

Vertebral Body Tethering

Policy Number: 064

	Commercial and Qualified Health Plans	MassHealth	Medicare Advantage
Authorization Required			
No Prior Authorization	X	X (CPT codes 22836, 22837, and 22838 only)	X
Not Covered		X (Codes 0656T, 0657T, and 0790T)	

Overview

The purpose of this document is to describe the guidelines Mass General Brigham Health Plan uses to determine medical necessity for vertebral body tethering (VBT) to treat idiopathic scoliosis. The treating provider must be a qualified spine/orthopedic specialist trained and experienced in VBT.

Coverage Guidelines

The use of an FDA approved vertebral body tethering (VBT) device to treat idiopathic scoliosis of the thoracic and/or lumbar spine may be considered medically necessary when ALL of the following conditions are met:

1. The treating provider has completed an in-person evaluation and documented the members suitability for VBT and the rationale for the procedure.
2. The member's radiographic imaging confirms all of the following:
 - a. Skeletal immaturity defined as Risser Grade 0-2, or Sanders Skeletal Maturation stage less than 5; and
 - b. Major Cobb angle of 35 to 65 degrees and osseous structure is dimensionally adequate to accommodate screw fixation; and
 - c. Cobb angle decreases in magnitude below 30 degrees on bending films
3. The member has progressive curvature that has not responded to one of the following conservative treatment options:
 - a. Failed external bracing defined as curvature progression greater than 5 degrees despite external brace wear;
 - b. External bracing is not/no longer indicated secondary to skeletal maturity or severe scoliosis (greater than 45 degrees);
 - c. There is clinical documentation of intolerance to external brace wear as prescribed despite reasonable efforts to improve brace comfort, fit, and wear compliance.
4. The surgery is to be performed at a facility with appropriate experience and expertise in the VBT procedure.

Exclusions

1. The member has congenital scoliosis
2. The member has achieved Skeletal maturity with no spinal growth remaining
3. The member has hyperkyphosis (40-50 degrees)
4. Kyphosis in the lumbar spine or at the thoracolumbar junction

5. Vertebral or chest wall deformity malformation in addition to scoliosis (e.g., pectus excavatum, severe rib prominence defined as trunk rotation greater than 20 degrees as measured by a scoliometer)
6. Previous surgery at the spinal levels where scoliotic curve(s) exist, unless related to prior tether correction
7. Member is non-ambulatory
8. Altered muscle function as a result of progressive neuromuscular disease

MassHealth

MassHealth considers codes 0656T, 0657T, and 0790T to be non-payable. However, due to the Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) benefit, members under 21 years of age who meet coverage guidelines may be eligible for treatment under those codes.

Medicare Variation

Mass General Brigham Health Plan uses guidance from the Centers for Medicare and Medicaid Services (CMS) for coverage determinations for its Medicare Advantage plan members. National Coverage Determinations (NCDs), Local Coverage Determinations (LCDs), Local Coverage Articles (LCAs), and documentation included in the Medicare manuals are the basis for coverage determinations. When there is no guidance from CMS for the requested service, Mass General Brigham Health Plan’s medical policies are used for coverage determinations. At the time of Mass General Brigham Health Plan’s most recent policy review, Medicare has **no NCD or LCD for vertebral body tethering.**

CPT/HCPCS Codes

The following codes are included below for informational purposes only; inclusion of a code does not constitute or imply coverage.

This list of codes applies to Commercial and MassHealth plans only.

Authorized CPT/HCPCS Codes	Code Description
22836	Anterior thoracic vertebral body tethering, including thoracoscopy, when performed; up to 7 vertebral segments
22837	Anterior thoracic vertebral body tethering, including thoracoscopy, when performed; 8 or more vertebral segments
22838	Revision (eg, augmentation, division of tether), replacement, or removal of thoracic vertebral body tethering, including thoracoscopy, when performed
0656T	Anterior lumbar or thoracolumbar vertebral body tethering; up to 7 vertebral segments
0657T	Anterior lumbar or thoracolumbar vertebral body tethering; 8 or more vertebral segments
0790T	Revision (eg, augmentation, division of tether), replacement, or removal of thoracolumbar or lumbar vertebral body tethering, including thoracoscopy, when performed

Effective

January 2025: Off-cycle Review. Removed from prior authorization. Clarified language in Medicare Variation.

August 2024: Annual update. Updated Prior Authorization table to reflect change in MassHealth’s coverage of VBT. Updated code definitions. Added language for MassHealth and Medicare Advantage.

January 2024: Off-cycle Review. Codes updated.

July 2023: Effective Date



References

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Baroncini A, Trobisch PD, Migliorini F. Learning curve for vertebral body tethering: analysis on 90 consecutive patients. *Spine Deform*. 2021 Jan;9(1):141-147. Epub 2020 Aug 21. PMID: 32827085.2013 AHA/ACC/TOS

Hoernschemeyer DG, Boeyer ME, Robertson ME. et. al. Anterior Vertebral Body Tethering for Adolescent Scoliosis with Growth Remaining: A Retrospective Review of 2 to 5-Year Postoperative Results. *J Bone Joint Surg Am*. 2020 Jul 1;102(13):1169-1176. doi: 10.2106/JBJS.19.00980. PMID: 32618924.

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Samdani AF, Ames RJ, Kimball JS, et al. Anterior vertebral body tethering for idiopathic scoliosis: two-year results. *Spine (Phila Pa 1976)*. Sep 15 2014; 39(20): 1688-93. PMID 24921854

Scoliosis Research Society (SRS), American Academy of Orthopaedic Surgeons (AAOS), Pediatric Orthopaedic Society of North America (POSNA), and American Academy of Pediatrics (AAP) Position Statement: Screening for the Early Detection of Idiopathic Scoliosis in Adolescents. [1122-Screening-for-the-Early-Detection-of-Idiopathic-Scoliosis-in-Adoles 12-28.pdf \(posna.org\)](#)

U.S. Food and Drug Administration (FDA), Center for Devices and Radiologic Health (CDRH). The Tether™ - Vertebral Body Tethering System. Summary of Safety and Effectiveness Data. Humanitarian Device Exemption (HDE) (H190005). Rockville, MD: FDA; August 16, 2019. Available at: <https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfhde/hde.cfm?id=H190005>

