

Substantive Changes in Proposed Medical Treatment Guidelines From January, 2010 revision to June, 2010 revision

Title Change

1. Change title from Cervical Medical Treatment Guideline to Neck Injury Medical Treatment Guideline
2. Change title from Low Back Medical Treatment Guideline to Mid and Low Back Medical Treatment Guideline (abbreviated as LB)

Note: Language in *italics* is new or revised language

All Guides

Note: The General Principles have been reorganized to group common principles. The only significant change is the addition of A.14 Pre-Authorization.

Add to General Principles in all guides

(Basis: To define procedures which require pre-authorization)

A.14 PRE-AUTHORIZATION

All diagnostic imaging, testing procedures, non-surgical and surgical therapeutic procedures within the criteria of the medical treatment guidelines and based on a correct application of the medical treatment guidelines are considered authorized, with the exception of following procedures: Lumbar Fusion, Artificial Disc Replacements, , Vertebroplasty, Kyphoplasty, Electrical Bone Growth Stimulators, Spinal Cord Stimulators, Anterior Acromioplasty of the Shoulder, Chondroplasty, Osteochondral Autograft, Autologous Chondrocyte Implantation, Meniscal Allograft Transplantation and Knee Arthroplasty (Total or Partial Knee Joint Replacement). These are not included on the list of pre-authorized procedures. Providers who want to perform one of these procedures must request pre-authorization from the carrier before performing the procedure.

Add/Revise Knee

1. Pre-authorization

(Basis: To define those procedures which require pre-authorization)

a. CHONDRAL DEFECTS (Cartilage or cartilage and bone defects)

Surgical Indications/Operative Treatment

Chondroplasty, Osteochondral Autograft and Autologous Chondrocyte Implantation are not included on the list of pre-authorized procedures. Providers who want to perform one of these procedures must request pre-authorization from the carrier before performing the procedure.

b. MENISCUS INJURY

Surgical Indications/ Operative Treatment Meniscectomy/Meniscus Repair and Meniscal Allograft Transplantation.

Meniscal Allograft Transplantation is not included on the list of pre-authorized procedures. Providers who want to perform one of these procedures must request pre-authorization from the carrier before performing the procedure.

c. TOTAL KNEE REPLACEMENT

Knee Arthroplasty (Total or Partial Knee Joint Replacement) is not included on the list of pre-authorized procedures. Providers who want to perform one of these procedures must request pre-authorization from the carrier before performing the procedure.

2. MENISCUS INJURY

(Basis: Clarification for use of MRI in meniscus injury. MRI addressed in Table 7, but omitted in Diagnostic Testing section)

Diagnostic Testing Procedures

Radiographs including standing Posterior/Anterior (PA), lateral, tunnel, and skyline views. MRI is the definitive imaging test MRI is sensitive and specific for meniscal tear. However, meniscal MRI is frequently abnormal in asymptomatic injuries. Clinical correlation with history and physical exam findings specific for meniscus injury is critically important.

Providers planning treatment should therefore consider the patient's complaints and presence of arthritis on MRI carefully, knowing that not all meniscus tears in the middle aged and older population are related to the patients' complaints of pain.

MRI arthrograms may be approved to diagnose recurrent meniscal tears particularly after previous surgery.

Add/Revise Shoulder

1. Pre-authorization

(Basis: To define those procedures which require pre-authorization)

a. IMPINGEMENT SYNDROME

Operative Procedures (Impingement Syndrome)

Anterior Acromioplasty of the Shoulder is not included on the list of pre-authorized procedures. Providers who want to perform one of these procedures must request pre-authorization from the carrier before performing the procedure.

b. ROTATOR CUFF TEARS

Operative Procedures (Rotator Cuff Tear)

Anterior Acromioplasty of the Shoulder is not included on the list of pre-authorized procedures. Providers who want to perform one of these procedures must request pre-authorization from the carrier before performing the procedure.

2. SUPERIOR LABRUM ANTERIOR AND POSTERIOR (SLAP) LESIONS

(Basis: Comments and pilot program analysis)

Lesions of the superior aspect of the glenoid labrum that extend anteriorly and posteriorly in relation to the biceps tendon insertion. There are several different types of SLAP lesions described:

- i. Type I is a fraying of the superior labral edge without detachment of the labrum from the glenoid rim.*
- ii. Type II is a detachment of the biceps anchor from the glenoid. Three distinct Type II lesions have been described as anterior only, posterior only, or combined anterior and posterior.*
- iii. Type III is a bucket handle tear in the superior labrum only with biceps tendon and remainder of the superior labrum having stable attachment.*
- iv. Type IV is a bucket handle tear as in Type III, but with extension of the tear in to the biceps tendon. Additional types of lesions have been described that include extensions*

History and Mechanisms of Injury (SLAP lesion)

Mechanism of Injury:

Common mechanisms of injury that are thought to contribute to SLAP lesions include:

- a) compression injury such as fall on an outstretched arm with the shoulder in forward flexion and abduction or direct blow to the glenohumeral joint;*
- b) traction injury such as repetitive overhead throwing, attempting to break a fall from a height, and sudden pull when losing hold of a heavy object;*
- c) driver of an automobile who is rear ended*
- d) repetitive overhead motions with force such as pitching; or*
- e) a fall on adducted arm with upward force directed on elbow.*

In some cases no mechanism of injury can be identified.

History may include:

- (a) Symptoms with overhead throwing motions;*
- (b) Dislocation, subluxation, or subjective sense of instability;*
- (c) Poorly localized shoulder pain that is exacerbated by overhead activities;*
- (d) Catching, locking, popping or snapping;*
- (e) Subtle instability.*

Physical Findings (SLAP lesion)

The physical examination is often nonspecific secondary to other associated intra-articular abnormalities.

No one test or combination of tests has been shown to have an acceptable sensitivity and specificity or positive predictive values for diagnosing SLAP lesion. Sensitivity and specificity are relatively low for individual tests and combinations.

Overall physical examination tests for SLAP lesions may be used to strengthen a diagnosis of SLAP lesion, but the decision to proceed to operative management should not be based on physical examination alone.

- *Speed Test.*
- *Yergason's Test.*
- *Active Compression (O'Brien) Test.*
- *Jobe Relocation Test.*
- *Crank Test.*
- *Anterior Apprehension Maneuver.*
- *Tenderness at the bicipital groove.*
- *Anterior Slide (Kibler) Test.*
- *Compression Rotation Test.*
- *Pain Provocation Test.*
- *Biceps Load Test II.*

Diagnostic Testing Procedures (SLAP lesion)

Radiographs are usually normal in isolated SLAP lesions. However, they can be useful in identifying other sources of abnormalities.

D.11.c.ii. Magnetic resonance imaging with arthrogram has the highest reported accuracy for both diagnosis and classification of SLAP lesions; however, it may be difficult to differentiate SLAP lesions, especially Type II lesions, from normal anatomic variants and from asymptomatic age related changes.

Arthroscopic evaluation is the most definitive diagnostic test.

Non-operative Treatment Procedures (SLAP lesion)

Most SLAP lesions are associated with other pathology such as rotator cuff tears, Bankart lesions, joint instability, biceps tendon tears, and supraspinatus tears. The provider should refer to the treatment protocols for these conditions

and follow both the surgical and non surgical recommendations. For suspected isolated SLAP lesions, non invasive care, consider the following.

Medications such as analgesics and anti-inflammatories may be helpful.

Therapeutic procedures may include instruction in therapeutic exercise and proper work techniques, evaluation of occupational work station.

Benefits may be achieved through therapeutic rehabilitation and rehabilitation interventions. They should include range-of-motion (ROM), active therapies, and a home exercise program. Passive as well as active therapies may be used for control of pain and swelling. Therapy should progress to strengthening and an independent home exercise program targeted to further improve ROM and strength of the shoulder girdle musculature.

Subacromial bursal and/or glenohumeral steroid injections may decrease inflammation and allow the therapist to progress with functional exercise and ROM.

- *Time to Produce Effect: One injection.*
- *Maximum Duration: 3 injections in one year at least 4 to 8 weeks apart.*

Steroid injections should be used cautiously in diabetic patients. Diabetic patients should be reminded to check their blood glucose levels at least daily for 2 weeks after injections.

Return to work with appropriate restrictions should be considered early in the course of treatment.

Other non-operative therapies may be employed in individual cases.

Surgical Indications (SLAP lesion)

There is a significant amount of normal anatomic variation of the superior glenoid labrum and origin of the long head of the biceps tendon. Differentiation between normal variation and pathology is imperative.

The physician should identify other shoulder pathology if any exists and allow the appropriate surgical indications. If a SLAP lesion is suspected, an arthroscopic exam should be performed in conjunction with the primary surgical procedure and an appropriate repair performed if necessary.

or

When no additional pathology is identified and there is an inadequate response to at least three months of non-operative management with active patient participation as evidenced by continued pain with functional limitations and/or instability significantly affecting activities of daily living or work duties;

Prior to surgical intervention, the patient and treating physician should identify functional operative goals and the likelihood of achieving improved ability to perform activities of daily living or work activities and the patient should agree to comply with the pre- and post-operative treatment plan and home exercise requirements. The patient should understand the length of partial and full disability expected postoperatively.

The patient should also understand that 1) non-operative treatment is an acceptable option and that 2) a potential complication of the surgery is shoulder stiffness with pain and possibly decreased function.

Operative Procedures (SLAP lesion)

Operative treatment of SLAP lesions depends on the type of lesion present and whether any other intra-articular abnormalities are present. The following are generally accepted protocols for surgical intervention.

Type I: Debridement is reasonable but not required;

Type II: Repair via suture anchors or biceps tenotomy are reasonable options;

Type III: Debridement or excision of the bucket handle component alone or repair via suture anchors or biceps tenotomy/tenodesis are reasonable options;

Type IV: Debridement and/or biceps tenotomy or tenodesis are reasonable options.

Post-operative Treatment (SLAP lesion)

Post-operative rehabilitation programs should be individualized and dependent upon whether any other intra-articular abnormalities exist and were operatively treated. There is a paucity of information on rehabilitation of isolated SLAP lesions. Common post-operative care involves wearing a sling, without active shoulder motion for 4 to 6 weeks. Elbow, wrist, and hand range-of-motion (ROM) exercises may be used at this time. The sling is removed at 4 to 6 weeks and active ROM is usually begun with restrictions directed by the surgeon. It is reasonable to restrict external rotation and abduction up to six months postoperative.

Add/Revise LB

1. Pre-authorization

(Basis: To define those procedures which require pre-authorization)

a. Spinal Fusion

Lumbar Fusion is not included on the list of pre-authorized procedures. Providers who want to perform one of these procedures must request pre-authorization from the carrier before performing the procedure.

b. Vertebroplasty and Kyphoplasty

Vertebroplasty and Kyphoplasty are not included on the list of pre-authorized procedures. Providers who want to perform one of these procedures must request pre-authorization from the carrier before performing the procedure.

c. Implantable Spinal Cord Stimulators

(Basis: To define those procedures which require pre-authorization and the criteria to be used when requesting pre-authorization)

Spinal Cord Stimulators are not included on the list of pre-authorized procedures. Providers who want to perform one of these procedures must request pre-authorization from the carrier before performing the procedure.

Recommendations:

Spinal cord stimulators (WCB) are recommended for treatment of selected patients with chronic LBP, specifically patients with failed back surgery syndrome, i.e. who have persistent severe and disabling LBP despite having been provided with conventional non-surgical treatments and having undergone surgical treatment that failed to relieve symptoms and improve function and no other treatment options are available. If available, an intensive Functional Rehabilitation Program should be tried before the use of a spinal cord stimulator. No patient can undergo insertion of a spinal cord stimulator before a thorough psychological evaluation indicates that there are no significant psychosocial factors that would predict poor response.

If no such psychosocial factors are identified, conditional pre-authorization must be obtained from the payor for a trial of device effectiveness. Once conditional pre-authorization is received a trial of effectiveness must be conducted prior to implantation, employing a methodology that includes random switching of the spinal cord stimulator on and off, with the patient blinded to the on/off status, during which the patient must keep a pain diary. If there is consistent reduction of pain when the stimulator is active (on), and

recurrence of pain is consistently recorded during “off” periods, the device can be concluded to be effective, and implantation can be performed.

2. Intraoperative Monitoring

(Basis: Comments and consistency between Neck and LB)

Intraoperative Monitoring is a common intraoperative electrodiagnostic technique that may include somatosensory evoked potentials (SSEP), motor evoked potentials (MEP), or pedicle screw monitoring. The monitoring procedure may be used to evaluate spinal cord integrity and screw placement during the operative procedure. The use of intraoperative monitoring can be anticipated to become more common as percutaneous spinal procedures gain greater acceptance

3. Revisions of Active Therapy in LB

Remove general exercises, stretching and flexibility. Replace with Therapeutic Exercise

(Basis: Comments and consistency)

Therapeutic Exercise

Therapeutic Exercise (WCB) with or without mechanical assistance or resistance, may include isoinertial, isotonic, isometric and isokinetic types of exercises. Indications include the need for cardiovascular fitness, reduced edema, improved muscle strength, improved connective tissue strength and integrity, increased bone density, promotion of circulation to enhance soft tissue healing, improvement of muscle recruitment, improved proprioception and coordination, increased range of motion and are used to promote normal movement patterns. Therapeutic exercise can also include complementary/ alternative exercise movement therapy (with oversight of a physician or appropriate healthcare professional).

Time to Produce Effect: 2 to 6 treatments.

Frequency: 3 to 5 times per week.

Optimum Duration: 4 to 8 weeks.

Maximum Duration: 8 weeks.

Add to Neck and LB

Pre-authorization

(Basis: To define those procedures which require pre-authorization)

1. Artificial Disc Replacement

Artificial Disc Replacement is not included on the list of pre-authorized procedures. Providers who want to perform one of these procedures must request pre-authorization from the carrier before performing the procedure.

2. Electrical Bone Growth Stimulators

(Basis: To define those procedures which require pre-authorization and the criteria to be used when requesting pre-authorization)

Electrical Bone Growth Stimulators are not included on the list of pre-authorized procedures. Providers who want to perform one of these procedures must request pre-authorization from the carrier before performing the procedure.

Recommendations

Non invasive Electrical Bone Growth Stimulators (WCB) as an adjunct to spinal fusion surgery for those at high risk for pseudoarthrosis, including one or more of the following fusion failure risk factors:

- 1) One or more previous failed spinal fusion(s)*
- 2) Grade II or worse spondylolisthesis*
- 3) Fusion to be performed at more than one level*
- 4) Presence of other risk factors that may contribute to non-healing:*
 - Current smoking*
 - Diabetes*
 - Renal disease*
 - Other metabolic diseases where bone healing is likely to be compromised (eg: significant osteoporosis)*
 - Active alcoholism*

- *Morbid obesity BMI >40*

Non-invasive Electrical Bone Growth Stimulators (WCB) may be considered as treatment for individuals with failed spinal fusion. Failed spinal fusion is defined as a spinal fusion that has not healed at a minimum of 6 months after the original surgery, as evidenced by serial x-rays over a course of three months during the latter portion of the 6 month period.

Revisions to Neck and LB

1. Revisions in Spinal Injections for the Neck and LB

(Basis: Comments and clarification)

a. LB

a.(i) Lumbar/Transforaminal/Epidural Injections

Lumbar/Transforaminal/Epidural Injections must be fluoroscopically guided, except in cases where radiation exposure is contraindicated and ultrasound evaluation of needle placement may be used.

Recommendations:

Frequency/Duration: It is recommended that each injection be scheduled separately, and effects of each injection be evaluated *depending upon patient response (improved function and pain reduction)*, rather than scheduling a “Series of 3.” Medications most often used in randomized controlled studies were triamcinolone and methylprednisolone combined with an anesthetic. The anesthetic has most often been bupivacaine. There are no head to head comparisons of different medications to ascertain the optimum medication(s) and/or dose(s).

Maximum duration: 3 injections may be done in one year depending upon patient response (improved function and pain reduction)

a.(ii) Diagnostic Facet Joint Injections (Intra-articular and Nerve Blocks)

Recommendations:

One fluoroscopically guided (*except in cases where radiation exposure is contraindicated and ultrasound evaluation of needle placement may be used*) diagnostic facet joint injection per side per level may be recommended for patients with chronic LBP that is significantly exacerbated by extension and rotation or associated with lumbar rigidity, and not alleviated with other conservative treatments (e.g., medication, aerobic exercise, other exercise, manipulation) in order to determine whether specific interventions targeting the facet joint are recommended. Repeated diagnostic injections in the same level(s) are not recommended.

Maximum Duration: One diagnostic facet joint injection per side per level, not to exceed two levels.

a.(iii) Therapeutic Facet Joint Injections

Recommendations:

Fluoroscopically guided (*except in cases where radiation exposure is contraindicated and ultrasound evaluation of needle placement may be used*) therapeutic facet joint injections may be considered for a select group of patients with chronic LBP who have completed a full course of conservative management, including but not limited to medication, modalities, active exercises, and have chronic low back pain believed to be the result of facet dysfunction (see Diagnostic Facet joint Injections)

Optimum Duration: 2-3 injections for each applicable joint per year depending upon patient response (improved function and pain reduction) not to exceed two levels.

Maximum: 3 injections may be done in one year depending upon patient response (improved function and pain reduction)

b. Neck

b.(i) Therapeutic Spinal Injections

Special Considerations:

For all injections (excluding trigger point and occipital nerve blocks) multi-planar fluoroscopy during procedures is required (*except in cases where radiation exposure is contraindicated and ultrasound evaluation of needle placement may be used*) to document technique and needle placement.

Frequency: One or more divided levels can be injected in one injection. If the first injection does not provide a diagnostic response with temporary and sustained pain relief (at least 2 to 6 weeks) substantiated by accepted pain scales (i.e., 80% pain reduction as measured by tools such as VAS), and improvement in function, repeat injections are not recommended.

Optimal Duration: Usually 1 to 3 injection(s), depending upon each patient's response (improved functional gain and pain reduction).

Maximum Duration: 3 injections per spinal region may be done in one year depending upon patient's response (improved functional gain and pain reduction). Patients should be reassessed after each injection for an 80% improvement in pain (as measured by accepted pain scales) and evidence of functional improvement.

b.(ii) Zygapophyseal (Facet) Injection

Zygapophyseal (Facet) injections must be fluoroscopically guided, *except in cases where radiation exposure is contraindicated and ultrasound evaluation of needed placement may be used.*

Frequency: 1 injection *per side per level, not to exceed two levels with a diagnostic response*. If the first injection does not provide a diagnostic response of temporary and sustained pain relief substantiated by accepted pain scales, (i.e., 80% pain reduction substantiated by tools such as VAS), and improvement in function, repeat injections are not recommended. At least 4 to 6 weeks of functional benefit should be obtained with each therapeutic injection.

Optimum Duration: 2 to 3 injections *for each applicable joint per year*. Not to exceed two joint levels *depending upon patient's response (improved functional gain and pain reduction)*.

Maximum Duration: 3 injections per application joint may be done in one year *depending upon patient's response (improved functional gain and pain reduction)*.

2. Revisions and Reformatting of Passive Therapies in Neck and LB

(Basis: Comments, clarification and consistency)

a. Neck

a.(i) Manipulation

Manipulative treatment (not therapy) is defined as the therapeutic application of manually guided forces by an operator to improve physiologic function and/or support homeostasis that has been altered by the injury or occupational disease, and has associated clinical significance.

Contraindications to manipulation may include joint instability, fractures, severe osteoporosis, infection, metastatic cancer, active inflammatory arthritides, and signs of progressive neurologic deficits, myelopathy, vertebral insufficiency, or carotid artery disease. Relative contraindications include stenosis, spondylosis, and disc herniation.

Manipulation is recommended for treatment of acute and sub-acute neck pain when tied to objective measures of improvement.

Time to produce effect for all types of manipulative treatment:
1 to 6 treatments.

Frequency: Up to 3 times per week for the first 4 weeks as indicated by the severity of involvement and the desired effect, then up to 2 treatments per week for the next 4 weeks *with re-evaluation for evidence of functional improvement or need for further workup. Continuance of treatment will depend upon functional improvement.*

Optimum Duration: 8 to 12 weeks.

Maximum Duration: 3 months. Extended durations of care beyond what is considered “maximum” may be necessary in cases of re-injury, interrupted continuity of care, exacerbation of symptoms, and in those patients with comorbidities.

There is no efficacy for chronic treatment (manipulation several times a month for years) and chronic treatment is not recommended.

There is no evidence that prophylactic treatment is effective, either for primary prevention (before the first episode of pain) or for secondary prevention (after recovery from an episode of neck pain) and prophylactic treatment is not recommended.

a.(ii) Massage (Manual or Mechanical)

Massage (Manual or Mechanical) consists of manipulation of soft tissue with broad-ranging relaxation and circulatory benefits. This may include stimulation of acupuncture points and acupuncture channels (acupressure), application of suction cups and techniques that include pressing, lifting, rubbing, pinching of soft tissues by or with the practitioner's hands. Indications include edema (peripheral or hard and non-pliable edema), muscle spasm, adhesions, the need to improve peripheral circulation and range of motion, or to increase muscle relaxation and flexibility prior to exercise.

As with all passive therapies, massage must be accompanied by exercise and patient education. *Objective benefit (functional improvement along with symptom reduction) must be demonstrated in order for further treatment to continue.*

Massage is recommended for select use in subacute and chronic neck pain as an adjunct to more efficacious treatments consisting primarily of a graded aerobic and strengthening exercise program.

Time to Produce Effect: Immediate.

Frequency: 1 to 2 times per week.

Optimum Duration: 6 weeks.

Maximum Duration: 2 months.

Discontinuation: Resolution, intolerance, lack of benefit, or non-compliance with aerobic and strengthening exercises

Massage is recommended as a treatment for acute neck pain and chronic radicular syndromes in which neck pain is a substantial symptom component

Time to Produce Effect: Immediate.

Frequency: 1 to 2 times per week.

Optimum Duration: 6 weeks.

Maximum Duration: 2 months.

Discontinuation: Resolution, intolerance or lack of benefit.

Massage is recommended for patients with sub-acute and chronic neck pain without underlying serious pathology, such as fracture, tumor, or infection.

Time to Produce Effect: Immediate.

Frequency: 1 to 2 times per week.

Optimum Duration: 6 weeks.

Maximum Duration: 2 months.

Discontinuation: Resolution, intolerance or lack of benefit.

Mechanical devices for administering massage are not recommended.

b. LB

b.(i) Manipulation

Manipulative treatment (not therapy) is defined as the therapeutic application of manually guided forces by an operator to improve physiologic function and/or support homeostasis that has been altered by the injury or occupational disease, and has associated clinical significance.

Contraindications to manipulation may include joint instability, fractures, severe osteoporosis, infection, metastatic cancer, active inflammatory arthritides, and signs of progressive neurologic deficits, myelopathy, vertebrobasilar insufficiency, or carotid artery disease. Relative contraindications include stenosis, spondylosis, and disc herniation.

Manipulation is recommended for treatment of acute and sub-acute neck pain when tied to objective measures of improvement.

Time to produce effect for all types of manipulative treatment: 1 to 6 treatments.

Frequency: Up to 3 times per week for the first 4 weeks as indicated by the severity of involvement and the desired effect, then up to 2 treatments per week for the next 4 weeks with re-evaluation for evidence of functional improvement or

need for further workup. Continuance of treatment will depend upon functional improvement.

Optimum Duration: 8 to 12 weeks.

Maximum Duration: 3 months. Extended durations of care beyond what is considered "maximum" may be necessary in cases of re-injury, interrupted continuity of care, exacerbation of symptoms, and in those patients with comorbidities.

There is no efficacy for chronic treatment (manipulation several times a month for years) and chronic treatment is not recommended.

There is no evidence that prophylactic treatment is effective, either for primary prevention (before the first episode of pain) or for secondary prevention (after recovery from an episode of neck pain) and prophylactic treatment is not recommended.

b.(ii) Massage (Manual or Mechanical)

Massage (Manual or Mechanical) consists of manipulation of soft tissue with broad-ranging relaxation and circulatory benefits. This may include stimulation of acupuncture points and acupuncture channels (acupressure), application of suction cups and techniques that include pressing, lifting, rubbing, pinching of soft tissues by or with the practitioner's hands. Indications include edema (peripheral or hard and non-pliable edema), muscle spasm, adhesions, the need to improve peripheral circulation and range of motion, or to increase muscle relaxation and flexibility prior to exercise.

As with all passive therapies, massage must be accompanied by exercise and patient education. Objective benefit (functional improvement along with symptom reduction) must be demonstrated in order for further treatment to continue.

Massage is recommended for select use in subacute and chronic neck pain as an adjunct to more efficacious treatments consisting primarily of a graded aerobic and strengthening exercise program.

Time to Produce Effect: Immediate.

Frequency: 1 to 2 times per week.

Optimum Duration: 6 weeks.

Maximum Duration: 2 months.

Discontinuation: Resolution, intolerance, lack of benefit, or non-compliance with aerobic and strengthening exercises

Massage is recommended as a treatment for acute neck pain and chronic radicular syndromes in which neck pain is a substantial symptom component

Time to Produce Effect: Immediate.

Frequency: 1 to 2 times per week.

Optimum Duration: 6 weeks.

Maximum Duration: 2 months.

Discontinuation: Resolution, intolerance or lack of benefit.

Massage is recommended for patients with sub-acute and chronic neck pain without underlying serious pathology, such as fracture, tumor, or infection.

Time to Produce Effect: Immediate.

Frequency: 1 to 2 times per week.

Optimum Duration: 6 weeks.

Maximum Duration: 2 months.

Discontinuation: Resolution, intolerance or lack of benefit.

Mechanical devices for administering massage are not recommended.

b.(iii) Mobilization (Joint)

Mobilization consists of passive movement involving oscillatory motions to the vertebral segment(s). The passive mobility is performed in a graded manner (I, II, III, IV, or V), which depicts the speed and depth of joint motion during the maneuver. It may include skilled manual joint tissue stretching. Indications include the need to improve joint play, segmental alignment, improve intracapsular arthrokinematics, or reduce pain associated with tissue impingement. Mobilization should be accompanied by active therapy. For Level V mobilization, contraindications include joint instability, fractures, severe osteoporosis, infection, metastatic cancer, active inflammatory arthritides, and signs of progressive neurologic deficits, myelopathy, vertebrobasilar insufficiency, or carotid artery disease. Relative contraindications include stenosis, spondylosis, and disc herniation.

Time to Produce Effect: 6 to 9 treatments.

Frequency: Up to 3 times per week.

Optimum Duration: 4 to 6 weeks.

Maximum Duration: 6 weeks.

b.(iv) Mobilization (Soft Tissue)

Mobilization of soft tissue is the skilled application of muscle energy, strain/counter strain, myofascial release, manual trigger point release, and other manual therapy techniques designed to improve or normalize movement patterns through the reduction of soft tissue pain and restrictions. These can be interactive with the patient participating or can be with the patient relaxing and letting the practitioner move the body tissues. Indications include muscle spasm around a joint, trigger points, adhesions, and neural compression. Mobilization should be accompanied by active therapy.

Time to Produce Effect: 4 to 9 treatments.

Frequency: Up to 3 times per week.

Optimum Duration: 4 to 6 weeks.

Maximum Duration: 6 weeks. There is no efficacy for chronic treatment (manipulation several times a month for years) and chronic treatment is not recommended.