

Subject: Thoracic Spine CT (72128, 72129, 72130)

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DESCRIPTION OF PROCEDURE/SERVICE/PHARMACEUTICAL

A Thoracic Spine CT

RECOMMENDATIONS

For most clinical indications, MRI is the preferred modality for imaging the spine and its related conditions. CT provides excellent bony details and is superior at evaluating spine fractures. CT imaging is also performed when MRI imaging is contraindicated.

Chronic Pain:

- Evaluation of chronic pain with recent documented (ending within the last 6 months) trial of conservative therapy for 6 weeks. *Conservative care consists of inactive treatments such as anti-inflammatory medications, activity modification, bracing, icing, etc. plus active treatments such as one of the following:
 - Physical Therapy
 - Chiropractic therapy
 - Provider supervised home exercise program
- Worsening pain or symptom progression during the course of conservative treatments.

Abnormal Neurologic Findings

- Weakness, abnormal reflexes, or dermatomal sensory change documented on physical exam
- Abnormal electromyography (EMG) or nerve conduction study (NCS) findings indicating a thoracic spine abnormality



- Atrophy of related muscles
- Scoliosis, when ordered by orthopedist or neurosurgeon and age of patient and severity of scoliosis on x-ray indicate bracing or surgery may be provided.

Signs of Thoracic Cord Compression (Myelopathy)

- Difficulty with balance and ambulation (unsteadiness, broad-based gait)
- Increased muscle tone
- Hyperreflexia
- Clonus
- Positive Babinski sign (toes up going in adult)
- Positive Hoffman's sign (flick test of middle finger)
- Diminished sensation to light touch, temperature, proprioception, vibration
- Bowel or bladder dysfunction

<u>Trauma</u>

- Blunt trauma to the spine with any abnormal neurological findings described above
- Failure to respond to a 6 week trial of *conservative care
- Worsening pain or symptom progression during the course of *conservative treatments
 - For evaluation of spinal fractures

Known or Suspected Tumor or Mass

- Initial evaluation of a recently diagnosed cancer
- Follow up of a known tumor or mass after completion of treatment or with new signs/symptoms
- Surveillance of a known tumor or mass according to accepted clinical standards.
- Severe bone pain with history of cancer
- Positive bone scan and/or x-rays suggestive for bone cancer (primary or metastatic)

Spine Issues Related to Immune System Suppression

• Evaluation of spine abnormalities related to immune system suppression, e.g. HIV, chemotherapy, leukemia, or lymphoma.

Spine Issues Related to Infection or Other Inflammatory Process

• Suspected infection, abscess, or inflammatory disease with fever, abnormal signs, symptoms, lab tests or other imaging findings.

Pre/Post Procedural

- Pre-operative evaluation when surgery is planned on the cervical spine
- Post-operative for routine recommended follow up or for potential post-operative complications.
- A repeat study may be needed to help evaluate a patient's progress after treatment procedure intervention or surgery. The reason for the repeat study and that it will affect care must be clear.

Congenital Conditions

- Known or suspected syrinx/syringomyelia when ordered by Neurologist, Orthopedist or Neurosurgeon
- Suspected tethered cord

<u>Multiple Sclerosis</u>



- Known Multiple Sclerosis (with symptoms or exam findings consistent with thoracic spine involvement)
 - Worsening or new symptoms without imaging in the past three months
 - Follow up of or surveillance of known disease and no imaging within the last year
 - Follow up of disease progression after a change in medications and no imaging in the last three months
- Suspected Multiple Sclerosis
 - For evaluation of patients with symptoms consistent with a possible diagnosis of multiple sclerosis with signs of thoracic myelopathy

<u>Other</u>

- Known or suspected spinal vascular lesion/malformation
- For CT myelogram or discogram

ADDITIONAL INFORMATION

The above medical necessity recommendations are used to determine the best diagnostic study based on a patient's specific clinical circumstances. The recommendations were developed using evidence based studies and current accepted clinical practices. Medical necessity will be determined using a combination of these recommendations as well as the patient's individual clinical or social circumstances.

- Tests that will not change treatment plans should not be recommended.
- Same or similar tests recently completed need a specific reason for repeat imaging.

REFERENCES USED FOR DETERMINATIONS

- 1. American College of Radiology. (2016). ACR Appropriateness Criteria® Retrieved from <u>https://acsearch.acr.org/list</u>.
- 2. Doyle R. Milliman Robertson Healthcare Guidelines. Vol. 4. Ambulatory Care Guidelines. Seattle, WA: Milliman; 1995; 2.54, 2.59-2.60.
- 3. Schiff D, O'Neill BP, Suman VJ. Spinal epidural metastasis as the initial manifestation of malignancy: clinical features and diagnostic approach. Neurology 1997; 49:452.
- 4. Rothman S. The diagnosis of infections of the spine by modern imaging techniques. Orthop Clin North Am. 1996; 27(1):15-31.
- 5. Loblaw DA, Laperriere NJ. Emergency treatment of malignant extradural spinal cord compression: an evidence-based guideline. J Clin Oncol 1998; 16:1613.
- 6. Association of early imaging for back pain with clinical outcomes in older adults. JAMA, 313(11), 1143-1153. doi: 10.1001/jama.2015.1871.
- 7. North American Spine Society. Five things physicians and patients should question. Choosing Wisely. Philadelphia, PA: American Board of Internal Medicine; 2013.
- 8. Hsu JM, Joseph T, Ellis AM. Thoracolumbar fracture in blunt trauma patients: guidelines for diagnosis and imaging. Injury. 2003; 34(6):426-433.
- 9. Chang CH, Holmes JF, Mower WR, Panacek EA. Distracting injuries in patients with vertebral injuries. J Emerg Med. 2005; 28(2):147-152.
- 10. Cheshire WP, Santos CC, Massey EW, Howard JF Jr. Spinal cord infarction: etiology and outcome. Neurology 1996; 47:321.
- 11. Muralidharan R, Saladino A, Lanzino G, et al. The clinical and radiological presentation of spinal dural arteriovenous fistula. Spine (Phila Pa 1976) 2011; 36:E1641.



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CPT	Description
72128	CT (Computed Tomography) Thoracic Spine without contrastCT (Computed Tomography)
	Thoracic Spine without contrast)
72129	CT (Computed Tomography) Thoracic Spine with contrastCT (Computed Tomography)
	Thoracic Spine with contrast)
72130	CT (Computed Tomography) Thoracic Spine without and with contrastCT (Computed
	Tomography) Thoracic Spine without and with contrast)