OKLAHOMA

GUIDELINES FOR TREATMENT OF THE CERVICAL SPINE

Developed and Adopted
by the
Physician Advisory Committee

Adopted by the Administrator
of the
Oklahoma Workers' Compensation Court

Effective August 15, 2009

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INTRODUCTION

BACKGROUND: The Physician Advisory Committee (PAC), a statutorily created advisory body to the Oklahoma Workers' Compensation Court, has been directed by Oklahoma Statute to develop and recommend treatment guidelines for injured Oklahoma workers. The PAC is composed of nine members; three appointed by the Governor, three appointed by the President Pro Tempore of the State Senate, and three appointed by the Speaker of the Oklahoma House of Representatives. By statute, the Governor's appointees must include a doctor of medicine and surgery, a family practitioner in a rural community of the state, and an osteopathic physician; the President Pro Tempore's appointees must include a doctor of medicine and surgery, a doctor of medicine or an osteopathic physician, and a podiatric physician; and the Speaker's appointees must include an osteopathic physician, a doctor of medicine or an osteopathic physician, and a chiropractic physician.

DEVELOPMENT OF THE GUIDELINES: The Committee received input from a wide variety of sources including employers, insurance carriers, and health care providers. Appropriate scientific literature has been reviewed. The Occupational Medicine Practice Guidelines promulgated by the American College of Occupational and Environmental Medicine and the Official Disability Guidelines published by the Work Loss Data institute, and practice parameters of the American Academy of Orthopaedic Surgeons were reviewed. Treatment protocols from Colorado, Washington, Minnesota, California, Rhode Island, and West Virginia were also utilized.

APPLICATION OF THE GUIDELINES: These treatment guidelines should not be construed as including all proper methods of care or excluding other acceptable methods of care which are based upon nationally accepted practice standards.

For injury or illness treated under the Oklahoma Workers' Compensation Act, compliance with these treatment guidelines is mandatory and an employer or insurer for an employer is not required to pay for treatment which is not in compliance with the treatment guidelines, unless prior authorization is received. If prior authorization is refused, independent review may be obtained under court procedures.

Authorization for treatment may not be denied on the sole basis the treatment is not addressed by these guidelines if it is documented to be based upon nationally accepted practice standards.

These guidelines do not affect any determination of liability for an injury under the Oklahoma Workers' Compensation Act, 85 O.S., Section 1, et seq., and are not intended to expand or restrict a health care provider's scope of practice under any other statutes.

I. THERAPEUTIC PROCEDURES – NON-OPERATIVE

A. BACKGROUND

1. This treatment guideline for the diagnosis and conservative treatment of neck pain is a consensus document based on nationally accepted practice standards and is not a scientific treatise on the subject.
2. It is understood that a certain number of injured employees treated under this guideline will require continued care that may transition to other treatment guidelines.

3. This treatment guideline is meant to cover the majority of tests and treatments for injured workers with cervical pain. However, it is expected that up to 10% of cases may fall outside these treatment guidelines and require review on a case-by-case basis.

4. Although the primary purpose of this document is advisory and educational, these guidelines are enforceable under Title 85, Section 201.1 (B) (5). The Physician Advisory Committee recognizes that acceptable medical practice may include deviations from these treatment guidelines as individual cases dictate. Therefore, these guidelines are not relevant as evidence of a provider's legal standard of care.

5. It is anticipated that these Guidelines will only be applicable for no more than six months following the injury.

6. The natural history of neck pain is such that within three months of the injury, 90% of all injured workers should no longer require active medical treatment.

B. GENERAL PRINCIPLES

1. Treatment Parameter Duration. Time frames for specific interventions begin once specific treatment has been initiated and not on the date of injury.

2. Active interventions. Active interventions (therapeutic exercise and/or functional treatment) are emphasized over passive modalities, especially as treatment progresses. Generally, passive interventions are viewed as a means to facilitate the transition to an active rehabilitation program.

3. Positive Patient Response. These results are defined primarily as functional gains that can be objectively measured, such as positional tolerances, range of motion, strength, endurance, activities of daily living (ADL), cognition, psychological behavior, and efficiency/velocity measurements. Subjective reports of pain and function should be considered and given relative weight when the pain has an anatomic and/or physiological basis. All findings must be based on objective medical evidence.

4. Re-evaluate Response to Treatment at least every 3-4 weeks. If a given treatment is not producing the desired effect within three to four weeks, the treatment should either be modified or discontinued. If a rational intervention fails to produce the desired effect, the diagnosis of the condition under treatment should be re-considered.

5. Surgical Interventions. Surgical Interventions for neck pain are covered in a companion treatment guideline.

6. Six-month time frame. As many studies have documented, the prognosis of an injured employee returning to work drops precipitously after the employee has been temporarily totally disabled for more than six months. The emphasis within these Guidelines is to move patients along a continuum of care and return to work before the six-month mark, whenever possible. It is important to note that these time frames may not be pertinent for injuries that do not involve work-time loss or are not occupationally-related.

7. Return-to-work. Work is therapeutic, assuming that the work is not likely to aggravate the basic problem or increase long-term pain. Even if there is residual chronic pain, return to work is not necessarily contraindicated.

8. Delayed Recovery. The Physician Advisory Committee recognizes that 3-10% of all industrially injured patients will not recover within 6-12 weeks of the index injury. Such individuals may require treatment beyond the limits discussed within this document, but such treatment will require clear documentation by the treating physician focusing on objective functional gains afforded by further treatment and its impact on prognosis.

9. Guideline Recommendations and Inclusion of Medical Evidence. All recommendations in this treatment guideline are considered to represent reasonable care in appropriately selected cases, regardless of the level of evidence attached to it. Those procedures considered inappropriate, unreasonable, or unnecessary are designated in the treatment guideline as "not recommended".

10. Care Beyond MMI. Maximum medical improvement (MMI) should be declared by the treating physician when the patient's condition has plateaued to the point that further medical intervention is unlikely to result in improved functional outcome. However, some patients may require treatment after MMI has been reached in order to maintain their functional state. The recommendations in this treatment guideline are for pre-MMI care and are not intended to limit post-MMI treatment.

C. INITIAL DIAGNOSTIC EVALUATION

1. History
2. Physical Examination
3. Routine xrays of the Cervical Spine
4. Laboratory Testing. Various laboratory tests may be indicated when the claimant's history suggests either an infectious, metabolic, endocrinologic, neoplastic, or system rheumatic disease. The tests are too numerous to list, but should be accompanied by an explanation by the treating physician of the indication for the procedure.

D. ADVANCED DIAGNOSTIC IMAGING AND TESTING PROCEDURES

Limitations: No test shall be repeated more frequently than every six months without prior authorization.

1. Imaging Studies
    a. MRI Scan. This is the imaging study of choice for most abnormalities of the cervical spine.
    b. CT scan. This test is useful for evaluating the status of fusions, bony abnormalities, and suspected fractures.
    c. Myelography
    d. CT/Myelogram
    e. Radioisotope Bone Scan. This test is useful in the diagnosis of bone tumors, stress fractures, osteomyelitis, and various inflammatory lesions. The scan is highly specific, but never very sensitive.
    f. Indium/Gallium Scanning. Not routinely used, but may be helpful in the diagnosis of tumors, infections, or abscesses.
2. Other Tests
    a. Personality/Psychological/Psychosocial Evaluation
    b. Electrodiagnostic Studies/Nerve Conduction Velocities
    c. Diagnostic Injections. Include, but not limited to the following:
        (1) Medial Branch Blocks
        (2) Intra-articular facet injections
        (3) Atlanto-axial and atlanto-occipital injections
        (4) Selctive nerve root block
    e. Discography
3. Special Tests
    a. Functional Capacity Evaluation
    b. Jobsite Evaluation
    c. Vocational Assessment
    d. Work Tolerance Screening

4. Not Recommended
    a. Thermography
    b. Surface EMG
    c. Current Perception Threshold Evaluation
    d. Somatosensory Evoked Potential.

        Note: May be used in suspected cases of spinal stenosis or myelopathy. (ref: ACOEM Occupational Medicine Practice Guidelines, p.182)
    e. Large-Array Surface Electromyography
    f. Surface EMG in combination with range of motion and/or Functional Capacity Evaluation

E. THERAPEUTIC PROCEDURES

1. Acupuncture
2. Biofeedback
3. Therapeutic Spinal Injections

Limitation: No more injections during a 6 month period than the number shown following each procedure:

a. Cervical epidural steroid injection - 3
b. Zygoapophyseal (Facet) Injections - 2
c. Facet Rhizotomy (Radio Frequency Medial Branch Neurectomy) - 1
d. Occipital Nerve Block - 3
e. Trigger Point Injections - 6
f. Medial branch nerve block for facet injections - 2
g. Selective nerve root block - 3

F. NOT RECOMMENDED

1. Prolotherapy/Sclerotherapy

G. MEDICATIONS

1. Acetaminophen
2. Muscle Relaxants
3. Narcotics. The use of narcotic medication is not recommended beyond two weeks unless clinically indicated.
4. Non-steroidal anti-inflammatory medication (NSAIDs). There is no evidence that these medications modify the natural history of the disease.
5. Oral Steroids
6. Psychotropic/Anti-anxiety/Anti-depressant/Hypnotic Agents
7. Tramadol
8. Topical Drug Delivery sytems

H. OCCUPATIONAL REHABILITATION PROGRAMS

1. Work Conditioning
2. Work Simulation

3. Work Hardening

I. ORTHOTICS

1. Cervical collars. There is no evidence that the use of a cervical collar promotes healing from a cervical strain. Their use in other situations may be indicated.

J. PERSONALITY/PSYCHOLOGICAL/PSYCHOSOCIAL INTERVENTION

Optimum duration: 6 weeks to 3 months

Maximum duration: 3 to 12 months

Counseling is not intended to delay, but to enhance functional recovery. For selected patients, longer supervised treatment may be required and if further counseling beyond 3 months is indicated, documentation is required addressing which issues are pre-existing, causative, or aggravated, as well as a realistic functional prognosis by the treating physician at no less than every 4-6 weeks during treatment.

K. THERAPY-PASSIVE (MODALITIES)

The Maximum Duration for all Physical Therapy-type treatments is 18 sessions unless prior approval is obtained.

Unlisted procedures require prior authorization to proceed.

1. Listed Procedures.
    a. Electrical Stimulation
    b. Infrared Therapy
    c. Iontophoresis
    d. Manipulation. On-going treatment beyond 18 visits may be appropriate if there is a demonstrated, continual improvement and active care components are clearly a part of the treatment plan. If no improvement is noted, consideration should be given for a referral to an allopathic or osteopathic specialist.
    e. Massage
    f. Joint Mobilization
    g. Soft Tissue Mobilization
    h. Superficial Heat and Cold Therapy
    i. Short-Wave Diathermy
    j. Manual Traction
    k. Mechanical Traction
    l. Transcutaneous Electrical Nerve Stimulation
    m. Ultrasound
    n. Whirlpool
2. Not Recommended
    a. Bed rest for more than 2 days.

L. THERAPY - ACTIVE

The Maximum Duration for all Physical Therapy-type treatments is 18 sessions unless prior approval is obtained.

Unlisted procedures require prior authorization to proceed.

1. Listed Procedures.
    a. Activities of Daily Living
    b. Functional Activities
    c. Functional Electrical Stimulation
    d. Cervical-Lumbar Stabilization
    e. Neuromuscular Re-education
    f. Therapeutic Exercise

II. THERAPEUTIC PROCEDURES - OPERATIVE

A. BACKGROUND

1. All operative interventions should be based on a positive correlation with clinical findings, the natural history of the disease, the clinical course, and diagnostic tests. A comprehensive assimilation of these factors should have led to a specific diagnosis with positive identification of the pathologic condition(s). It is imperative for the clinician to rule out non-physiologic modifiers of pain presentation, or non-operative conditions mimicking radiculopathy or instability (peripheral compressive neuropathy, chronic soft tissue injuries, and psychological conditions), prior to consideration of elective surgical intervention. Early intervention may be required in acute incapacitating pain or in the presence of progressive neurological deficits. Patients who are not candidates for or refuse surgical treatment should be treated with non-operative therapy as indicated.
2. Operative treatment is indicated when the natural history of surgically treated lesions is better than the natural history for non-operatively treated lesions. All patients being considered for surgical intervention should first undergo a comprehensive neuromusculoskeletal examination to identify mechanical pain generators that may respond to non-surgical techniques, or may be refractory to surgical intervention.
3. If operative intervention is being considered, it is recommended that the injured worker refrain from smoking for at least six weeks prior to surgery and during the time of healing. Because smokers have a higher risk of nonunion and higher postoperative costs, it is recommended that insurers cover a smoking cessation program perioperatively.
4. Complications may exist with any cervical spine procedure and are well known and documented and are part of the surgical informed consent.
5. In situations requiring the possible need for operation, a second opinion may be necessary. Psychological evaluation is strongly encouraged when surgery is being performed for isolated axial pain to determine if the patient will likely benefit from the treatment.
6. Interdisciplinary interventions should be strongly considered post-operatively in patients not making functional progress within expected time frames.
7. Return to work activity restrictions should be specific. Most cervical fusion patients are able to return to limited-duty activity around 6 weeks. Full activity is generally not achieved until three to 12 months, depending on the procedure and healing of the individual.

B. ACUTE FRACTURES AND DISLOCATIONS. Decisions regarding the need for surgery in acute traumatic injury will depend on the specific injury type and possibility of long-term neurologic damage. Acute disc herniations may occur in the presence of traumatic injury.

1. Cervical orthotic devices:
    a. Description: Cervical orthotic devices restrict flexion, extension, rotation, and lateral bending motion and may be used for nonoperative cervical fractures and also for postoperative immobilization. These include the use of various cervical collars or more extensive devices such as a halo vest.

b. Halo vests are rarely used now because of more advanced cervical spine stabilization techniques and earlier surgical intervention. Sometimes they are used, however, postoperatively or occasionally for certain fractures such as a hangman's fracture, odontoid fractures, etc.

2. Anterior or Posterior Decompression with Fusion:

a. Description: To provide relief of pressure on the cervical spinal cord and nerve roots and maintain alignment and stabilization of the spine. This may involve the use of bone graft (autograft and/or allograft) or intervertebral fusion devices such as PEEK cages. These are usually combined with anterior plating and/or posterior lateral mass screws, pedicle screws, and rods to produce a bony union between two or more adjacent vertebrae.

b. Surgical Indications: When a significant or progressive neurologic deficit exists in the presence of spinal canal compromise. Early decompression and reduction of the neural arch structures becomes critical to enhance the neurologic recovery. Neurologic deficits are often treated on an emergent or semi-emergent basis, depending on the patient's overall medical condition.

c. Operative Treatment: Both anterior and posterior surgical decompression of the cervical spine are widely accepted. The approach is guided by location of the compressive pathology as well as the presence of other concomitant injuries. The anterior approach is generally used for vertebral compression fractures and/or with acute disc herniation compressing the spinal cord and nerve roots anteriorly. The posterior approach is indicated for more specific fractures and often when the anterior column appears to be stable. Oftentimes, however, in the presence of complicated/unstable fractures, patients are now more widely treated with a combination of anterior and posterior approaches with plating and instrumentation to provide maximum stabilization of the spine and early mobilization of the patient. In addition, in view of widespread injury, several levels may be fused in order to achieve stabilization and enhance outcome.

Bone forming materials, including biologics, are used at the surgeon's discretion.

d. Post-Operative Treatment: Cervical bracing may be appropriate (usually 6-12 weeks with fusion). Home programs with instruction in ADLs, sitting, posture, and a daily walking program should be an early part of the rehabilitation process. Referral to a formal rehabilitation program, with emphasis on cervical, scapular, and thoracic strengthening, and restoration of ROM, is appropriate once the fusion is solid and without complication. Active treatment, which patients should have had prior to surgery, will frequently require a repeat of the sessions previously ordered. The goals of the therapy program should include instruction in a long-term home-based exercise program.

C. DISC HERNIATION AND OTHER CERVICAL CONDITIONS: Operative treatment is indicated only when the natural history of an operatively treatable problem is better than the natural history of the problem without operative treatment. All patients being considered for surgical intervention should undergo a comprehensive neuromuscular examination to identify pain generators that may respond to nonsurgical techniques or may be refractory to surgical intervention. Timely decision making for operative intervention is critical to avoid deconditioning and instability of the cervical spine.

General Indications for Surgery - Operative intervention should be considered and a consultation obtained when improvement of symptoms has plateaued and the residual symptoms of pain and functional disability are unacceptable at the end of six weeks of treatment, or at the end of longer duration of non-operative intervention for debilitated patients with complex problems. Choice of surgical approach is based on anatomy, the patient's pathology, and the surgeon's experience and preference.

1. Specific Indications include:

a. For Patients with Myelopathy: immediate surgical evaluation and treatment is indicated.

b. For Patients with Cervical Radiculopathy:

(1) Early intervention is required for acute incapacitating pain or in the presence of significant and/or progressive neurological deficits.

2) Persistent or recurrent arm pain with functional limitations, unresponsive to conservative treatment after six weeks; or

(3) Progressive functional neurological deficit; or

(4) Static neurological deficit associated with significant radicular pain; and

(5) Confirmatory imaging studies consistent with clinical findings.

c. For Patients with Persistent Non-radicular Cervical Pain: in the absence of a radiculopathy, it is recommended that a decisive commitment to surgical or nonsurgical interventions be made within 4 to 6 months following injury. The effectiveness of three-level or greater cervical fusion for non-radicular pain has not been established. In patients with non-radicular cervical pain for whom fusion is being considered, required pre-operative indications include all of the following:

(1) In general, if the program of non-operative treatment fails, operative treatment is indicated when:

(a) Improvement of the symptoms has plateaued, and the residual symptoms of pain and functional disability are unacceptable at the end of 6 to 12 weeks of active treatment, or at the end of longer duration of non-operative programs for debilitated patients with complex problems; and/or

(b) Frequent recurrences of symptoms cause serious functional limitations even if a non-operative active treatment program provokes satisfactory improvement of symptoms, and restoration of function on each recurrence.

(c) Mere passage of time with poorly guided treatment is not considered an active treatment program.

(2) All pain generators are adequately defined and treated; and

(3) All physical medicine and manual therapy interventions are completed; and

(4) X-ray, MRI, or CT/discography demonstrating disc pathology or spinal instability; and

(5) Spine pathology limited to two levels unless other complicating factors are involved.

(6) Psychosocial evaluation for confounding issues addressed.

2. Surgical procedures include:

a. Cervical Discectomy with or without Fusion:

(1) Description — Procedure to relieve pressure on one or more nerve roots and/or spinal cord.

(2) Surgical Indications — Radiculopathy from ruptured disc, spondylosis, spinal instability, deformity, or patients with nonradicular neck pain meeting fusion criteria.

(3)) Operative Treatment — Anterior cervical discectomy and fusion with either a bone bank allograft or autograft or an interbody fusion device with biologic material and plating is the standard approach anteriorly and is most commonly used for disc herniation. A posterior laminotomy and discectomy, however, is occasionally used for patients with specific lateral disc herniations when the surgeon's preference is that the individual would respond better with a posterior approach than an anterior one.

(4) Bone formation materials, including, biologics, are used at the surgeon's discretion.

(5) Post-Operative Therapy — Cervical bracing may be appropriate (usually 6-12 weeks

with fusion). Home programs with instruction in ADLs, sitting, posture, and a daily walking program should be an early part of the rehabilitation process. Referral to a formal rehabilitation program, with emphasis on cervical, scapular, and thoracic strengthening and restoration of range of motion (ROM) is appropriate, once the fusion is solid and without complication. Active treatment, which patients should have had prior to surgery, will frequently require a repeat of the sessions previously ordered. The goals of the therapy program should include instruction in a long-term-based exercise program.

b. Cervical Corpectomy:

(1) Description - Removal of the vertebral body by an anterior approach. This will also include removal of the adjacent cervical disc and involves a fusion.

(2) Surgical Indications - Single or multiple-level spinal stenosis, spondylosis, and/or deformity, with or without cord compression.

(3) Operative Treatment - Anterior vertebral body decompression (vertebrectomy) is undertaken with bone graft (allograft and/or autograft) or with intervertebral body fusion devices and plating to maintain the cervical alignment and stability. Oftentimes a combined posterior approach with hardware may be undertaken to further stabilize the spine and increase the fusion rate. This is often undertaken with multiple-level corpectomy because of the inherent instability from an anterior approach alone. This again is based on the surgeon's preference and biomechanical factors affecting stability.

(4) Post-Operative Therapy - Dependent upon number of vertebral bodies involved, healing time may be longer than discectomy. Home programs with instruction in ADLs, sitting, posture, and a daily walking program should be an early part of the rehabilitation process. Referral to a formal rehabilitation program with emphasis on cervical, scapular, and thoracic strengthening is appropriate for most patients once the cervical spine is deemed stable and without complication. The goals of the therapy program should include instruction in a long-term home-based exercise program.

c. Cervical Laminectomy with or without Foraminotomy or Fusion:

(1) Description - Surgical removal of the posterior portion of a vertebra in order to gain access to the spinal cord or nerve roots.

(2) Surgical Indications - Nerve root(s) and/or spinal cord decompression.

(3) Operative Treatment - Laminectomy, laminotomy, and/or foraminotomy, and nerve root decompression.

(4) Post-Operative Therapy - Cervical bracing may be appropriate (usually 6 to 12 weeks with fusion). Home programs with instruction in ADLs, sitting, posture, and a daily walking program should be an early part of the rehabilitation process. Referral to a formal rehabilitation program with emphasis on cervical, scapular, and thoracic strengthening and restoration of ROM is appropriate for most patients once the cervical spine is deemed stable and without complications. The goals of the therapy program should include instruction in a long-term home-based exercise program.

d. Cervical Laminoplasty:

(1) Description - Technique that increases anterior or posterior dimensions of the spinal canal while leaving posterior elements partially intact.

(2) Surgical Indications - Multi-level disease: cervical spinal stenosis or spondylitic myelopathy. Not indicated in cervical kyphosis.

(3) Operative Treatment - Posterior approach, with or without instrumentation.

(4) Post-Operative Therapy - May include 4 to 12 weeks of cervical bracing. Home

programs with instruction in ADLs, sitting, posture, and daily walking program should be an early part of the rehabilitation process. Referral to a formal rehabilitation program with emphasis on cervical, scapular, and thoracic strengthening and restoration of ROM is appropriate once the cervical spine is stable and without complication. Active treatment, which patients should have had prior to surgery, will frequently require a repeat of the sessions previously ordered. The goals of the therapy program should include instruction in a long-term, home-based exercise program.

e. Percutaneous Discectomy - Not recommended.

f. Failed Cervical Fusion (non-union, pseudarthrosis)

(1) Description - Failed bony union of the cervical spine whether posttraumatic or postoperative.

(2) Surgical Indications - Previous failed cervical postoperative fusion or failed posttraumatic nonunion.

(3) Operative Treatment - Anterior, posterior, or combined approach with plating and instrumentation, depending on the multiple levels that are involved and possible instability and deformity.

(4) Bone Formation - Bone-forming materials, including biologics, are used at the surgeon's discretion.

(5) Postoperative Therapy - May include 4 to 12 weeks of cervical bracing. Home programs with instruction in ADLs, sitting, posture, and daily walking program should be an early part of the rehabilitation process. Referral to a formal rehabilitation program with emphasis on cervical, scapular, and thoracic strengthening and restoration of ROM is appropriate once the cervical spine is stable and without complication. Active treatment, which patients should have had prior to surgery, will frequently require a repeat of the sessions previously ordered. The goals of the therapy program should include instruction in a long-term, home-based exercise program.

(6) External bone stimulators and rarely internal (implantable) bone stimulators are often used as an adjunct to surgery to increase the rate of bony fusion. Patients with high risk factors such as smoking, multiple levels, revision surgery, deformity, etc., are primary candidates. The general efficiency and safety has been previously established.

D. ARTIFICIAL CERVICAL DISC REPLACEMENT involves the insertion of a prosthetic device into the cervical intervertebral space with the goal of maintaining physiologic motion at the treated cervical segment. The use of artificial discs in motion-preserving technology is based on the surgeon's preference and training. Only FDA-approved artificial discs and appropriate guidelines are recommended. Currently artificial discs have been approved for a single level but are anticipated to be approved for two or possibly more levels in the future.

E. PERCUTANEOUS RADIOFREQUENCY DISC DECOMPRESSION is not recommended.

F. EPIDUROSCOPY AND EPIDURAL LYSIS OF ADHESIONS - Refer to Therapeutic Injections.

G. INTRAOPERATIVE MONITORING is a common intraoperative electrodiagnostic technique that may include somatosensory evoked potentials (SSEP) and/or motor evoked potentials (MEP). The use of intraoperative monitoring in the cervical spine has been established, particularly with more complicated procedures, because of the potential for nerve-root and/or spinal-cord injury and is anticipated to become more commonly used.