Spinal Manipulation under Anesthesia

<table>
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<tr>
<th>Type:</th>
<th>Policy Specific Section:</th>
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<tbody>
<tr>
<td>Investigational / Experimental</td>
<td>Medicine</td>
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<tr>
<th>Original Policy Date:</th>
<th>Effective Date:</th>
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<tbody>
<tr>
<td>February 26, 1997</td>
<td>July 6, 2012</td>
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Definitions of Decision Determinations

**Medically Necessary:** A treatment, procedure or drug is medically necessary only when it has been established as safe and effective for the particular symptoms or diagnosis, is not investigational or experimental, is not being provided primarily for the convenience of the patient or the provider, and is provided at the most appropriate level to treat the condition.

**Investigational/Experimental:** A treatment, procedure or drug is investigational when it has not been recognized as safe and effective for use in treating the particular condition in accordance with generally accepted professional medical standards. This includes services where approval by the federal or state governmental is required prior to use, but has not yet been granted.

**Split Evaluation:** Blue Shield policy review can result in a Split Evaluation, where a treatment, procedure or drug will be considered to be investigational for certain indications or conditions, but will be deemed safe and effective for other indications or conditions, and therefore potentially medically necessary in those instances.

Description

Spinal 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. Manipulation under anesthesia (MUA) is generally performed with an anesthesiologist in attendance.

Manipulation under anesthesia 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. While under anesthesia, the normal posturing response is eliminated thereby creating less resistance to manipulation than in the conscious patient. A chiropractor, osteopathic physician or medical physician may perform this type of manipulation.

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

Policy

Spinal manipulation under anesthesia is considered **investigational** for all indications including, but not limited to:

- Spinal manipulation under joint anesthesia
- Spinal manipulation after epidural anesthesia and corticosteroid injection
- Treatment of chronic spinal (cranial, cervical, thoracic and lumbar) pain and chronic sacroiliac and pelvic pain
- Manipulation of other joints under anesthesia involving serial treatment sessions
- Manipulation under anesthesia involving multiple joints for treatment of chronic pain

Policy Guideline

Manipulation under anesthesia of the spine may include:

- Spinal manipulation under anesthesia (SMUA) (e.g., under general anesthesia, or regional anesthesia [epidural, spinal or nerve blocks], or conscious sedation)
- Spinal manipulation under joint anesthesia (MUJA) (e.g., after an injection of a local anesthetic into lumbar facet joints or sacroiliac joints under fluoroscopic guidance)
- Spinal manipulation under epidural and corticosteroid injection (MUESI) (e.g., after an epidural injection of corticosteroid and local anesthetic into the facet or sacroiliac joints)

**Documentation Required for Clinical Review**

- No records required

The materials provided to you are guidelines used by this plan to authorize, modify, or deny care for persons with similar illness or conditions. Specific care and treatment may vary depending on individual need and the benefits covered under your contract. These Policies are subject to change as new information becomes available.
APPENDIX to Spinal Manipulation under Anesthesia Policy

Prior Authorization Requirements

This service (or procedure) is considered investigational in all instances. If you would like to submit additional information please forward to the Prior Authorization Department.

Within five days before the actual date of service, the Provider MUST confirm with Blue Shield that the member's health plan coverage is still in effect. Blue Shield reserves the right to revoke an authorization prior to services being rendered based on cancellation of the member's eligibility. Final determination of benefits will be made after review of the claim for limitations or exclusions.

Questions regarding the applicability of this policy should also be directed to the Prior Authorization Department. Please call 1-800-541-6652 or visit the Provider Portal www.blueshieldca.com/provider.

Evidence Basis for the Policy

Rationale

Spinal manipulation under anesthesia (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. Manipulation under anesthesia of the spine has been used in various forms since the 1930s. Complications from general anesthesia and forceful long lever, high amplitude non-specific manipulation procedures resulted in decreased use of the procedure in favor of other therapies. Spinal 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.

Spinal MUA is described as follows:

- Necessary depth of sedation is achieved
- A series of mobilization, stretching, and traction procedures to the spine and lower extremities is performed
- This may include passive stretching of the gluteal and hamstring muscles with:
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- Straight leg raise
- Hip capsule stretching and mobilization
- Lumbosacral traction
- 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. Spinal manipulation therapy may also be applied to the thoracolumbar or cervical area if considered necessary to address the low back pain. The MUA takes 15 to 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 three or more consecutive days for best results. Care after MUA may include four to eight 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 and after epidural injection of corticosteroid and local anesthetic. Spinal manipulation under anesthesia has also been combined with other joint manipulation during multiple sessions (Dagenais et al., 2008).

**Review of Literature**

Randomized, placebo controlled trials are considered particularly important when assessing treatment of low back pain, to control not only for the expected placebo effect but to also control for the variable natural history of low back pain, which may resolve with conservative treatment alone. Dagenais et al. (2008) performed a comprehensive review of the history of manipulation under anesthesia (MUA) and other published experimental literature. The author noted the literature does not confirm theories about a mechanism of action for these procedures. The only randomized, controlled trial identified was published in 1971 when the techniques for spinal manipulation were different from those used at the present time.

West et al. (2009) reported on a series of 177 patients with pain arising from the cranial, cervical, thoracic, and lumbar spine, as well as the sacroiliac and pelvic regions who had failed conservative and surgical treatment. Patients underwent three sequential manipulations with intravenous (IV) sedation followed by four to six weeks of spinal manipulation and therapeutic modalities; all had six months of follow up. On average, visual analogue scale (VAS) ratings improved by 62% in patients with cervical pain and 60% in patients with lumbar pain.

Kohlbeck et al. (2005) carried out a prospective cohort study of 68 patients with chronic low back pain. All patients received an initial four to six week trial of SMT, after which 42 patients received supplemental intervention with MUA and the remaining 26 patients continued with SMT. Low back pain and disability measures favored the MUA group over the SMT only group at three months (adjusted mean difference of 4.4 points on a 100 point scale, 95% confidence interval [CI]: -2.2 to 11.0). This difference attenuated at one year (adjusted mean difference of 0.3 points, 95% CI: 9.2).

In 2002, Palmieri and Smoyak evaluated the efficacy of using self reported questionnaires to study MUA using a convenience sample of 87 subjects in two ambulatory surgery centers and two chiropractic clinics. Thirty-eight patients with low back pain received MUA and 49 received...
traditional chiropractic treatment. A numeric pain scale and Roland Morris Questionnaire were administered at baseline, after the procedure, and four weeks later. Average pain scale scores in the MUA group decreased by 50% versus 26% in the traditional treatment group and Roland Morris Questionnaire scores decreased by 51% and 38%, respectively. The authors concluded this study supported the need for large scale studies on MUA and that the assessments are easily administered and dependable.

Dougherty et al. (2004) retrospectively reviewed outcomes of 20 cervical and 60 lumbar radiculopathy patients who underwent spinal manipulation post epidural injection (MUESI). After epidural injection of lidocaine (guided fluoroscopically or with computed tomography), methylprednisolone acetate flexion distraction mobilization and then high velocity, low amplitude spinal manipulation were delivered to the affected spinal regions. Outcome criteria were empirically defined as significant improvement, temporary improvement, or no change. Among lumbar spine patients, 22 (37%) noted significant improvement, 25 (42%) reported temporary improvement, and 13 (22%) no change. Patients receiving cervical epidural injection reported the following:

- Ten (50%) experienced significant improvement
- Six (30%) experienced temporary relief
- Four (20%) experienced no change

The authors noted that this was the first report of the use of spinal manipulation post epidural injection in the cervical spine.

The one study of manipulation under joint anesthesia/analgesia (MUJA) found in the literature search had only four subjects. A paper published by Michaelsen (2000) advised that MUJA should be viewed with “guarded optimism because its success is based solely on anecdotal experience”.

Summary

In summary, the scientific evidence regarding spinal MUA, spinal MUJA, and MUESI is limited to observational case series and non-randomized comparative studies. Evidence regarding the efficacy of MUA over several sessions or for multiple joints is also lacking. Evidence is insufficient to determine whether MUA improves health outcomes; thus, it is considered investigational.

Benefit Application

Benefit determinations should be based in all cases on the applicable contract language. To the extent there are any conflicts between these guidelines and the contract language, the contract language will control. 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.

Some state or federal mandates (e.g., Federal Employee Program (FEP)) prohibit Plans from denying Food and Drug Administration (FDA) - approved technologies as investigational. In
these instances, plans may have to consider the coverage eligibility of FDA-approved technologies on the basis of medical necessity alone.

This Policy relates only to the services or supplies described herein. Benefits may vary according to benefit design; therefore, contract language should be reviewed before applying the terms of the Policy. Inclusion or exclusion of a procedure, diagnosis or device code(s) does not constitute or imply member coverage or provider reimbursement.

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<td>22505</td>
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**Tables**

N/A

**Definitions**

**Subluxation** - A condition in which the bony surfaces of a joint no longer face each other exactly but remain partially aligned (also known as partial or incomplete dislocation).

**Dislocation** - A displacement of a bone from its normal position, classified as either complete or incomplete.
The following Medical Policies share diagnoses and/or are equivalent BSC Medical Policies: N/A

**Key / Related Searchable Words**

- Chiropractic manipulation under anesthesia

**References**


**Policy History**

This section provides a chronological history of the activities, updates and changes that have occurred with this Medical Policy.

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<th>Effective Date</th>
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<th>Reason</th>
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<td>2/26/1997</td>
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<td>6/20/2012</td>
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<tr>
<td>7/6/2012</td>
<td>Policy revision without position change</td>
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