They note that such modalities may be considered recognizing that no improvement relative to the natural history of cervical radiculopathy has been demonstrated. (Bono et al., 2010)

The NASS evidence-based clinical guideline (Kriener et al., 2011) for diagnosis and treatment of lumbar disc hernation with radiculopathy notes that there is insufficient evidence to make a recommendation for or against the use of traction in the treatment of lumbar disc herniation with radiculopathy.

American College of Physicians / American Pain Society

A joint clinical practice guideline from the American College of Physicians and the American Pain Society for the diagnosis and treatment of low back pain notes that intermittent or continuous traction in patients with or without sciatica have not been proven effective for chronic low back pain. (Chou, et al., 2007b)

U.S. FOOD AND DRUG ADMINISTRATION (FDA)

Non-powered orthopedic traction devices are classified by the FDA as Class I devices. There are numerous FDA-registered traction devices including foam or rigid collars, and over-the-door pulley, pneumatic, or mechanical systems. The devices are exempt from the premarket notification procedures. Additional information is available at: http://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfCFR/CFRSearch.cfm?FR=888.5850. (Accessed April 30, 2018)

Note: Orthotrac Pneumatic Vest is no longer available for sale as of January 1, 2009.

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The foregoing Oxford policy has been adapted from an existing UnitedHealthcare national policy that was researched, developed and approved by UnitedHealthcare Medical Technology Assessment Committee. [*2018T0545L*]

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POLICY HISTORY/REVISION INFORMATION

Date	Action/Description
12/01/2018	• Simplified non-coverage rationale (no change to guidelines) • Archived previous policy version REHAB 016.22 T2

INSTRUCTIONS FOR USE

This Clinical Policy provides assistance in interpreting UnitedHealthcare Oxford standard benefit plans. When deciding coverage, the member specific benefit plan document must be referenced as the terms of the member specific benefit plan may differ from the standard plan. In the event of a conflict, the member specific benefit plan document governs. Before using this policy, please check the member specific benefit plan document and any applicable federal or state mandates. UnitedHealthcare Oxford reserves the right to modify its Policies as necessary. This Clinical Policy is provided for informational purposes. It does not constitute medical advice.

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