



Medical Policy Manual

Topic: Manipulation Under Anesthesia for the Treatment of Pain

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Section: Medicine

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IMPORTANT REMINDER

Medical Policies are developed to provide guidance for members and providers regarding coverage in accordance with contract terms. Benefit determinations are based in all cases on the applicable contract language. To the extent there may be any conflict between the Medical Policy and contract language, the contract language takes precedence.

PLEASE NOTE: Contracts exclude from coverage, among other things, services or procedures that are considered investigational or cosmetic. Providers may bill members for services or procedures that are considered investigational or cosmetic. Providers are encouraged to inform members before rendering such services that the members are likely to be financially responsible for the cost of these services.

DESCRIPTION

Manipulation under anesthesia (MUA) consists of passive movements and stretching of joints performed while the patient receives anesthesia, usually general anesthesia or moderate sedation. 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.^[1]

Spinal manipulation has also been performed after injection of local anesthetic into lumbar zygapophyseal and/or sacroiliac joints under fluoroscopic guidance (MUJA) and after epidural injection of corticosteroid and local anesthetic (MUESI). Manipulation under IV sedation may be called manipulation under sedation (MUS). All of these manipulation techniques may also be referred to as medication- or medicine-assisted manipulation (MAM).

MUA may be provided on several consecutive days, followed by six to eight weeks of active rehabilitation with manual therapy, including manipulative therapy and other modalities.

MEDICAL POLICY CRITERIA

Note: 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.

Except as noted above, manipulation under any form of anesthesia is considered **investigational** for the treatment of chronic pain in any joint or combination of joints, including but not limited to the following:

1. Temporomandibular joint
2. Spine: cervical, thoracic, lumbar, sacral
3. Shoulder (see Note)
4. Wrist
5. Elbow
6. Fingers
7. Pelvis
8. Hip (see Note)
9. Knee (see Note)
10. Ankle
11. Toes

SCIENTIFIC EVIDENCE

The most clinically relevant outcomes of manipulation under anesthesia (MUA) of the spine or any joint are improvements in pain and/or function. Relief of pain is a subjective outcome and can be influenced by nonspecific effects, placebo response, and the natural history of the disease. Therefore, data from adequately powered, blinded, randomized controlled trials (RCTs) are required to control for placebo effect, determine its magnitude, and determine whether any treatment effect from MUA provides a significant advantage over sham MUA, surgical treatment, or continued medical management.

Literature Appraisal

Systematic Reviews

- In a 2013 systematic review, DiGiorgi indicated that, while generally favorable outcomes have been reported, there was a lack of high-quality evidence to support any MUA technique.^[2] Published studies were limited to weak nonrandomized, noncomparative trials with significant heterogeneity in the condition being treated, type of medications used, manipulation technique, and the number of procedures each patient received.^[3-7] The author concluded that prospective RCTs are needed to

improve the evidence quality either for or against MUA techniques, and for establishing patient selection criteria.

- In a 2008 comprehensive review of the history of MUA and a systematic review of the published experimental literature, Dagenais and colleagues noted that there was no research to confirm theories about a mechanism of action for MUA.^[8] The only randomized, controlled trial^[9] identified was excluded from the review because it was published in 1971 when the techniques for spinal manipulation were different from those used at the present time.

Randomized Controlled Trials (RCTs)

No RCTs on the safety and effectiveness of MUA have been published since the 1971 trial noted above.

Nonrandomized Studies

No new studies have been published since the 2013 systematic review summarized above.

Clinical Practice Guidelines

American College of Occupational and Environmental Medicine (ACOEM)

The ACOEM evidence-based guidelines on spinal disorders concluded that manipulation under anesthesia and medication-assisted spinal manipulation are not recommended for acute, subacute, or chronic spinal pain.^[10,11] The level of evidence assigned to this determination was “I,” defined as “insufficient for an evidence-based recommendation. The intervention is not recommended for appropriate patients because of high costs/high potential for harm to the patient.”

Summary

The current scientific evidence is insufficient to permit conclusions regarding the benefits and safety of joint or spinal manipulation under anesthesia (MUA), joint or spinal manipulation with joint anesthesia, and spinal manipulation after epidural anesthesia and corticosteroid injection compared with conventional manipulation or medical treatment for chronic pain. In addition, there are no evidence-based clinical practice guidelines from U.S. professional associations that recommend MUA. Therefore, MUA is considered investigational for the treatment of chronic joint or spinal pain.

REFERENCES

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CROSS REFERENCES

None

CODES	NUMBER	DESCRIPTION
CPT	00640	Anesthesia for manipulation of the spine or for closed procedures on the cervical, thoracic, or lumbar spine
	01120	Anesthesia for procedures on bony pelvis
	01160	Anesthesia for all closed procedures involving symphysis pubis or sacroiliac joint
	01200	Anesthesia for all closed procedures involving hip joint
	01380	Anesthesia for all closed procedures on knee joint
	01620	Anesthesia for all closed procedures on humeral head and neck,

CODES	NUMBER	DESCRIPTION
		sternoclavicular joint, acromioclavicular joint, and shoulder joint
	01820	Anesthesia for all closed procedures on radius, ulna, wrist, or hand bones
	21073	Manipulation of temporomandibular joint(s) (TMJ), therapeutic, requiring an anesthesia service (ie, general or monitored anesthesia care)
	22505	Manipulation of spine requiring anesthesia, any region
	23700	Manipulation under anesthesia, shoulder joint, including application of fixation apparatus (dislocation excluded)
	25259	Manipulation, wrist, under anesthesia
	27194	Closed treatment of pelvic ring fracture, dislocation, diastasis or subluxation; with manipulation, requiring more than local anesthesia
	27275	Manipulation, hip joint, requiring general anesthesia
	27570	Manipulation of knee joint under general anesthesia (includes application of traction or other fixation devices)
	27860	Manipulation of ankle under general anesthesia (includes application of traction or other fixation apparatus)
HCPCS	None	