American Academy of Osteopathy
Consensus Statement for Osteopathic Manipulation of Somatic Dysfunction under Anesthesia and Conscious Sedation

Background:
The purpose of Osteopathic manipulation with or without general anesthesia is to restore the patient to optimal health potential. This is accomplished by the proper use of those procedures that will restore normal motion to the specific joint(s) and the associated muscles and tissues found to be in a dysfunctional state.

Manipulation Under Anesthesia (MUA) is an OMT procedure, performed with the added benefit of conscious or general sedation of the patient. It is used to circumvent and overcome the conscious and unconscious defense mechanisms and natural resistance to treatment manifesting in some conditions. Research and publication on the utilization and efficacy of this procedure is limited.

Definitions:
Osteopathic Manipulative Treatment (OMT) is an osteopathic medical procedure involving the therapeutic application of manually guided forces by an osteopathic physician to improve physiologic function and/or support homeostasis. It is a form of manual treatment used to eliminate or alleviate somatic dysfunction and related disorders. This treatment may be accomplished using a variety of techniques including direct approaches such as muscle energy and high velocity-low amplitude (HVLA) thrust or impulse procedures, or indirect approaches such as strain/counterstrain, cranial osteopathy, and myofascial release (MFR) procedures, among others.

Somatic Dysfunction as used by osteopathic physicians and surgeons, is defined as “Impaired or altered function of related components of the somatic (body frame work) system; skeletal, arthrodial, and myofascial structures; and related vascular, lymphatic, and neural elements.” It is further classified by body regions, including head, cervical, thoracic, lumbar, sacral, pelvic, lower extremity, upper extremity, ribs, and abdomen.

Indications:
Manipulation under anesthesia may be appropriate in cases of restrictions and abnormalities of function. These include recurrent muscle spasm, range of motion restrictions, persistent pain secondary to injury and/or repetitive motion trauma. Furthermore it is an alternative approach after failure* to significantly improve with conservative treatment including but not limited to OMT, physical therapy and medication. In general, MUA is limited to patients who have somatic dysfunction which:

1. has failed to respond to conservative treatment in the office or hospital that has included the use of OMT, physical therapy and medication, and/or
2. is so severe that muscle relaxant medication, anti-inflammatory medication or analgesic medications are of little benefit, and/or
3. results in biomechanical impairment which may be alleviated with the use of the procedure.

* Failure may be defined as a lack of significant response in 3-6 weeks in the acute phase, 6-12 weeks in the post-acute phase, and greater than 12 weeks in the chronic phase. In the chronic pain patient, these criteria may be met at the initial evaluation by an osteopathic physician.

Contraindications:
Manipulation under general anesthesia is contraindicated in the presence of
• primary or metastatic carcinoma in the area to be treated
• local bone or joint infection in the area to be treated
• acute fracture
• unstable spondylolisthesis
• acute inflammatory arthritis
• uncontrolled diabetic neuropathy
• evidence of spinal cord compression by tumor or disc herniation
• evidence of aortic aneurysm
• contraindications to general anesthesia or IV sedation, and
• any condition that would contraindicate direct manipulative techniques which would likely result in harm to the patient.
Relative Contraindications:
The physician may choose to proceed with caution and with documentation of his/her considerations on the chart in the presence of

- systemic infections
- previous MUA for the same problem performed within the previous three weeks, and
- radiographic evidence of advanced degenerative joint disease, osteoporosis or other condition of a degree in which MUA may result in harm to the patient.

Dosage and Frequency:
MUA is usually a single dose procedure. As with other OMT procedures, patients occasionally report post-treatment reactions.

The reaction may last 24-48 hours, and includes muscle soreness usually relieved by rest, warm bath, and mild anti-inflammatory or analgesic medication. In some cases a follow-up MUA may be indicated after a three week interval. If a follow-up MUA is indicated with less than a three week interval, a second opinion is recommended. After a second or follow-up MUA, any additional MUA considerations should be with the consensus of appropriate consultants. These may include a neurologist, orthopedic surgeon, physiatrist, and/or a specialist in osteopathic manipulative medicine or neuromusculoskeletal medicine and osteopathic manipulative medicine certified by the AOBNMM or AOBSPPM.

Recommended Physician Qualifications:
As a minimum, it is recommended that the physician performing the MUA procedure, should meet all of the following qualifications:

1. Be board certified (or board eligible) under the jurisdiction of an AOA certifying board. (See Grandfathering Guideline below.)
2. Have demonstrated skill in Osteopathic diagnostic and manipulative treatment procedures.
3. Have documented training and experience in manipulation under anesthesia.

Grandfathering Guideline:
Those osteopathic physicians currently credentialed to perform MUA and whose privileges are in good standing may be allowed to continue these privileges regardless of board certification by the AOBNMM or AOBSPPM.

Facility Guidelines:
MUA is a hospital or surgical center procedure. As a minimum, the physician administering the procedure should comply with all appropriate hospital or surgical center protocols.

1. A signed informed consent approved by the hospital or surgical center. The patient must be informed about their diagnosis, the procedure, alternatives, potential risks and possible complications.
2. The anesthesiologist/anesthetist is properly credentialed by the hospital or surgical center.
3. History and physical must be done prior to or upon admission.
4. All necessary laboratory reports, x-rays and other imaging studies, consultants’ reports, etc. will be accomplished and charted prior to the procedure.
5. MUA may be performed as a same-day or in-patient procedure depending on the condition of the patient.
6. Hospital or surgical center quality management procedures apply.
7. The physician performing the MUA may be the attending physician or a consulting specialist.

Disclaimer:
It is the intent of the American Academy of Osteopathy that this document be used as a guideline in establishing privileges for osteopathic physicians and surgeons for the use of Manipulation Under Anesthesia.

This document is not to be construed as an endorsement of efficacy or final criteria for implementation by a hospital/institution without appropriate review and implementation of the hospital or institution’s own guidelines for Manipulation Under Anesthesia.

In reviewing this document, each hospital or institution must review, formulate and institute its own rules regarding qualifications, statistical monitoring and outcomes in establishing procedures, controls, and systems for Manipulation Under Anesthesia.

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AAO Board of Governors