

G. SPINAL PAIN, SECTION 3: SPINAL AND RADICULAR PAIN SYNDROMES OF THE LUMBAR, SACRAL, AND COCCYGEAL REGIONS

N.B. For explanatory material on this section and on section D, Spinal and Radicular Pain Syndromes of the Cervical and Thoracic Regions, see pp. 11-16 of the list of Topics and Codes

GROUP XXVI: LUMBAR OR RADICULAR SPINAL PAIN SYNDROMES

In using this section, please refer back to the remarks upon Spinal and Radicular Pain Syndromes, pp. 11-16. Please note particularly the comments on coding at the top of sections IX and XXVI of the list of Topics and Codes, pp. 17 and 29.

Lumbar Spinal or Radicular Pain Attributable to a Fracture (XXVI-1)

Definition

Lumbar spinal pain occurring in a patient with a history of injury in whom radiography or other imaging studies demonstrate the presence of a fracture that can reasonably be interpreted as the cause of their pain.

Clinical Features

Lumbar spinal pain with or without referred pain.

Diagnostic Features

Radiographic or other imaging evidence of a fracture of one of the osseous elements of the lumbar vertebral column.

Schedule of Fractures

XXVI-1.1 (S)(R)

Fracture of a Vertebral Body

Code 533.X1aS/C 633.X1aR

XXVI-1.2(S)

Fracture of a Spinous Process

Code 533.X1bS

XXVI-1.3 (S)(R)

Fracture of a Transverse Process

Code 533.X1cS/C 633.X1cR

XXVI-1.4(S)(R)

Fracture of a Superior Articular Process

Code 533.X1dS/C 633.X1dR

XXVI-1.5(S)(R)

Fracture of an Inferior Articular Process

Code 533.X1eS/C 633.X1e

XXVI-1.6(S)(R)

Fracture of a Lamina (pars interarticularis)

Code 533.X1fS 633.X1fR

Lumbar Spinal or Radicular Pain Attributable to an Infection (XXVI-2)

Definition

Lumbar spinal pain occurring in a patient with clinical and/or other features of an infection, in whom the site of infection can be specified and which can reasonably be interpreted as the source of their pain.

Clinical Features

Lumbar spinal pain with or without referred pain, associated with pyrexia or other clinical features of infection.

Diagnostic Features

A presumptive diagnosis can be made on the basis of an elevated white cell count or other serological features of infection, together with imaging evidence of the presence of a site of infection in the lumbar vertebral column or its adnexa. Absolute confirmation relies on histological and/or bacteriological confirmation using material obtained by direct or needle biopsy.

Schedule of Sites of Infection

XXVI-2.1(S)(R)

Infection of a Vertebral Body (osteomyelitis)

Code 532.X2aS/C 632.X2aR

XXVI-2.2(S)(R)

Septic Arthritis of a Zygapophyseal Joint

Code 532.X2bS/C 632.X2bR

XXVI-2.3(S)(R)

Infection of a Paravertebral Muscle (e.g., psoas abscess)

Code 532.X2cS/C 632.X2cR

XXVI-2.4(S)(R)

Infection of an Intervertebral Disk (diskitis)

Code 532.X2dS/C 632.X2dR

XXVI-2.5(S)(R)

Infection of a Surgical Fusion-Site

Code 532.X2eS/C 632.X2eR

XXVI-2.6(S)(R)

Infection of a Retroperitoneal Organ or Space

Code 532.X2fS/C 632.X2fR

XXVI-2.7(S)(R)

Infection of the Epidural Space (epidural abscess)

Code 532.X2gS/C 632.X2gR

XXVI-2.8(S)(R)

Infection of the Meninges (meningitis)

Code 502.X2*S/C 602.X2cR

XXVI-2.9(S)(R)

Acute Herpes Zoster

Code 503.X2dS/C (low back)

Code 603.X2dR (leg)

XXVI-2.10(S)(R)

Postherpetic Neuralgia

Code 503.X2bS/C (low back)

Code 603.X2bR (leg)

Lumbar Spinal or Radicular Pain Attributable to a Neoplasm (XXVI-3)**Definition**

Lumbar spinal pain associated with a neoplasm that can reasonably be interpreted as the source of the pain.

Clinical Features

Lumbar spinal pain with or without referred pain.

Diagnostic Features

A presumptive diagnosis may be made on the basis of imaging evidence of a neoplasm that directly or indirectly affects one or other of the tissues innervated by lumbar spinal nerves. Absolute confirmation relies on obtaining histological evidence by direct or needle biopsy.

Schedule of Neoplastic Diseases

XXVI-3. I (S)(R)

Primary Tumor of a Vertebral Body

Code 533.X4aS/C 633.X4aR

XXVI-3.2(S)(R)

Primary Tumor of Any Part of a Vertebra Other than Its Body

Code 533.X4bS/C 633.X4bR

XXVI-3.3(S)(R)

Primary Tumor of a Zygapophysial Joint

Code 533.X4cS/C 633.X4cR

XXVI-3.4(S)(R)

Primary Tumor of a Paravertebral Muscle

Code 533.X4dS/C 633.X4dR

XXVI-3.5(S)(R)

Primary Tumor of Epidural Fat (e.g., lipoma)

Code 533.X4eS/C 633.X4eR

XXVI-3.6(S)(R)

Primary Tumor of Epidural Vessels (e.g., angioma)

Code 533.X4fS/C 633.X4fR

XXVI-3.7(S)(R)

Primary Tumor of Meninges (e.g., meningioma)

Code 503.X4aS/C 603.X4aR

XXVI-3.8(S)(R)

Primary Tumor of a Spinal Nerve (e.g., neurofibroma, schwannoma, neuroblastoma)

Code 503.X4bS/C 603.X4bR

Code 503.X4cS/C 603.X4cR

XXVI-3.9(S)(R)

Primary Tumor of Spinal Cord (e.g., glioma)

Code 533.X4gS/C 633.X4gR

XXVI-3.10(S)(R)

Metastatic Tumor Affecting a Vertebra

Code 533.X4hS/C 633.X4hR

XXVI-3.11 (S)(R)

Metastatic Tumor Affecting the Vertebral Canal

Code 533.X4iS/C 633.X4iR

XXVI-3.12(S)(R)

Other Infiltrating Neoplastic Disease of a Vertebra (e.g., lymphoma)

Code 533.X4jS/C 633.X4jR

Lumbar Spinal or Radicular Pain Attributable to Metabolic Bone Disease (XXVI-4)

Definition

Lumbar spinal pain associated with a metabolic bone disease that can reasonably be interpreted as the source of the pain.

Clinical Features

Lumbar spinal pain with or without referred pain.

Diagnostic Features

Imaging or other evidence of metabolic bone disease affecting the lumbar vertebral column, confirmed by appropriate serological or biochemical investigations and/or histological evidence obtained by needle or other biopsy.

Schedule of Metabolic Bone Diseases

XXVI-4. 1(S)(R)

Osteoporosis of Age

Code 532.X5aS/C 632.X5aR

XXVI-4.2(S)(R)

Osteoporosis of Unknown Cause

Code 532.X5bS/C 632.X5bR

XXVI-4.3(S)(R)

Osteoporosis of Some Known Cause Other than Age

Code 532.X5cS/C 632.X5cR

XXVI-4.4(S)(R)

Hyperparathyroidism

Code 532.X5dS/C 632.X5dR

XXVI-4.5 (S)(R)

Paget's Disease of Bone

Code 532.X5eS/C 632.X5eR

XXVI-4.6(S)(R)

Metabolic Disease of Bone Not Otherwise Classified

Code 532.X5fS/C 632.X5fR

Lumbar Spinal or Radicular Pain Attributable to Arthritis (XXVI-5)

Definition

Lumbar spinal pain associated with arthritis that can reasonably be interpreted as the source of the pain.

Clinical Features

Lumbar spinal pain with or without referred pain.

Diagnostic Features

Imaging or other evidence of arthritis affecting the joints of the lumbar vertebral column.

Schedule of Arthritides

XXVI-5. I (S)(R)

Rheumatoid Arthritis

Code 534.X3aS/C 634.X3aR

XXVI-5.2(S)(R)

Ankylosing Spondylitis

Code 532.X8*S/C 632.X8*R

XXVI-5.3 (S)(R)

Osteoarthritis

Code 538.X6aS/C 638.X6aR

XXVI-5.4(S)(R)

Seronegative Spondyloarthropathy Not Otherwise Classified

Code 532.X8bS/C 623.X8bR

Remarks

Osteoarthritis is included in this schedule with some hesitation because there is only a weak relation between pain and this condition as diagnosed radiologically.

The alternative classification to “lumbar spinal pain due to osteoarthrosis” should be “lumbar zygapophysial joint pain” if the criteria for this diagnosis are satisfied (see XXVI-13) or “lumbar spinal pain of unknown or uncertain origin” (see XXVI-9).

Similarly, the condition of “spondylosis” is omitted from this schedule because there is no positive correlation between the radiographic presence of this condition and the presence of spinal pain. There is no evidence that this condition represents anything more than age-changes in the vertebral column.

References

Lawrence JS, Bremner JM, Bier F. Osteoarthrosis: prevalence in the population and relationship between symptoms and X-ray changes. *Ann Rheum Dis* 1966;25:1–24.

Magora A, Schwartz TA. Relation between the low back pain syndrome and X-ray findings. *Scand J Rehab Med* 1976;8:115–25.

Lumbar Spinal or Radicular Pain Associated with a Congenital Vertebral Anomaly (XXVI-6)

Definition

Lumbar spinal pain associated with a congenital vertebral anomaly.

Clinical Features

Lumbar spinal pain with or without referred pain.

Diagnostic Features

Imaging evidence of a congenital vertebral anomaly affecting the lumbar vertebral column.

Remarks

There is no evidence that congenital anomalies per se cause pain. Although they may be associated with pain, the specificity of this association is unknown. This classification should be used only when the cause of pain cannot be otherwise specified, but should not be used to imply that the congenital anomaly is the actual source of pain.

Code

523.XOaS/C 623.XOaR

Pseudarthrosis of a Transitional Vertebra (XXVI-7)

Definition

Lumbar spinal or radicular pain stemming from a pseudarthrosis formed by a transitional vertebra.

Clinical Features

Lumbar, lumbosacral, or sacral spinal pain.

Diagnostic Criteria

The pseudarthrosis must be evident radiographically, and must be shown to be symptomatic by having the pain relieved upon selective anesthetization of the pseudarthrosis, provided that the local anesthetic injected does not spread to affect other structures that might constitute an alternative source of the patient's pain.

Pathology

Periostitis as a result of repeated contact between the two bones, progressing to sclerosis of the contact sites of the two bones.

Remarks

The majority of pseudarthroses between transitional vertebrae are asymptomatic. Consequently, the radiographic presence of a pseudarthrosis in a patient with spinal pain is insufficient grounds alone to justify the diagnosis. The pseudarthrosis must be shown to be symptomatic.

Reference

Jonsson B, Stromqvist B, Egund N. Anomalous lumbosacral articulations and low-back pain: evaluation and treatment. *Spine* 1989;14:831-4.

Code

523.XObS/C

623.XObR

Pain Referred From Abdominal Viscera or Vessels and Perceived as Lumbar Spinal Pain (XXVI-8)**Definition**

Lumbar spinal pain associated with disease of an abdominal viscus or vessel that reasonably can be interpreted as the source of pain.

Clinical Features

Lumbar spinal pain with or without referred pain, together with features of the disease affecting the viscus or vessel concerned.

Diagnostic Features

Reliable evidence of the primary disease affecting an abdominal viscus or vessel.

Schedule of Diseases

- XXVI-8.1 Aortic Aneurysm (See also XVII-7)
Code 522.X6
- XXVI-8.2 Gastric Ulcer (See also XXI-4)
Code 555.X3a
- XXVI-8.3 Duodenal Ulcer (See also XXI-5)
Code 555.3Xb
- XXVI-8.4 Mesenteric Ischemia (See also XXI-8)

XXVI-8.5	Code 555.X5 Pancreatitis (See also XXI-19) Code 553.XXf
XXVI-8.6	Perforation of a Retroperitoneal Organ Code 552.X3

Lumbar Spinal Pain of Unknown or Uncertain Origin (XXVI-9)

Definition

Lumbar spinal pain occurring in a patient who has not previously undergone surgery for that pain whose clinical features and associated features do not enable the cause and source of the pain to be determined, and whose cause or source cannot be or has not been determined by special investigations.

Clinical Features

Lumbar spinal pain with or without referred pain.

Diagnostic Features

Lumbar spinal pain for which no other cause has been found or can be attributed.

Pathology

Unspecified.

Remarks

This definition is intended to cover those complaints that for whatever reason currently defy conventional diagnosis. It does not encompass pain of psychological origin. It presupposes an organic basis for the pain but one that cannot be or has not been established reliably by clinical examination or special investigations, such as imaging techniques or diagnostic blocks.

This diagnosis may be used as a temporary diagnosis. Patients given this diagnosis could in due course be accorded a more definitive diagnosis once appropriate diagnostic techniques are devised or applied. In some instances, a more definitive diagnosis might be attainable using currently available techniques, but for logistic or ethical reasons these may not have been applied.

Upper Lumbar Spinal Pain of Unknown or Uncertain Origin (XXVI-9.1)

Definition

As for XXVI-9 but the pain is located in the upper lumbar region.

Clinical Features

Spinal pain located in the upper lumbar region.

Diagnostic Features

As for XXVI-9, save that the pain is located in the upper lumbar region.

Pathology

As for XXVI-9.

Remarks

As for XXVI-9.

Code 5XX.X8cS

Lower Lumbar Spinal Pain of Unknown or Uncertain Origin (XXVI-9.2)

Definition

As for XXVI-9 but the pain is located in the lower lumbar region.

Clinical Features

Spinal pain located in the lower lumbar region.

Diagnostic Features

As for XXVI-9, save that the pain is located in the lower lumbar region.

Pathology

As for XXVI-9.

Remarks

As for XXVI-9.

Code

5XX.X8dS

Lumbosacral Spinal Pain of Unknown or Uncertain Origin (XXVI-9.3)

Definition

As for XXVI-9 but the pain is located in the lumbosacral region.

Clinical Features

Spinal pain located in the lumbosacral region.

Diagnostic Features

As for XXVI-9, save that the pain is located in the lumbosacral region.

Pathology

As for XXVI-9.

Remarks

As for XXVI-9.

Code 5XX.X8eS

Lumbar Spinal or Radicular Pain after Failed Spinal Surgery (XXVI-10)

Definition

Lumbar spinal pain of unknown origin either persisting despite surgical intervention or appearing after surgical intervention for spinal pain originally in the same topographical location.

Clinical Features

Lumbar spinal pain occurring alone or in association with referred pain or radicular pain.

Diagnostic Criteria

As for lumbar spinal pain of unknown origin with the exception that the patient's history now includes an unsuccessful attempt at treating the pain in the same region by surgical means.

Pathology

Unknown.

Remarks

This diagnosis has been formulated as an entity distinct from lumbar spinal pain of unknown origin to accommodate beliefs that the failed attempt at surgical therapy complicates the patient's condition pathologically, psychologically, or both.

Conjectures may be raised as to the possible origin of this form of pain, such as neuroma formation, deafferentation, epidural scarring, etc., but until reliable diagnostic techniques are developed whereby these or similar conditions can be confirmed objectively, any attempt at diagnosis can only be presumptive.

The diagnosis does not apply if a patient presents with spinal pain that is not associated both topographically and temporally with the spinal surgery. In that case, the spinal pain should be accorded a separate diagnosis; the previous spinal pain treated surgically should be considered only as part of the patient's general medical history.

Code

533.XlgS/C

632.XlhR

Lumbar Discogenic Pain (XXVI-11)

Definition

Lumbar spinal pain, with or without referred pain, stemming from a lumbar intervertebral disk.

Clinical Features

Spinal pain perceived in the lumbar region, with or without referred pain to the lower limb girdle or lower limb.

Diagnostic Criteria

The patient's pain must be shown conclusively to stem from an intervertebral disk by demonstrating either

- (1) that selective anesthetization of the putatively symptomatic intervertebral disk completely relieves the patient of the accustomed pain for a period consonant with the expected duration of action of the local anesthetic used;
- or
- (2) that selective anesthetization of the putatively symptomatic intervertebral disk substantially relieves the patient of the accustomed pain for a period consonant with the expected duration of action of the local anesthetic used, save that whatever pain persists can be ascribed to some other coexisting source or cause;
- or
- (3) provocation diskography of the putatively symptomatic disk reproduces the patient's accustomed pain, but provided that provocation of at least two adjacent intervertebral disks clearly does not reproduce the patient's pain, and provided that the pain cannot be ascribed to some other source innervated by the same segments that innervate the putatively symptomatic disk.

Pathology

Unknown, but presumably the pain arises as a result of chemical or mechanical irritation of the nerve

endings in the outer anulus fibrosus, initiated by injury to the anulus, or as a result of excessive stresses imposed on the anulus by injury, deformity, or other disease within the affected segment or adjacent segments.

Remarks

Provocation diskography alone is insufficient to establish conclusively a diagnosis of discogenic pain because of the propensity for false-positive responses either because of apprehension on the part of the patient or because of the coexistence of a separate source of pain within the segment under investigation. If analgesic diskography is not performed or is possibly false-negative, criterion (3) must be explicitly satisfied. Otherwise, the diagnosis of “discogenic pain” cannot be sustained, whereupon an alternative classification must be used.

Code

533.X1iS	Trauma
533.X6aS	Degenerative
533.X7cS	Dysfunctional

References

Bernard TN. Lumbar discography followed by computed tomography: refining the diagnosis of low-back pain. *Spine* 1990;15:690–707.

Bogduk N. The lumbar disc and low back pain. *Neurosurg Clin North Am* 1991;2:791–806.

Executive Committee of the North American Spine Society. Position statement on discography. *Spine* 1988;13:1343.

Simmons JW, Aprill CN, Dwyer A P, Brodsky AE. A reassessment of Holt’s data on “the question of lumbar discography.” *Clin Orthop* 1988;237:120–4.

Walsh TR, Weinstein JN, Spratt KF, Lehmann TR, Aprill C, Sayre H. Lumbar discography in normal subjects. *J Bone Joint Surg* 1990;72A:1081–8.

Internal Disk Disruption (XXVI-12)

Definition

Lumbar spinal pain, with or without referred pain, stemming from an intervertebral disk, caused by internal disruption of the normal structural and biochemical integrity of the symptomatic disk.

Clinical Features

Lumbar spinal pain, with or without referred pain in the lower limb girdle or lower limb; aggravated by movements that stress the symptomatic disk.

Diagnostic Criteria

The diagnostic criteria for lumbar discogenic pain must be satisfied, and in addition, CT-diskography must demonstrate a grade 3 or greater grade of anular disruption as defined by the Dallas diskogram scale.

Pathology

The pathology of internal disk disruption is believed to be due to enzymatic degradation of the internal disk matrix. Initially, the degradation is restricted to the nucleus pulposus, but eventually it progresses in a centrifugal pattern along radial fissures into the anulus fibrosus. Biochemically the process involves activation of enzymes such as proteinases, cathepsin, and collagenase. Biophysically the process is characterized by denaturation and deaggregation of proteoglycans and diminished water-binding capacity of the nucleus pulposus.

The causes of disk degradation are still speculative but possibly involve disinhibition of proteolytic enzymes systems endogenous to the disk as a result of impaired nutrition to the disk or injuries to the vertebral endplate.

Pain arises as a result of chemical or mechanical stimulation of the nerve endings located in the outer third or outer half of the annulus fibrosus, and is aggravated by any movements that stress these portions of the annulus.

Code

533.XItS	Trauma
533.X6bS	Degenerative
533.X7*S	Dysfunctional

References

Bernard TN. Lumbar discography followed by computed tomography: refining the diagnosis of low-back pain. *Spine* 1990;15:690–707.

Bogduk N. The lumbar disc and low back pain. *Neurosurg Clin North Am* 1991;2:791–806.

Crock HV. Internal disc disruption: a challenge to disc prolapse 50 years on. *Spine* 1986;11:650–3.

Vanharanta H, Sachs BL, Spivey MA, Guyer RD, Hochschuler SH, Rashbaum RF, Johnson RG, Ohnmeiss D, Mooney V. The relationship of pain provocation to lumbar disc deterioration as seen by CT/discography. *Spine* 1987;12:295–8.

Lumbar Zygapophysial Joint Pain (XXVI-13)

Definition

Lumbar spinal pain, with or without referred pain, stemming from one or more of the lumbar zygapophysial joints.

Clinical Features

Lumbar spinal pain with or without referred pain.

Diagnostic Criteria

No criteria have been established whereby zygapophysial joint pain can be diagnosed on the basis of the patient's history or by conventional clinical examination. The condition can be diagnosed only by the use of diagnostic, intraarticular zygapophysial joint blocks. For the diagnosis to be declared, all of the following criteria must be satisfied.

1. The blocks must be radiologically controlled.
2. Arthrography must demonstrate that any injection has been made selectively into the target joint, and any material that is injected into the joint must not spill over into adjacent structures that might otherwise be the actual source of the patient's pain.
3. The patient's pain must be totally relieved following the injection of local anesthetic into the target joint.
4. A single positive response to the intraarticular injection of local anesthetic is insufficient for the diagnosis to be declared. The response must be validated by an appropriate control test that excludes false-positive responses on the part of the patient, such as:
 - no relief of pain upon injection of a nonactive agent;
 - no relief of pain following the injection of an active local anesthetic into a site other than the target joint; or
 - a positive but differential response to local anesthetics of different durations of action

injected into the target joint on separate occasions.

Local anesthetic blockade of the nerves supplying a target zygapophysial joint may be used as a screening procedure to determine in the first instance whether a particular joint might be the source of symptoms, but the definitive diagnosis may be made only upon selective, intraarticular injection of the putatively symptomatic joint.

Pathology

Still unknown. May be due to small fractures not evident on plain radiography or conventional computerized tomography, but possibly demonstrated on high-resolution CT, conventional tomography, or stereoradiography. May be due to osteoarthritis, but the radiographic presence of osteoarthritis is not a sufficient criterion for the diagnosis to be declared. Zygapophysial joint pain may be caused by rheumatoid arthritis, ankylosing spondylitis, septic arthritis, or villo-nodular synovitis.

Sprains and other injuries to the capsule of zygapophysial joints have been demonstrated at post mortem and may be the cause of pain in some patients, but these types of injuries cannot be demonstrated in vivo using currently available imaging techniques.

Remarks

See also XXVI-17, Lumbar Segmental Dysfunction.

Code

Trauma	533.X1kS/C	633.X1*R
Degenerative	533.X6oS/C	633.X6aR

References

- Bough B, Thakore J, Davies M, Dowling F. Degeneration of the lumbar facet joints: arthrography and pathology. *J Bone Joint Surg* 1990;72B:275-6.
- Carette S, Marcoux S, Truchon R, Grondin C, Gagnon J, Allard Y, Latulippe M. A controlled trial of corticosteroid injections into facet joints for chronic low back pain. *New Engl J Med* 1991;325:1002-7.
- Carrera GF, Williams AL. Current concepts in evaluation of the lumbar facet joints. *Crit Rev Diagn Imaging* 1984;21:85-104.
- Eisenstein SM, Parry CR. The lumbar facet arthrosis syndrome, *J Bone Joint Surg* 1987;69B:3-7.
- Fairbank JCT, Park WM, McCall IW, O'Brien JP. Apophyseal injection of local anesthetic as a diagnostic aid in primary low-back pain syndromes. *Spine* 1981;6:598-605.
- Helbig T, Lee CK. The lumbar facet syndrome. *Spine* 1988;13:61-4.
- Lewinnek GE, Warfield CA. Facet joint degeneration as a cause of low back pain. *Clin Orthop* 1986;213:216-22.
- Lippit AB. The facet joint and its role in spine pain: management with facet joint injections. *Spine* 1984;9:746-50.
- Marks R. Distribution of pain provoked from lumbar facet joints and related structures during diagnostic spinal infiltration. *Pain* 1989;39:37-40.
- Mooney V, Robertson J. The facet syndrome. *Clin Orthop* 1976;115:149-56.
- Moran R, O'Connell D, Walsh MG. The diagnostic value of facet joint injections. *Spine* 1986;12:1407-10.
- Twomey LT, Taylor JR, Taylor MM. Unsuspected damage to lumbar zygapophyseal (facet) joints after motor vehicle accidents. *Med J Aust* 1989;151:210-7.

Lumbar Muscle Sprain (XXVI-14)

Definition

Lumbar spinal pain stemming from a lesion in a specified muscle caused by strain of that muscle beyond its normal physiological limits.

Clinical Features

Lumbar spinal pain, with or without referred pain, associated with tenderness in the affected muscle and aggravated by either passive stretching or resisted contraction of that muscle.

Diagnostic Criteria

The following criteria must all be satisfied.

1. The affected muscle must be specified.
2. A history of activities consistent with the affected muscle having been strained.
3. The muscle is tender to palpation.
4. (a) Aggravation of the pain by any clinical test that can be shown to selectively stress the affected muscle, or
(b) Selective infiltration of the affected muscle with local anesthetic completely relieves the patient's pain.

Pathology

Rupture of muscle fibers, usually near their myotendinous junction, that elicits an inflammatory repair response.

Remarks

This nosological entity has been included in recognition of its frequent use in clinical practice, and because "muscle sprain" is readily diagnosed in injuries of the limbs. However, in the context of spinal pain this entity is only presumptive, since no clinical test for spinal muscle sprain has been validated.

Code

533.X11S

References

Fairbank JCT, O'Brien JP. Iliac crest syndrome: a treatable cause of low-back pain. *Spine* 1983;8:220-4.

Garrett WE, Saffrean MR, Seaber AV, Glisson RR, Ribbeck BM. Biomechanical comparison of stimulated and non-stimulated skeletal muscle pulled to failure. *Am J Sports Med* 1987;15:448-54.

Garrett WE, Nikolau PK, Ribbeck BM, Glisson RR, Seaber AV. The effect of muscle architecture on the biomechanical failure properties of skeletal muscle under passive tension. *Am J Sports Med* 1988;16:7-12.

Ingpen ML, Burry HC. A lumbo-sacral strain syndrome. *Ann Phys Med* 1970;10:270-4.

Nikolau PK, MacDonald BL, Glisson RR, Seaber AV, Garrett WE Jr. Biomechanical and histological evaluation of muscle after controlled strain injury. *Am J Sports Med* 1987;15:9-14.

Lumbar Trigger Point Syndrome (XXVI-15)

Definition

Lumbar spinal pain stemming from a trigger point or trigger points in one or more of the muscles of the lumbar spine.

Clinical Features

Lumbar spinal pain, with or without referred pain, associated with a trigger point in one or more muscles of the lumbar vertebral column.

Diagnostic Criteria

The following criteria must all be satisfied.

1. A trigger point must be present in a muscle, consisting of a palpable, tender, firm, fusiform nodule oriented in the direction of the affected muscle's fibers.
2. The muscle must be specified.
3. Palpation of the trigger point reproduces the patient's pain and/or referred pain.
4. Elimination of the trigger point relieves the patient's pain. Elimination may be achieved by stretching the affected muscle, dry needling the trigger point, or infiltrating it with local anesthetic.

Pathology

Unknown. Trigger points are believed to represent areas of contracted muscle that have failed to relax as a result of failure of calcium ions to sequester. Pain arises as a result of the accumulation of algogenic metabolites.

Remarks

For the diagnosis to be accorded, the diagnostic criteria for a trigger point must be fulfilled. Simple tenderness in a muscle without a palpable band does not satisfy the criteria, whereupon an alternative diagnosis must be accorded, such as muscle sprain, if the criteria for that condition are fulfilled, or spinal pain of unknown origin.

Schedule of Trigger Point Sites

XXVI-15.1(5)

Multifidus

Code 532.X1aS

XXVI-15.2(S)

Longissimus Thoracis

Code 532.X1bS

XXVI-15.3(S)

Iliocostalis Lumborum

Code 532.X1cS

XXVI-15.4(5)

Lumbar Trigger Point Not Otherwise Specified

Code 532.X1*S

References

Simons DG. Myofascial pain syndromes: Where are we? Where are we going? Arch Phys Med Rehab 1988;69:207-12.

Travell JG, Simons DG. Myofascial pain and dysfunction: the trigger point manual. Baltimore: Williams & Wilkins; 1983.

Lumbar Muscle Spasm (XXVI-16)

Definition

Lumbar spinal pain resulting from sustained or repeated involuntary activity of the lumbar spinal muscles.

Clinical Features

Lumbar spinal pain for which there is no other underlying cause, associated with demonstrable sustained muscle activity.

Diagnostic Features

Palpable spasm is usually found at some time, most often in the paravertebral muscles.

Pathology

Unknown. Presumably sustained muscle activity prevents adequate wash-out of algogenic chemicals produced by the sustained metabolic activity of the muscle.

Remarks

While there are beliefs in a pain-muscle spasm-pain cycle, clinical tests or conventional electromyography have not been shown to demonstrate reliably the presence of sustained muscle activity in such situations. The strongest evidence for repeated involuntary muscle spasm stems from sleep-EMG studies conducted on patients with low-back pain, but although it is associated with back pain a causal relationship between this type of muscle activity and back pain has not been established.

Code

532.XItS	Trauma
532.X2hS	Infection
532.X4aS	Neoplasm
532.X6aS	Degenerative
532.X7dS	Dysfunctional
532.X8fS	Unknown

References

Fischer AA, Chang CH. Electromyographic evidence of paraspinal muscle spasm during sleep in patients with low back pain. *Clin J Pain* 1985;1:147-54.

Garrett W, Anderson G, Richardson W, et al. Muscle: future directions. In: Frymoyer JW, Gordon SL; American Academy of Orthopaedic Surgeons; National Institute of Arthritis and Musculoskeletal and Skin Diseases (U.S.); North American Spine Society, editors. *New Perspectives on Low Back Pain: workshop*, Airlie, Virginia, May 1988. Park Ridge, IL: The Academy; 1989. p. 373-9.

Garrett W, Bradley W, Byrd S, Edgerton VR, Gollnick P. Muscle: basic science perspectives. In: Frymoyer JW, Gordon SL; American Academy of Orthopaedic Surgeons; National Institute of Arthritis and Musculoskeletal and Skin Diseases (U.S.); North American Spine Society, editors. *New Perspectives on Low Back Pain: workshop*, Airlie, Virginia, May 1988. Park Ridge, IL: The Academy; 1989. p. 335-72.

Roland MO. A critical review of the evidence for a pain-spasm-pain cycle in spinal disorders. *Clin Biomech* 1986;1:102-9.

Lumbar Segmental Dysfunction (XXVI-17)

Definition

Lumbar spinal pain ostensibly due to excessive strains imposed on the restraining elements of a single spinal motion segment.

Clinical Features

Lumbar spinal pain, with or without referred pain, that can be aggravated by selectively stressing a particular spinal segment.

Diagnostic Criteria

All the following criteria should be satisfied.

1. The affected segment must be specified.
2. The patient's pain is aggravated by clinical tests that selectively stress the affected segment.
3. Stressing adjacent segments does not reproduce the patient's pain.

Pathology

Unknown. Presumably involves excessive strain imposed by activities of daily living on structures such as the ligaments, joints, or intervertebral disk of the affected segment.

Remarks

This diagnosis is offered as a partial distinction from spinal pain of unknown origin in so far as the source of the patient's pain can at least be narrowed to a particular offending segment. Further investigation of a patient accorded this diagnosis might result in the patient's condition being ascribed a more definitive diagnosis such as discogenic pain or zygapophysial joint pain, but the diagnosis of segmental dysfunction could be applied if facilities for undertaking the appropriate investigations are not available, if the physician or patient does not wish to pursue such investigations, or if the pain arises from multiple sites in the same segment rendering investigation futile or meaningless.

For this diagnosis to be sustained it is critical that the clinical tests used be shown to be able to stress selectively the segment in question and to have acceptable interobserver reliability. To date, no studies have established validity for any techniques purported to demonstrate segmental dysfunction.

Code

533.X1hS

533.X7eS

Lumbar Ligament Sprain (XXVI-18)**Definition**

Lumbar spinal pain stemming from a lesion in a specified ligament caused by strain of that ligament beyond its normal physiological limit.

Clinical Features

Lumbar spinal pain, with or without referred pain, aggravated by active or passive movements that strain the affected ligament.

Diagnostic Criteria

All the following criteria should be satisfied; otherwise the diagnosis can only be presumptive.

1. The affected ligament must be specified.
2. A history of an acute or chronic mechanical disturbance of the vertebral column which would be expected to have strained the specified ligament.
3. Aggravation of the pain by any clinical test that has been shown to stress the specified ligament selectively, or
 - (b) Aggravation of the pain by a combination of clinical tests each of which stresses several ligaments or other structures but which have only the specified ligament in common, or
 - (c) Selective infiltration of the putatively symptomatic ligament with local anesthetic under radiographic control completely relieves the patients pain.

Pathology

Unknown and unstudied. Presumably partial rupture of the collagen fibers of the ligament at a microscopic or macroscopic level causes inflammation of the injured part. May involve sustained strain of the ligament at the limit of its physiological range at a length short of partial failure but sufficient to elicit nociceptive stimulation consistent with impending damage to the ligament.

Remarks

Any clinical tests or local anesthetic infiltration of the ligament must be shown to be specific for that ligament. Any conventional or otherwise established clinical tests must have been shown to have good interobserver reliability.

Ligament sprain is an acceptable diagnosis in the context of injuries of the joints of the appendicular skeleton because the affected ligament is usually accessible to palpation for tenderness and because the ligament can be selectively stressed by passive movements of the related limb segments. However, this facility does not pertain to the lumbar spine. Lumbar ligaments are either impalpable or difficult to stress selectively. Hence the diagnosis is somewhat conjectural.

Code

533.XlmS

Sprain of the Anulus Fibrosus (XXVI19)

Definition

Lumbar spinal pain arising from a lesion in the anulus fibrosus of an intervertebral disk caused by excessive strain of the anulus fibrosus.

Clinical Features

Lumbar spinal pain, with or without referred pain, aggravated by movements that stress an anulus fibrosus, associated with a history compatible with singular or cumulative injury to the anulus fibrosus.

Diagnostic Criteria

The following criteria must be fulfilled.

1. The affected anulus fibrosus must be specified.
2. A history of activities or injury consistent with the affected anulus fibrosus having been strained.
3. (a) Aggravation of the pain by clinical tests that selectively stress the affected anulus fibrosus, or
(b) Relief of the patient's pain upon selectively infiltrating the affected anulus fibrosus with local anesthetic.

Pathology

Analogous to ligament sprain. Partial or complete tears of the anulus fibrosus in a location consistent with the nature of the precipitating stress; typically: circumferential tears of the outer layers of the anulus fibrosus caused by excessive combined flexion and rotation of the affected segment. Pain arises either as a result of an inflammatory repair response to the injured collagen fibers or as a result of excessive strain imposed by activities of daily living on the remaining, intact collagen fibers of the anulus fibrosus, which alone are insufficient to sustain these loads within their accustomed, normal physiological limits.

Remarks

Any clinical test used to diagnose sprain of the anulus fibrosus should be shown to be valid and reliable. To date, no such test has been developed. Consequently, until this is done this entity must remain conjectural. Such clinical tests as have been advocated for this condition (Farfan 1985) have not been assessed for validity.

Code

533.XlnS

Reference

Farfan HF. The use of mechanical etiology to determine the efficacy of active intervention in single joint lumbar intervertebral joint problems. *Spine* 1985;10:350–8.

Interspinous Pseudarthrosis (Kissing Spines, Baastrup's Disease) (XXVI-20)

Definition

Lumbar spinal pain stemming from a pseudarthrosis formed between consecutive lumbar spinous processes.

Clinical Features

Lumbar, lumbosacral, or sacral spinal pain associated with midline tenderness over the affected interspinous space, the pain being aggravated by extension of that segment of the vertebral column.

Diagnostic Criteria

The pseudarthrosis must be evident radiographically and must be shown to be symptomatic by having the pain relieved upon selective anesthetization of the pseudarthrosis, provided that the local anesthetic injected does not spread to affect other structures that might constitute an alternative source of the patient's pain.

Pathology

Periostitis as a result of repeated contact between the two bones, progressing to sclerosis of the contact sites of the two bones.

Remarks

The radiographic presence of a pseudarthrosis in a patient with spinal pain is insufficient grounds alone to justify the diagnosis. The pseudarthrosis must be shown to be symptomatic. Relief of pain following infiltration of local anesthetic into the lesion is not necessarily attended by relief following surgical treatment.

Code

533.X1oS

Reference

Beks JWF. Kissing spines: fact or fancy? *Acta Neurochir* 1989;100:134–5.

Lumbar Instability (XXVI-21)

Definition

Lumbar spinal pain ostensibly due to excessive or abnormal motion of lumbar motion segment that exhibits decreased stiffness (Pope and Panjabi 1985) or an increased neutral zone (Panjabi et al. 1989).

Clinical Features

Lumbar spinal pain, with or without referred pain, that can be aggravated by movements that stress the affected spinal segment, accompanied by radiographic evidence of instability.

Diagnostic Criteria

No universally accepted criteria exist for the clinical or radiographic diagnosis of instability, but for this classification to be used, one of the sets of criteria proposed in the literature must be satisfied, such as those of Posner et al. (1982), Kalebo et al. (1990), or Nachemson (1991).

Pathology

Loss of stiffness in one or more of the elements of a lumbar motion segment that resist translation, rotation, or both. The pain presumably arises as a result of excessive stresses being imposed by movement

on structures such as the ligaments, joints, or anulus fibrosus of the affected segment.

Remarks

No studies have revealed exactly what the source of pain is in unstable lumbar motion segments nor what the mechanism of pain production is. This diagnosis is, therefore, offered only as one of association between lumbar spinal pain and demonstrable movement abnormalities. No studies have vindicated any clinical test for instability. Consequently, the diagnosis can be sustained only if the radiographic criteria are strictly satisfied. At the time of writing, although such criteria have been enunciated, reservations have also been raised about the internal and external reliability of measurements made on radiographs of the type used to demonstrate instability (Shaffer et al. 1990).

Code

533.X7jS

References

- Kalebo P, Kadzialka R, Sward L. Compression-traction radiography of lumbar segmental instability. *Spine* 1990;15:351–5.
- Nachemson AL. Instability of the lumbar spine: pathology, treatment, and clinical evaluation. *Neurosurg Clin N Am* 1991;2:785–90.
- Panjabi M, Abumi K, Duranceau J, Oxland T. Spinal stability and intersegmental muscle forces in a biomechanical model. *Spine* 1989;14:194–200.
- Pope MH, Panjabi M. Biomechanical definitions of spinal instability. *Spine* 1985;10:255–6.
- Posner I, White AA, Edwards WT, Hayes WC. A biomechanical analysis of the clinical stability of the lumbar and lumbosacral spine. *Spine* 1982;7:374–89.
- Shaffer WO, Spratt KF, Weinstein J, Lehmann TR, Goel V. The consistency and accuracy of roentgenograms for measuring sagittal translation in the lumbar vertebral motion segment: an experimental model. *Spine* 1990;15:741–50.

Spondylolysis (XXVI-22)

Definition

Lumbar spinal pain arising from a painful pars interarticularis defect.

Clinical Features

Lumbar spinal pain, with or without referred pain, in association with a radiographically demonstrable pars interarticularis defect that has been shown to be the source of the patient's pain.

Diagnostic Criteria

The patient's pain should be fully or substantially relieved upon anesthetization of the pars interarticularis defect using a procedure that ensures that no other structure is anesthetized that might alternatively be the source of the patient's pain.

Remarks

This classification should not be used unless the diagnostic criterion is satisfied. The presence of a pars interarticularis defect on radiographs or nuclear scans in a patient with lumbar spinal pain is not sufficient evidence to justify this diagnosis, because pars interarticularis defects occur in about 7% of asymptomatic individuals (Moreton 1966) and therefore may be only a coincidental finding in a patient with lumbar spinal pain. For this classification to be used evidence must be brought to bear that the observed defect is not asymptomatic.

Code

53X.X0*S

References

Moreton RD. Spondylolysis. JAMA 1966;195:671-4.

Suh PB, Esses SI, Kostuik JP. Repair of pars interarticularis defect: the prognostic value of pars infiltration. Spine 1991;16:S445-8.

Prolapsed Intervertebral Disk (XXVI-23)**Code**

502.X1cS/C

602.X 1 aR

GROUP XXVII: SACRAL SPINAL OR RADICULAR PAIN SYNDROMES

Sacral Spinal or Radicular Pain Attributable to a Fracture (XXVII-1)

Definition

Sacral spinal pain occurring in a patient with a history of injury in whom radiography or other imaging studies demonstrate the presence of a fracture that can reasonably be interpreted as the cause of pain.

Clinical Features

Sacral spinal pain with or without referred pain.

Diagnostic Features

Radiographic or other imaging evidence of a fracture of the sacrum.

Code

533.X21S/C

Sacral Spinal or Radicular Pain Attributable to an Infection (XXVII-2)

Definition

Sacral spinal pain occurring in a patient with clinical and/or other features of an infection, in whom the site of infection can be specified and can reasonably be interpreted as the source of the pain.

Clinical Features

Sacral spinal pain with or without referred pain, associated with pyrexia or other clinical features of infection.

Diagnostic Features

A presumptive diagnosis can be made on the basis of an elevated white cell count or other serological features of infection, together with imaging evidence of the presence of a site of infection in the sacrum or its adnexa. Absolute confirmation relies on histological and/or bacteriological confirmation using material obtained by direct or needle biopsy.

Schedule of Sites of Infection

XXVII-2.1(S)(R)

Infection of the Sacrum (osteomyelitis)

Code 533.X2aS/C 633.X2aR

XXVII-2.2(S)

Septic Arthritis of the Sacroiliac Joint

Code 533.X2bS

XXVII-2.3(S)

Infection of a Paravertebral Muscle (psoas abscess)

Code 533.X2cS

XXVII-2.4(S)

Infection of a Surgical Fusion-Site

Code 533.X2dS

XXVII-2.5(S)

Infection of a Retroperitoneal Organ or Space

Code 533.X2eS

XXVII-2.6(S)(R)

Infection of the Epidural Space (epidural abscess)

Code 533.X2fS/C 633.X2bR

XXVII-2.7(S)(R)

Infection of the Meninges (meningitis)

Code 502.X2dS/C 602.X2dR

Sacral Spinal or Radicular Pain Attributable to a Neoplasm (XXVII-3)

Definition

Sacral spinal pain associated with a neoplasm that can reasonably be interpreted as the source of the pain.

Clinical Features

Sacral spinal pain with or without referred pain.

Diagnostic Features

A presumptive diagnosis may be made on the basis of imaging evidence of a neoplasm that directly or indirectly affects one or other of the tissues innervated by sacral spinal nerves. Absolute confirmation relies on obtaining histological evidence by direct or needle biopsy.

Schedule of Neoplastic Diseases

XXVII-3.1(S)(R)

Primary Tumor of the Sacrum

Code 533.X4tS/C 633.X4kR

XXVII-3.2(S)

Primary Tumor of the Sacroiliac Joint

Code 533.X4kS

XXVII-3.3(S)(R)

Primary Tumor of a Parasacral Muscle

Code 533.X4mS

XXVII-3.4(S)(R)

Primary Tumor of Epidural Fat (e.g., lipoma)

Code 533.X4nS/C 633.X4lR

XXVII-3.5(S)(R)

Primary Tumor of Epidural Vessels (e.g., angioma)

Code 533.X4oS/C 633.X4mR

XXVII-3.6(S)(R)

Primary Tumor of Meninges (e.g., meningioma)

Code 503.X4dS/C 603.X4dR

XXVII-3.7(S)(R)

Primary Tumor of a Spinal Nerve (e.g., neurofibroma, schwannoma, neuroblastoma)

Code 533.X4eS/C 603.X4eR

XXVII-3.8(S)(R)

Metastatic Tumor Affecting the Sacrum

Code 533.X4pS/C 633.X4nR

XXVII-3.9(S)(R)

Metastatic Tumor Affecting the Sacral Canal

Code 533.X4qS/C 633.X4oR

XXVII-3.10

Other Infiltrating Neoplastic Disease Affecting the Sacrum (e.g., lymphoma)

Code 533.X4rS/C 633.X4pR

Sacral Spinal or Radicular Pain Attributable to Metabolic Bone Disease (XXVII-4)

Definition

Sacral spinal pain associated with a metabolic bone disease that can reasonably be interpreted as the source of the pain.

Clinical Features

Sacral spinal pain with or without referred pain.

Diagnostic Features

Imaging or other evidence of metabolic bone disease affecting the sacrum, confirmed by appropriate serological or biochemical investigations and/or histological evidence obtained by needle or other biopsy.

Schedule of Metabolic Bone Diseases

XXVII-4. 1(S)(R)

Osteoporosis of Age

Code 532.X5gS/C 632.X5gR

XXVII-4.2(S)(R)

Osteoporosis of Unknown Cause

Code 532.X5hS/C 632.X5hR

XXVII-4.3 (S)(R)

Osteoporosis of Some Known Cause Other than Age

Code 532.X5iS/C 632.X5iR

XXVII-4.4(S)(R)

Hyperparathyroidism

Code 532.X5jS/C 632.X5jR

XXVII-4.5 (S)(R)

Paget's Disease of Bone

Code 532.X5kS/C 632.X5kR

XXVII-4.6(S)(R)

Metabolic Disease of Bone Otherwise Not Classified

Code 532.X51S/C 632.X51R

Sacral Spinal or Radicular Pain Attributable to Arthritis (XXVII-5)

Definition

Sacral spinal pain associated with arthritis that can reasonably be interpreted as the source of the pain.

Clinical Features

Sacral spinal pain with or without referred pain.

Diagnostic Features

Imaging or other evidence of arthritis affecting the sacroiliac joints.

Schedule of Arthritides

XXVII-5.1(S)

Rheumatoid Arthritis of the Sacroiliac Joint

Code 534.X3bS

XXVII-5.2(S)

Ankylosing Spondylitis

Code 532.X8aS
XXVII-5.3(S)(R)
Seronegative Spondylarthropathy Otherwise Not Classified
Code 523.X8aS/C 623.X8aR
XXVII-5.4(S)
Sacroiliitis (evident on bone-scan)
Code 532.X8gS
XXVII-5.5(S)
Osteitis Condensans Ilii
Code 532.X8uS

Reference

Bellamy N, Park W, Rooney PJ. What do we know about the sacroiliac joint? *Sem Arthritis Rheum* 1983;12:282–313.

Spinal Stenosis: Cauda Equina Lesion (XXVII-6)

Definition

Chronic pain usually experienced in the buttocks and legs, at times extremely severe. Usually deep and aching with “heaviness and numbness” in the leg from buttock to foot, associated with narrowing of the vertebral canal.

Site

Low back, buttocks, and lower extremities.

System

Musculoskeletal system.

Main Features

Patients usually have a long history of gradually increasing lumbar spinal with referred pain in the buttocks or lower limbs, with or without radicular pain, aggravated by extension of the lumbar spine, or by sustained postures that involve accentuation of the lumbar lordosis (like prolonged standing), and by walking. Walking also produces overt or subtle neurological features in the lower limbs that range from sensations of heaviness or clumsiness to paresthesias, numbness, weakness, and temporary paralysis of the lower limbs. The onset of these neurological features may be measured in terms of a “walking distance,” which diminishes as the condition progresses in severity.

Associated Symptoms

There may be paresthesias and bowel or bladder disturbance, or impotence.

Aggravating Factors

Walking, standing.

Signs and Laboratory Findings

X-rays usually demonstrate diffuse severe degenerative disease with facet hypertrophy and a shallow anteroposterior diameter of the lumbar canal. Cystometrogram may be helpful in diagnosis. Myelography and CT scanning are helpful in showing narrowing of the spinal canal. Magnetic resonance imaging and electrodiagnostic studies can also be helpful in demonstrating the areas involved. The dilemma posed by this condition is the discrepancy between physical signs, which are usually not great, and the subjective complaints.

Etiology

Congenital factors, (e.g., lumbar spondylosis, lumbar spondylolisthesis; degenerative disease, osteoarthritis).

Pathology

Encroachment upon and narrowing of the vertebral canal as a whole or of multiple lateral recesses thereof by osteophytes of the zygapophysial joints or syndesmophytes of the intervertebral disks. Congenital narrowing of the vertebral canal may predispose to this condition insofar as symptoms may arise in the face of osteophytes and syndesmophytes that in other individuals would not cause significant encroachment. The mechanism of the neurological features is unknown but may involve constriction of the dural sac with obstruction of flow of the cerebrospinal fluid, or obstruction of venous blood flow in the vertebral canal, or direct compression of spinal nerve roots.

Radicular pain may arise as a result of compression or other compromise of one or more nerve roots but there is no evidence that the constrictive effects of spinal stenosis cause spinal pain and referred pain. These latter forms of pain ostensibly arise from the disorders of one or more of the disks or zygapophysial joints whose osteophytic overgrowth coincidentally causes the stenosis.

Spinal stenosis is characterized by an essentially global distribution of neurological symptoms in the lower limbs, and in this respect should be distinguished from radicular pain due to foraminal stenosis, in which the pathology is restricted to a single intervertebral foramen and as such does not encroach upon the vertebral canal as a whole.

Treatment

Surgical decompression.

Differential Diagnosis

Peripheral vascular claudication, sciatic nerve compression, osteoarthritis of hip or knee, retroperitoneal tumors, other tumor or abscess, prolapsed lumbar disk.

Code

533.X6*S/C Back
633.X6*R Legs

Sacral Spinal or Radicular Pain Associated with a Congenital Vertebral Anomaly (XXVII-7)**Definition**

Sacral spinal pain associated with a congenital vertebral anomaly.

Clinical Features

Sacral spinal pain with or without referred pain.

Diagnostic Features

Imaging evidence of a congenital vertebral anomaly affecting the sacrum.

Remarks

There is no evidence that congenital anomalies per se cause pain. Although they may be associated with pain, the specificity of this association is unknown. This classification should be used only when the cause of pain cannot be otherwise specified, but should not be used to imply that the congenital anomaly

is the actual source of pain.

Code

533.X0*S/C

533.X0*R

633.X0*R

Pain Referred from Abdominal or Pelvic Viscera or Vessels Perceived as Sacral Spinal Pain (XXVII-8)

Definition

Sacral spinal pain associated with disease of an abdominal or pelvic viscus or vessel that reasonably can be interpreted as the source of pain.

Clinical Features

Sacral spinal pain with or without referred pain, together with features of the disease affecting the viscus or vessel concerned.

Diagnostic Features

Imaging or other evidence of the primary disease affecting an abdominal or pelvic viscus or vessel.

Schedule of Diseases

XXVII-8.0 Classified elsewhere:

Dysmenorrhea (see XXIV-2 and XXIV-3)

Endometriosis (see XXIV-4)

Posterior Parametritis (see XXIV-5)

Retroversion of the Uterus (see XXIV-7)

Carcinoma of the rectum (see XXIX-5.1)

XXVII-8.1 Irritation of Presacral Tissues by Blood

Code 533.X6aS/C

XXVII-8.2 Irritation of Presacral Tissues by Contents of Ruptured Viscera

Code 533.X6bS/C

Sacral Spinal Pain of Unknown or Uncertain Origin (XXVII-9)

Definition

Sacral spinal pain occurring in a patient whose clinical features and associated features do not enable the cause and source of the pain to be determined, and whose cause or source cannot be or has not been determined by special investigations.

Clinical Features

Sacral spinal pain with or without referred pain.

Diagnostic Features

Sacral spinal pain for which no other cause has been found or can be attributed.

Pathology

Unspecified.

Remarks

This definition is intended to cover those complaints that for whatever reason currently defy conventional

diagnosis. It does not encompass pain of psychological origin. It presupposes an organic basis for the pain but one that cannot be or has not been established reliably by clinical examination or special investigations, such as imaging techniques or diagnostic blocks.

This diagnosis may be used as a temporary diagnosis. Patients given this diagnosis could in due course be accorded a more definitive diagnosis once appropriate diagnostic techniques are devised or applied. In some instances, a more definitive diagnosis might be attainable using currently available techniques, but for logistic or ethical reasons these may not have been applied.

Code

5XX.X8*S

Sacroiliac Joint Pain (XXVII-10)

Definition

Spinal pain stemming from a sacroiliac joint.

Clinical Features

Pain perceived in the region of the sacroiliac joint with or without referred pain into the lower limb girdle or lower limb itself.

Diagnostic Criteria

The following criteria should all be fulfilled.

1. Pain is present in the region of the sacroiliac joint.
2. Stressing the sacroiliac joint by clinical tests that are selective for the joint reproduces the patient's pain, or
3. Selectively infiltrating the putatively symptomatic joint with local anesthetic completely relieves the patient of the pain.
- 4.

Pathology

Unknown. Presumably the pain is caused by excessive stresses being imposed on the ligaments of the sacroiliac joint as a result of some structural fault in the joint itself or as a result of the joint as a whole being subject to inordinate stresses.

Remarks

This category does not encompass sacroiliitis, ankylosing spondylitis, or seronegative spondylarthropathies that may be demonstrated by radionuclide imaging other forms of imaging or diagnosed by other means. This category infers a mechanical disorder of the joint.

Mechanical disorders of the sacroiliac joint are the subject of controversy. While there are beliefs that such disorders can befall the sacroiliac joint, no clinical tests of laudable validity and reliability have been devised whereby this condition can be diagnosed. The presence of such a condition, however, in the absence of any overt inflammatory joint disease, is implied by a positive response to an intraarticular injection of local anesthetic. Until such time as appropriate clinical tests are demonstrated to be valid and reliable, any diagnosis of sacroiliac joint pain based exclusively on clinical examination must be held to be only presumptive.

Code

533.X6dS

Reference

Waisbrod H, Krainick JU, Gerbershagen HU. Sacroiliac joint arthrodesis for chronic low back pain, Arch Orthop Traum Surg 1987;106:238-40.

GROUP XXVIII: COCCYGEAL PAIN SYNDROMES

Coccygeal Pain of Unknown or Uncertain Origin (XXVIII-1)

Definition

Coccygeal pain occurring in a patient whose clinical features and associated features do not enable the cause and source of the pain to be determined, and whose cause or source cannot be or has not been determined by special investigations.

Clinical Features

Coccygeal pain with or without referred pain.

Diagnostic Features

Coccygeal pain for which no other cause has been found or can be attributed.

Pathology

Unspecified.

Remarks

This definition is intended to cover those complaints that for whatever reason currently defy conventional diagnosis. It does not encompass pain of psychological origin. It presupposes an organic basis for the pain but one that cannot be or has not been established reliably by clinical examination or special investigations, such as imaging techniques or diagnostic blocks.

This diagnosis may be used as a temporary diagnosis. Patients given this diagnosis could in due course be accorded a more definitive diagnosis once appropriate diagnostic techniques are devised or applied. In some instances, a more definitive diagnosis might be attainable using currently available techniques, but for logistic or ethical reasons these may not have been applied.

Code

5XX.X8hS

Posterior Sacrococcygeal Joint Pain (XXVIII-2)

Definition

Pain perceived in the coccygeal region, stemming from one or both of the posterior sacrococcygeal joints.

Clinical Features

Pain in the sacrococcygeal region.

Diagnostic Criteria

Complete relief of pain upon infiltration of the putatively symptomatic joint or joints with local anesthetic, provided that the injection can be shown to have been selective in that it has not infiltrated other structures that might constitute the actual source of pain.

Pathology

Unknown, but presumably involves sprain of the capsule of the affected joint.

Code

533.X1pS Trauma

533.X6eS Degenerative

GROUP XXIX: DIFFUSE OR GENERALIZED SPINAL PAIN

Generalized Spinal Pain Attributable to Multiple Fractures (XXIX-1)

Definition

Generalized spinal pain occurring in a patient with a history of injury in whom radiography or other imaging studies demonstrate the presence of multiple fractures that can reasonably be interpreted as the cause of their pain.

Clinical Features

Generalized spinal pain with or without referred pain.

Diagnostic Features

Radiographic or other imaging evidence of multiple fractures throughout the vertebral column.

Code

933.X1*S/C

933.X1*R

Generalized Spinal Pain Attributable to Disseminated Neoplastic Disease (XXIX-2)

Definition

Generalized spinal pain associated with widespread neoplastic disease of the vertebral column or its adnexa that can reasonably be interpreted as the source of the pain.

Clinical Features

Generalized spinal pain with or without referred pain.

Diagnostic Features

Imaging or other evidence of neoplastic disease that directly or indirectly affects multiple regions of the vertebral column or its adnexa.

Schedule of Neoplastic Diseases

XXIX-2. 1(S)(R)

Disseminated Primary Tumors Affecting the Vertebral Column or Its Adnexa (e.g., multiple myeloma)

Code 933.X4aS/C 933.X4aR

XXIX-2.2(S)(R)

Disseminated Metastatic Tumors Affecting the Vertebral Column or Its Adnexa

Code 933.X4bS/C 933.X4bR

XXIX-2.3(S)(R)

Infiltrating Neoplastic Disease of the Vertebral Column or Its Adnexa, Other than Primary or Metastatic Tumors (e.g., lymphoma)

Code 933.X4cS/C 933.X4cR

Generalized Spinal Pain Attributable to Metabolic Bone Disease (XXIX-3)

Definition

Generalized spinal pain associated with a metabolic bone disease that can reasonably be interpreted as the

source of the pain.

Clinical Features

Generalized spinal pain with or without referred pain.

Diagnostic Features

Imaging or other evidence of metabolic bone disease affecting multiple regions of the vertebral column.

Schedule of Metabolic Bone Diseases

XXIX-3.1(S)(R)

Osteoporosis of Age

Code 933.X5aS/C 933.X5aR

XXIX-3.2(S)(R)

Osteoporosis of Unknown Cause

Code 933.X5bS/C 933.X5bR

XXIX-3.3(S)(R)

Osteoporosis of Some Known Cause Other than Age

Code 933.X5cS/C 933.X5cR

XXIX-3.4(S)(R)

Hyperparathyroidism

Code 933.X5dS/C 933.X5dR

XXIX-3.5(S)(R)

Paget's Disease of Bone

Code 933.X5eS/C 933.X5eR

XXIX-3.6(S)(R)

Metabolic Disease of Bone Not Otherwise Classified

Code 933.X5fS/C 933.X5fR

Generalized Spinal Pain Attributable to Arthritis (XXIX-4)

Definition

Generalized spinal pain associated with arthritis that can reasonably be interpreted as the source of the pain.

Clinical Features

Generalized spinal pain with or without referred pain.

Diagnostic Features

Imaging or other evidence of arthritis affecting the joints of multiple regions of the vertebral column.

Schedule of Arthritides

XXIX-4.1(S)(R)

Rheumatoid Arthritis

Code 932.X3aS/C 932.X3aR

XXIX-4.2(S)(R)

Ankylosing Spondylitis

Code 932.X3bS/C 932.X3bR

XXIX-4.3(S)(R)

Osteoarthritis

Code 932.X8*S/C 932.X8*R

XXIX-4.4(S)(R)

Seronegative Spondylarthropathy Not Otherwise Classified
Code 932.X8bS/C 932.X8bR

Ankylosing Spondylitis (XXIX-4.2)

Definition

Aching low back pain and stiffness of gradual development due to chronic inflammatory change of unknown origin.

Site

Low back.

System

Musculoskeletal system.

Main Features

Prevalence in 1-2% of the population. Males nine times more common than females. Peak onset in the third or fourth decades. More common in Caucasian populations, but some other ethnic groups, e.g., Haida Indians, have unusually high prevalence rates. Chronic, persistent low back pain of insidious onset, aching discomfort, and stiffness while sleeping that forces the patient to get up and move around; morning stiffness is usually greater than half an hour in duration, and stiffness occurs also after periods of inactivity (“gelling phenomenon”).

Associated Symptoms

Peripheral joint disease in 20% of patients, conjunctivitis and iritis in 25% of patients, chronic pulmonary fibrosis and cardiovascular disease.

Aggravating Features

Inactivity.

Signs

Depressed spinal mobility and chest expansion with chest involvement.

Laboratory Findings

None specific; 90% of patients are HLA-B27 positive, but 8-10% of normal populations also are HLA-B27 positive.

Radiographic Findings

Bilateral symmetric sacroiliitis; syndesmophytes of lumbar thoracic spines.

Usual Course

Chronic lumbar pain often with acute exacerbations intermittently; pain diminishes as spine fuses.

Relief

Some severe morning stiffness or pain abates with activity. A good response to nonsteroidal anti-inflammatory drugs.

Complications

Spinal immobility, fracture of fused spine. Higher spinal disease may cause vertical odontoid subluxation or penetration with brain-stem compression.

Etiology

Unknown; may be immunological, with possible environmental factors, along with apparent genetic susceptibility.

Essential Features

Chronic aching lumbar pain and stiffness with “gelling” and with characteristic X-ray changes as described.

Differential Diagnosis

Psoriatic spondylitis; Reiter’s spondylitis; mechanical back pain; discogenic back pain.

Code

932.X3bS/C

932.X3bR

Back Pain of Other Visceral or Neurological Origin Involving the Spine (XXIX-5)**Carcinoma of the Rectum (XXIX-5.1)****Code**

Pelvic pain

753.X4*S/C 753.X4*R

Perineal pain

853.X4*S/C 853.X4*R

Tumor Infiltration of the Lumbosacral Plexus (XXIX-5.2)**Definition**

Progressively intense pain in the low back or hip with radiation into the lower extremity.

Site

Lower back and leg.

System

Nervous system (lumbosacral plexus).

Main Features

Lumbosacral plexopathy occurs most commonly in patients with genitourinary, gynecological, and colonic cancers as a result of local tumor extension. The local pain is pressure-like or aching in quality. The referred pain varies with the site of plexus involvement and can be burning, crampy, or lancinating. Upper lumbar plexus involvement produces pain in the anterior thigh and groin, whereas pain in the L5-S1 distribution radiates down the posterior aspect of the leg to the heel. The pain is often worse at night and is usually aggravated by movement of the hip joint.

Associated Symptoms

Typically, leg weakness and numbness occur three to five months after the onset of pain. Sphincter disturbance is uncommon.

Signs and Laboratory Findings

There may be tenderness in the region of the sciatic notch. There is usually limitation of both direct and reverse straight leg raising. Focal weakness and sensory loss with depressed deep tendon reflexes may be evident. The cardinal feature is progressive weakness in a pattern involving more than one nerve root. There may be pedal edema due to lymphatic obstruction.

An intravenous pyelogram may show hydronephrosis. A CT scan through the abdomen and pelvis is the definitive study. It may show a paralumbar or pelvic soft tissue mass and there may be bony erosion of the pelvic side wall. Myelography may be positive if there is epidural extension of disease.

Usual Course

The course is inexorably progressive and leads to a wheelchair- or bedridden existence.

Summary of Essential Features and Diagnostic Criteria

Low back and hip pain radiating into the leg is followed in weeks to months by progressive numbness, paresthesias, weakness, and leg edema. The physical findings indicate that more than one nerve root is involved. CT scan of the abdomen and pelvis is the study of choice.

Differential Diagnosis

Myelography and cerebrospinal fluid analysis should rule out epidural and meningeal metastatic disease, respectively. Other entities to consider are radiation fibrosis, lumbosacral neuritis, and disk disease.

Code

502.X4dS/C

502.X4dR

Tumor Infiltration of the Sacrum and Sacral Nerves (XXIX-5.3)

Definition

Dull aching sacral pain accompanied by burning or throbbing pain in the rectum and perineum.

Site

Sacrum, rectum, and perineum.

Systems

Skeletal and nervous systems.

Main Features

Pain in a sacral distribution usually occurs in the fifth, sixth, and seventh decades as a result of the spread of bladder, gynecological, or colonic cancer. There is dull aching midline pain and usually burning or throbbing pain in the soft tissues of the rectal and perineal region. The pain is usually made worse by sitting and lying. The rectal and perineal component of the pain may respond poorly to analgesic agents.

Associated Symptoms

With bilateral involvement, sphincter incontinence and impotence are common.

Signs and Laboratory Findings

There may be tenderness over the sacrum and in the region of the sciatic notches. Sometimes there is limitation of both direct and reverse straight leg raising. Involvement of S1 and S2 roots will produce weakness of ankle plantar flexion, and the ankle jerks may be absent. There is usually sensory loss in the perianal region and in the genitalia, and this may be accompanied by hyperpathia. CT scan of the pelvis usually shows sacral erosion with a presacral mass.

Usual Course

The pain and sensory loss may be unilateral initially with progression to bilateral sacral involvement and sphincter disturbance.

Social and Physical Disability

The major disabilities are the results of intractable pain and loss of sphincter function. An in-dwelling urinary catheter may be required.

Summary of Essential Features Differential Diagnosis

The essential features are dull aching sacral pain with The differential diagnosis includes post-traumatic neuburning or throbbing perineal pain. There is usually sac-romas in patients with previous pelvic surgery, pelvic ral sensory loss and sphincter incontinence. A CT scan abscess, radiation fibrosis, and tension myalgias of the of the pelvis may show sacral erosion and a presacral pelvic floor. soft tissue mass.

Differential Diagnosis

The differential diagnosis includes post-traumatic neuromas in patients with previous pelvic surgery, pelvic abscess, radiation fibrosis, and tension myalgias of the pelvic floor.

Diagnostic Criteria

1. Dull aching sacral pain.
2. Burning or throbbing perineal pain.
3. Perineal sensory loss and sphincter dysfunction.
4. CT scan of pelvis may show sacral erosion and presacral soft tissue mass.

Code

Nerve infiltration

702.X4*S/C 702.X4*R

Musculoskeletal deposits

732.X4*S/C 732.X4*R

GROUP XXX: LOW BACK PAIN OF PSYCHOLOGICAL ORIGIN WITH SPINAL REFERRAL

The frequency of low back pain due solely to psychological causes is unknown but probably relatively low compared with low back pain overall, which of course is very common. Psychological causes may play an important part in protracted low back pain in a large number of patients. They will, however, rarely be seen to be the sole cause of the pain, nor will the diagnosis emphasize them in the first instance.

Low Back Pain of Psychological Origin with Spinal Referral (XXX-1)

(See also 1-16)

Code

533.X7bS	Tension
51X.X9aS	Delusional
51X.X9bS	Conversion
51X.X9fS	Depression