

*National Imaging Associates, Inc.	
Clinical guidelines: THORACIC SPINE SURGERY	Original Date: July 2015
CPT Codes**: - Thoracic Spine Surgery: 22532, + 22534, 22556, 22585, 22610, + 22614, 22830, 63003, 63016, 63046, + 63048, 63055, + 63057, 63064, + 63066, 63077, + 63078 **See UM Matrix for allowable billed groupings and additional covered codes	Last Revised Date: December May 2023
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GENERAL INFORMATION

It is an expectation that all patients receive care/services from a licensed clinician. All appropriate supporting documentation, including recent pertinent office visit notes, laboratory data, and results of any special testing must be provided. If applicable: All prior relevant imaging results and the reason that alternative imaging cannot be performed must be included in the documentation submitted.

STATEMENT

Operative treatment is indicated when the natural history of surgically treated lesions is better than the natural history for non-operatively treated lesions. All operative interventions must be based on a positive correlation with clinical findings, the natural history of the disease, the clinical course, and diagnostic tests or imaging results. All individuals being considered for surgical intervention should receive a comprehensive neuromusculoskeletal examination to identify pain generators that may either respond to non-surgical techniques or may be refractory to surgical intervention.

Aggressive surgical approaches to fusion may be an indication for denial of cases (when such techniques have not been demonstrated to be superior to less morbid techniques) or recommendation for alternative procedure. Because of variable outcomes with fusion surgery, individuals should be actively involved in the decision-making process and provided appropriate decision-support materials explaining potential risks/benefits and treatment alternatives when considering this intervention.

Purpose

This guideline outlines the key surgical treatments and indications for common ~~lumbar~~thoracic spinal disorders and is a consensus document based upon the best available evidence. Spine surgery is a complex area of medicine, and this document breaks out the clinical indications by surgical type.

This guideline does not address spinal deformity surgeries or the clinical indications for spinal deformity surgery.

Scope

Spinal surgeries should be performed only by those with extensive surgical training (neurosurgery, orthopedic surgery). Choice of surgical approach is based on anatomy, pathology, and the surgeon's experience and preference.

Instrumentation, bone formation or grafting materials, including biologics, should be used at the surgeon's discretion; however, use should be limited to FDA approved indications regarding the specific devices or biologics.

INDICATIONS

All requests for thoracic spine surgery will be reviewed on a **case-by-case** basis. The following criteria **must** be met for consideration.

Decompression Surgery Only

- Positive clinical findings of myelopathy with evidence of progressive neurologic deficits consistent with worsening spinal cord compression – immediate surgical evaluation is indicated.^{1,2} Symptoms may include any of the following: [1, 2]
 - Lower extremity weakness
 - Unsteady gait related to myelopathy/balance or generalized lower extremity weakness
 - Disturbance with coordination
 - Hyperreflexia
 - Positive Babinski sign
 - Clonus; **OR**
- Progressive neurological deficit (motor deficit, bowel or bladder dysfunction) or lower extremity weakness or paralysis with corresponding evidence of spinal cord compression on a magnetic resonance imaging (MRI) or computed tomography (CT) scan images – immediate surgical evaluation is indicated; **OR**
- When **All** of the following criteria are met:
 - Persistent or recurrent symptoms/pain with functional limitations that are unresponsive to at least 6 consecutive weeks in the last 6 months of documented, physician-directed appropriate conservative treatment to include at least 2 of the following:
 - Analgesics, steroids, and/or NSAIDs
 - Structured program of physical therapy
 - Structured home exercise program prescribed by a physical therapist, chiropractic provider or physician
 - Epidural steroid injections and/or selective nerve root block; **AND**
 - Imaging studies confirm the presence of spinal cord or spinal nerve root compression at the level corresponding with the clinical findings (MRI or CT)

Thoracic Decompression With Fusion Surgery

- Deformity cases – please refer to our Deformity Spine Surgery (Adult) Guideline; **OR**
- For myelopathy or radiculopathy secondary to cord or root compression (see criteria described above) satisfying the indications for decompressive surgery requiring extensive decompression that results in destabilization of the thoracic spine^{1,2}

NOTE: There is no current evidence base to support fusion in the thoracic spine for degenerative disease without significant neurological compression or significant deformity as outlined above.

RELATIVE CONTRAINDICATIONS FOR SPINE SURGERY

- **Medical contraindications to surgery**, e.g., severe osteoporosis; infection of soft tissue adjacent to the spine, whether or not it has spread to the spine; severe cardiopulmonary disease; anemia; malnutrition and systemic infection [3]^{3,4}
- **Psychosocial risk factors**. It is imperative to rule out non-physiologic modifiers of pain presentation or non-operative conditions mimicking radiculopathy or instability (e.g., peripheral neuropathy, piriformis syndrome, myofascial pain, sympathetically mediated pain syndromes, sacroiliac dysfunction, psychological conditions, etc.) prior to consideration of elective surgical intervention [4]⁵
- **Active nicotine use prior to fusion surgery**. Individuals must refrain from nicotine use for at least six weeks prior to surgery and during the period of fusion healing [5]⁶⁻⁹
- **Morbid obesity**. Contraindication to surgery in cases where there is significant risk and concern for improper post-operative healing, post-operative complications related to morbid obesity, and/or an inability to participate in post-operative rehabilitation [6, 7]¹⁰

NOTE: Cases of severe myelopathy and progressive neurological dysfunction may require surgery despite these general contraindications.

BACKGROUND

Thoracic Decompression with or without fusion

Thoracic disc herniation with or without nerve root compression is usually treated conservatively (non-surgically). A back brace may be worn to provide support and limit back motion. Injection of local anesthetic and steroids around the spinal nerve (spinal nerve blocks) may be effective in relieving radicular pain. As symptoms subside, activity is gradually increased. This may include physical therapy and/or a home exercise program. Preventive and maintenance measures (e.g., exercise, proper body mechanics) should be continued indefinitely. Job modification may be necessary to avoid aggravating activities.

Simple laminectomy is rarely used in the treatment of thoracic disc herniation because of the high risk of neurologic deterioration and paralysis. Excision of the disc (discectomy) may be performed via several different surgical approaches –anteriorly, laterally, or transpedicular. Fusion should be performed only if surgery causes instability in the spinal column. Many newer techniques do not usually destabilize the thoracic spine.

POLICY HISTORY

Date	Summary
<u>December 2023</u>	<ul style="list-style-type: none"><u>Added Table of Contents</u><u>Updated references</u><u>Reconciled CPT code discrepancies</u>
May 2023	Added references
May 2022	No changes

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Reviewed / Approved by NIA Clinical Guideline Committee

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