

Corporate Medical Policy

Spinal Manipulation Under Anesthesia

File Name: spinal_manipulation_under_anesthesia
Origination: 5/1998
Last Review: 10/2024

Description of Procedure or Service

Manipulation under anesthesia (MUA) consists of a series of mobilization, stretching, and traction procedures performed while the patient receives anesthesia (usually general anesthesia or moderate sedation).

Background

Manipulation is intended to break up fibrous and scar tissue to relieve pain and improve range of motion. Anesthesia or sedation is used to reduce pain, spasm, and reflex muscle guarding that may interfere with the delivery of therapies and to allow the therapist to break up joint and soft-tissue adhesions with less force than would be required to overcome patient resistance or apprehension. MUA is generally performed with an anesthesiologist in attendance. MUA is an accepted treatment for isolated joint conditions, such as arthrofibrosis of the knee and adhesive capsulitis. It is also used to treat (reduce) fractures (e.g., vertebral, long bones) and dislocations.

MUA has been proposed as a treatment modality for acute and chronic pain conditions, particularly of the spinal region, when standard care, including manipulation, and other conservative measures have been unsuccessful. MUA of the spine has been used in various forms since the 1930s. Complications from general anesthesia and forceful long-lever, high-amplitude nonspecific manipulation procedures resulted in decreased use of the procedure in favor of other therapies. MUA was modified and revived in the 1990s. This revival is attributed to increased interest in spinal manipulative therapy and the advent of safer, shorter-acting anesthesia agents used for conscious sedation.

MUA of the spine is described as follows: after sedation is achieved, a series of mobilization, stretching, and traction procedures to the spine and lower extremities is performed and may include passive stretching of the gluteal and hamstring muscles with straight-leg raise, hip capsule stretching and mobilization, lumbosacral traction, and stretching of the lateral abdominal and paraspinal muscles. After the stretching and traction procedures, spinal manipulative therapy (SMT) is delivered with high-velocity, short-amplitude thrust applied to a spinous process by hand while the upper torso and lower extremities are stabilized. SMT may also be applied to the thoracolumbar or cervical area if considered necessary to address the low back pain.

The MUA takes 15–20 minutes, and after recovery from anesthesia, the patient is discharged with instructions to remain active and use heat or ice for short-term analgesic control. Some practitioners recommend performing the procedure on 3 consecutive days for best results. Care after MUA may include 4–8 weeks of active rehabilitation with manual therapy including SMT and other modalities. Manipulation has also been performed after injection of local anesthetic into lumbar zygapophyseal and/or sacroiliac joints under fluoroscopic guidance (manipulation under joint anesthesia/analgesia, MUJA) and after epidural injection of corticosteroid and local anesthetic (manipulation postepidural injection). Spinal manipulation under anesthesia has also been combined with other joint manipulation during multiple sessions. Together, these may be referred to as medicine-assisted manipulation.

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This policy does **NOT** address the treatment of vertebral fractures or dislocations by spinal manipulation under anesthesia.

This policy does not address manipulation under anesthesia for fractures, completely dislocated joints, adhesive capsulitis (e.g., frozen shoulder), and/or fibrosis of a joint that may occur following total joint replacement.

****Note: This Medical Policy is complex and technical. For questions concerning the technical language and/or specific clinical indications for its use, please consult your physician.*

Policy

Spinal manipulation under anesthesia is considered investigational for treatment of chronic pain. BCBSNC does not provide coverage for investigational services or procedures.

Benefits Application

This medical policy relates only to the services or supplies described herein. Please refer to the Member's Benefit Booklet for availability of benefits. Member's benefits may vary according to benefit design; therefore member benefit language should be reviewed before applying the terms of this medical policy.

When Spinal Manipulation Under Anesthesia is covered

Not applicable

When Spinal Manipulation Under Anesthesia is not covered

Spinal manipulation (and manipulation of other joints, e.g., hip joint, performed during the procedure) with the patient under anesthesia, spinal manipulation under joint anesthesia, and spinal manipulation after epidural anesthesia and corticosteroid injection are considered **investigational** for treatment of chronic spinal (cranial, cervical, thoracic, lumbar) pain and chronic sacroiliac and pelvic pain.

Spinal manipulation and manipulation of other joints under anesthesia involving serial treatment sessions are considered **investigational**.

Manipulation under anesthesia involving multiple body joints is considered **investigational** for treatment of chronic pain.

Policy Guidelines

Evidence reviews assess the clinical evidence to determine whether the use of a technology improves the net health outcome. Broadly defined, health outcomes are length of life, quality of life, and ability to function—including benefits and harms. Every clinical condition has specific outcomes that are important to patients and to managing the course of that condition. Validated outcome measures are necessary to ascertain whether a condition improves or worsens; and whether the magnitude of that change is clinically significant. The net health outcomes is a balance of benefits and harms.

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To assess whether the evidence is sufficient to draw conclusions about the net health outcome of technology, two domains are examined: the relevance and the quality and credibility. To be relevant, studies must represent one or more intended clinical use of the technology in the intended population and compare an effective and appropriate alternative at a comparable intensity. For some conditions, the alternative will be supportive care or surveillance. The quality and credibility of the evidence depend on study design and conduct, minimizing bias and confounding that can generate incorrect findings. The randomized controlled trial is preferred to assess efficacy, however, in some circumstances, nonrandomized studies may be adequate. Randomized controlled trials are rarely large enough or long enough to capture less common adverse events and long-term effects. Other types of studies can be used for these purposes and to assess generalizability to broader clinical populations and settings of clinical practice.

For individuals who have chronic spinal, sacroiliac, or pelvic pain who receive manipulation under anesthesia (MUA), the evidence includes case series and nonrandomized comparative studies. Relevant outcomes are symptoms, functional outcomes, quality of life, and treatment-related morbidity. Scientific evidence on spinal MUA, spinal manipulation with joint anesthesia, and spinal manipulation after epidural anesthesia and corticosteroid injection is very limited. No randomized controlled trials have been identified. Evidence on the efficacy of MUA over several sessions or for multiple joints is also lacking. The evidence is insufficient to determine the effects of the technology on health outcomes.

Billing/Coding/Physician Documentation Information

This policy may apply to the following codes. Inclusion of a code in this section does not guarantee that it will be reimbursed. For further information on reimbursement guidelines, please see Administrative Policies on the Blue Cross Blue Shield of North Carolina web site at www.bcbsnc.com. They are listed in the Category Search on the Medical Policy search page.

Applicable service codes: 22505, 00640

BCBSNC may request medical records for determination of medical necessity. When medical records are requested, letters of support and/or explanation are often useful, but are not sufficient documentation unless all specific information needed to make a medical necessity determination is included.

Scientific Background and Reference Sources

Physician Advisory Group, 4/25/96

Consultant Review, 4/96

MPAG, 11/98

Medical Policy Advisory Group - 12/99

Specialty Matched Consultant Review - 7/20/2001

BCBSA Medical Policy Reference Manual 8.01.40; 5/15/02

Specialty Matched Consultant Review - 8/2003

BCBSA Medical Policy Reference Manual 8.01.40; 10/9/03

BCBSA Medical Policy Reference Manual 8.01.40; 3/15/05

Specialty Matched Consultant Review - 9/2005

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BCBSA Medical Policy Reference Manual 8.01.40; 3/7/06

Medical Director Review - 7/2007

BCBSA Medical Policy Reference Manual 8.01.40; 4/8/2010

Medical Director Review - 8/2010

BCBSA Medical Policy Reference Manual 8.01.40; 10/8/2010

Medical Director – 2/2011

Specialty Matched Consultant Advisory Panel –11/2011

BCBSA Medical Policy Reference Manual 8.01.40; 10/4/2011

BCBSA Medical Policy Reference Manual 8.01.40; 10/11/2012

Specialty Matched Consultant Advisory Panel – 1/2013

BCBSA Medical Policy Reference Manual 8.01.40; 12/12/2013

Specialty Matched Consultant Advisory Panel – 1/2014

BCBSA Medical Policy Reference Manual 8.01.40; 12/11/2014

Specialty Matched Consultant Advisory Panel – 1/2015

Specialty Matched Consultant Advisory Panel 1/2016

Medical Director review 1/2016

BCBSA Medical Policy Reference Manual 8.01.40; 8/11/2016

BCBSA Medical Policy Reference Manual 8.01.40; 8/10/2017

BCBSA Medical Policy Reference Manual 8.01.40; 4/12/2018

BCBSA Medical Policy Reference Manual 8.01.40; 4/8/2019

BCBSA Medical Policy Reference Manual 8.01.40; 4/16/2020

Specialty Matched Consultant Advisory Panel 10/2020

BCBSA Medical Policy Reference Manual 8.01.40; 05/2021

Specialty Matched Consultant Advisory Panel 10/2021

Medical Director review 10/2021

Specialty Matched Consultant Advisory Panel 10/2022

Medical Director review 10/2022

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Kohlbeck FJ, Haldeman S. Medication-assisted spinal manipulation. Spine J. 2002; 2(4): 288-302.PMID 14589481

Specialty Matched Consultant Advisory Panel 10/2023

Medical Director review 10/2023

Specialty Matched Consultant Advisory Panel 10/2024

Medical Director review 10/2024

Policy Implementation/Update Information

- 5/18/96 Original process to deny anesthesia services related to spinal manipulation as investigational was recommended by the Physician Advisory Group 4/25/96 and implemented via the claims system.
- 5/20/98 Policy developed.
- 9/2/98 Reviewed for clarification. Changed policy to reflect that anesthesia used in spinal manipulation is investigational.
- 6/99 Reformatted, Description of Procedure or Service revised, Medical Term Definitions added.
- 12/99 Medical Policy Advisory Group
- 10/00 System coding changes.
- 9/01 Specialty Matched Consultant Review. No change in policy.
- 8/02 Scientific Background and Reference Sources added. System coding change. Billing and Coding section clarified.
- 10/03 Specialty Matched Consultant Review 8/2003. "Description of Procedure" section revised for clarity. Under "Policy" section, added statement that this policy does not address the treatment of vertebral fractures or dislocations by spinal MUA. "Benefits Application" section revised. Under "When not covered" section, revised to state "Spinal manipulation under anesthesia, in the absence of vertebral fracture or dislocation, is considered investigational. BCBSNC does not cover investigational services." Policy guidelines added. CPT code 00640 added to Billing/Coding section.
- 10/8/05 Specialty Matched Consultant Review – 9/14/05. No change in policy.
- 8/27/07 "Description" section revised. "Policy Guidelines" added to clarify dislocation versus subluxation. Reviewed policy on 7/19/2007 with Medical Director and policy status changed to: "Active policy, no longer scheduled for routine literature review." Since there have been no changes in the policy statement. Reference Sources added. (btw)
- 6/22/10 Policy Number(s) removed (amw)
- 9/28/10 Policy status changed from "Active Policy: No longer scheduled for routine literature review" to active policy. "Description" section extensively revised." Spinal manipulation (and manipulation of other joints, e.g., hip joint, performed during the

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procedure) with the patient under anesthesia, spinal manipulation under joint anesthesia, and spinal manipulation after epidural anesthesia and corticosteroid injection are considered **investigational** for treatment of chronic spinal (cranial, cervical, thoracic, lumbar) pain and chronic sacroiliac and pelvic pain.” No change to policy intent. Reviewed by Medical Director.8/10/10. References added. (btw).

- 3/1/11 “Description” section updated. Added the following statements to the “When Not Covered” section; “Spinal manipulation and manipulation of other joints under anesthesia involving serial treatment sessions are considered investigational.” And “Manipulation under anesthesia involving multiple body joints is considered investigational for treatment of chronic pain.” No change to policy intent. Updated “Policy Guidelines” section. Reviewed by the Medical Director 2/9/2011 (btw)
- 1/10/12 Specialty Matched Consultant Advisory Panel review 11/30/11. No changes to policy. (btw)
- 1/29/13 Specialty Matched Consultant Advisory Panel review 1/16/2013. No changes to policy. References added. (btw)
- 2/11/14 Specialty Matched Consultant Advisory Panel review 1/28/2014. No changes to policy statement. Reference added. (btw)
- 2/24/15 References updated. Specialty Matched Consultant Advisory Panel review 1/2015. Medical Director review 1/2015. No changes to Policy Statement. (td)
- 2/29/16 References updated. Specialty Matched Consultant Advisory Panel review 1/27/2016. Medical Director review 1/2016. (td)
- 12/30/16 Policy Guideline and Reference updated. Specialty Matched Consultant Advisory Panel Review 11/30/2016. No change to policy statement. (an)
- 12/15/17 Policy Guidelines updated. Reference added. Specialty Matched Consultant Advisory Panel Review 1/29/2017. No change to policy statement. (an)
- 11/9/18 Policy Guidelines updated. Reference added. Specialty Matched Consultant Advisory Panel Review 10/24/2018. No change to policy statement. (an)
- 10/29/19 Specialty Matched Consultant Advisory Panel Review 10/16/2019. No change to policy statement. (eel)
- 11/10/20 Specialty Matched Consultant Advisory Panel Review 10/21/2020. References updated. No change to policy statement. (eel)
- 11/2/21 References updated. Specialty Matched Consultant Advisory Panel Review 10/2021. Medical Director Review 10/2021. References updated. No change to policy statement. (tt)
- 11/1/22 Minor updates made to description. Moved statement related to evidence reviews from When not Covered to Policy Guidelines for clarity. Specialty Matched Consultant Advisory Panel Review 10/2022. Medical Director Review 10/2022. References updated. No change to policy statement. (tt)
- 11/7/23 References updated. Specialty Matched Consultant Advisory Panel Review 10/2023. Medical Director Review 10/2023. No change to policy statement. (tt)

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10/30/24 References updated. Specialty Matched Consultant Advisory Panel Review 10/2024.
Medical Director Review 10/2024. No change to policy statement. (tt)

Medical policy is not an authorization, certification, explanation of benefits or a contract. Benefits and eligibility are determined before medical guidelines and payment guidelines are applied. Benefits are determined by the group contract and subscriber certificate that is in effect at the time services are rendered. This document is solely provided for informational purposes only and is based on research of current medical literature and review of common medical practices in the treatment and diagnosis of disease. Medical practices and knowledge are constantly changing and BCBSNC reserves the right to review and revise its medical policies periodically.