



Spine ICD-10 Analysis

Agenda

ICD-10 CM and PCS Structure

Documentation Analysis

Case studies

- Compression Fracture
- Discectomy
- Disk Herniation
- Spondylolisthesis
- Spinal Stenosis
- Degenerative Disk Disease
- Herniation and Degeneration
- Spinal Fusion

Documentation Tips - Major Diagnosis

Documentation Tips - Procedures

Acuity- acute, chronic, intermittent

Severity- mild, moderate, severe

Etiology- trauma, diabetes, renal failure, exercise or infection induced

Location- where is it- be specific about which joint, chest, femur, posterior thorax

Laterality- which side is it? Left, right, both?

Detail: Present on admission status, associated symptoms (hypoxia, loss of consciousness), additional medical diagnoses, initial versus subsequent encounter

If you like mnemonics...

Any: Acuity

Small: Severity

Error: Etiology

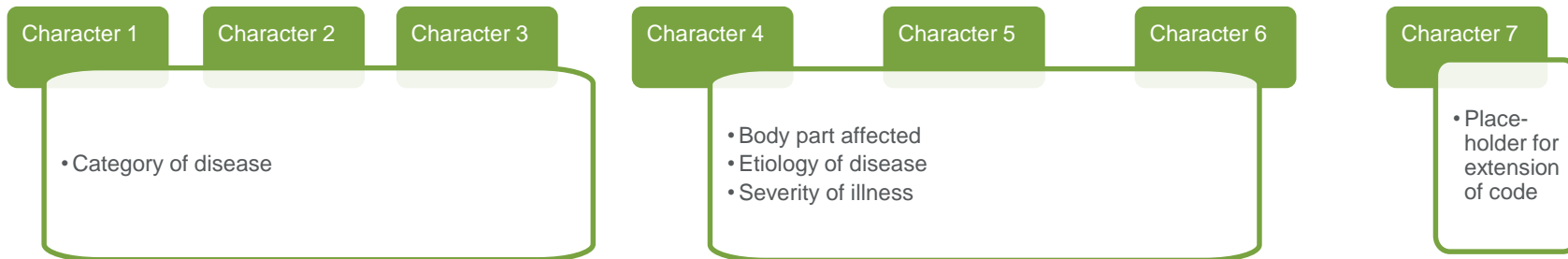
Loses: Location

Large: Laterality

Dollars: Detail- Present on admission status, associated symptoms, additional medical diagnoses, initial versus subsequent encounter

ICD-10 CM

- Diagnosis classification system developed by the Centers for Disease Control and Prevention for use in all U.S. health care treatment settings
- ICD 10 CM codes can have 3, 4, 5, 6 or 7 characters (alphanumeric)

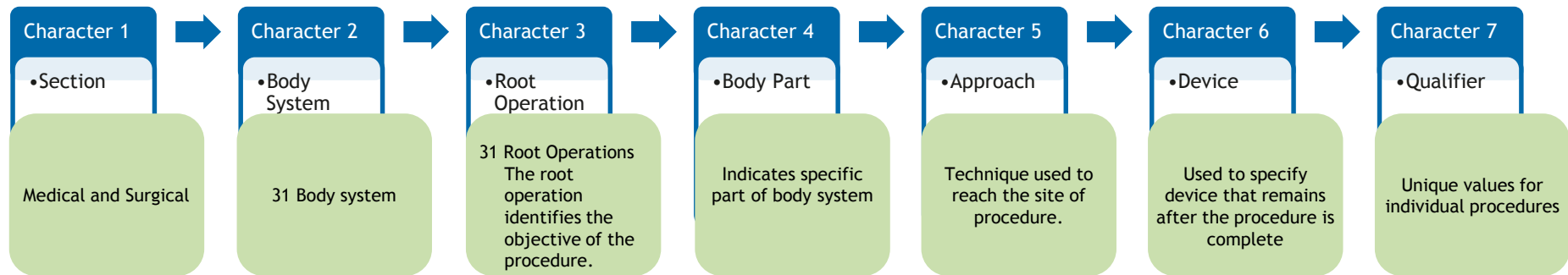


M51.14	M51 – Thoracic, thoracolumbar, and lumbosacral intervertebral disc disorder	1 – With radiculopathy	4 – Thoracic region
---------------	---	------------------------	---------------------

A joint effort between the healthcare provider and the coder is essential to achieve complete and accurate documentation, code assignment, and reporting of diagnoses and procedures.

ICD-10 PCS

- ICD-10-PCS codes are composed of seven characters
- Each character is an axis of classification that specifies information about the procedure performed



Name	ICD-10 PCS coding	Medical and surgical	Upper joints	Fusion	Body part (Thoracic vertebral joint)	Approach (Open)	Device (Interbody fusion device)	Qualifier (Anterior approach anterior column)
Spinal fusion	0RG60A0	0	R	G	6	0	A	0

In ICD-10 PCS, the term “*procedure*” refers to the complete specification of the seven characters.

Documentation Analysis

- Compression vertebral fractures have additional classification based on the cause, specific site along with encounter type.
- Diagnosis coding and documentation of disc herniation (displacement), disc degeneration, and spinal stenosis have increased codes depending on anatomic sites.
- Disc displacement coding, in addition to anatomic site detail there is the optional ability to code associated radiculopathy, if present.
- Specificity of codes for congenital abnormality has increased in ICD-10. There are specific codes available for kyphosis, lordosis, scoliosis etc. as compared to unspecified codes in ICD-9.
- ICD-10 code for bone marrow biopsy (extraction) requires to specifies body part as iliac, sternum, or vertebra, and the approach of biopsy as percutaneous or open.
- ICD-10 requires to specify the vertebral joint, the type of fusion device used, the approach used and the column fused.
- ICD-10 requires to specify discectomy as partial or complete removal of the disk.

With ICD-10 CM, the number of diagnosis codes increases from approximately 13,000 to 68,000, and with much greater detail in diagnosis-code descriptions, along with the creation of diagnosis codes that combine conditions, manifestations, and complications into a single code.

Case Study – Compression Fracture

Discharge Summary

ADMISSION DIAGNOSES:

1. Left compression fractures, status post kyphoplasty on 01/11/2013.
2. Chronic incontinence, present on admission.
3. History of abdominal aortic aneurysm, status post repair in 2011, present on admission.
4. History of breast cancer, status post left mastectomy, present on admission.
5. Hypertension, present on admission.
6. Chronic obstructive pulmonary disease, present on admission.
7. Gastroesophageal reflux disease, present on admission.
8. Anxiety, present on admission.

HISTORY OF PRESENT ILLNESS:

For a complete dictated history and physical, please _____ accompanying dictation, but in short the patient is a 62-year-old female with a past medical history of several compression fractures, breast cancer, status post left mastectomy in 2010, AAA repair, chronic low back pain, hypertension, who presented to the emergency department with back pain and back spasms xl day. She was found to have an L4 superior endplate compression fracture per MRI.

HOSPITAL COURSE:

1. L4 compression fracture. These findings were found on MRI. Dr. White from neurosurgery was consulted and the patient underwent kyphoplasty on 01/11/2013. The patient tolerated this procedure very well, and at the time of discharge, was able to ambulate with the assistance of her walker and was doing very well working with physical therapy. Pain was optimally controlled with MS Contin 30 b.i.d. in addition to Percocet one tab q.4 hours p.r.n. breakthrough pain. At the time of discharge, the patient forgot about this pain regimen and felt like she would be able to continue as needed. Her constipation secondary to pain medications is going to be treated with both senna and docusate, which she will be discharged with. The patient will restart aspirin two weeks from the time of her surgery, which means she will begin her aspirin on 01/25/2013.
2. Chronic incontinence. The patient was continued on her oxybutynin 2.5 p.o. b.i.d. during this hospitalization.
3. History of AAA, status post repair. The patient did not have any chest pain, shortness of breath. Her Plavix was recently stopped by her PCP and she was only on aspirin.
4. Breast cancer, status post mastectomy in 2010. This is being followed by Dr. Norton in Oncology. She was continued on her Femara during this hospitalization.
5. Hypertension. The patient remained stable during her hospitalization and was continued on her metoprolol with holding parameters.
6. COPD. The patient is still smoking one to two cigarettes per day. She underwent smoking cessation counseling during this hospitalization. She was given a nicotine patch.
7. GERD. The patient was continued on her famotidine 20 p.o. b.i.d.
8. Transaminitis. On admission, the patient was found to have a very mild elevation in her LFTs, however, at the time of discharge, this has completely resolved. She did not endorse any right upper quadrant pain, nausea, vomiting, and there is no evidence of any jaundice.

3M Diagnosis

Choose one:

Compression fracture specified as

- 1. Traumatic
- 2. Other/unspecified

3M Diagnosis

Choose one:

Vertebral collapse

- 1. * Fatigue or stress fracture
- 2. * Pathological fracture
- 3. In (due to) (e.g., metastasis, osteoporosis...)
- 4. Other/unspecified

3M Diagnosis

Choose one:

Encounter for vertebral fatigue fracture or collapse

- 1. Initial
- 2. Subsequent with delayed healing
- 3. Subsequent with routine healing
- 4. Sequela

3M Code Display

ICD-10-CM Diagnosis Codes

M4856XA Collapsed vertebra, not elsewhere classified, lumbar region, initial encounter for fracture

ICD-10-PCS Procedures

0QS03ZZ Reposition Lumbar Vertebra, Percutaneous Approach

0QU03JZ Supplement Lumbar Vertebra with Synthetic Substitute, Percutaneous Approach

ICD-10 Documentation for compression fracture:

- Specify if traumatic or non-traumatic (pathological, fatigue, due to metastasis, osteoporosis etc.)
- Specify the specific vertebra for fatigue fracture as lumbar, cervical, lumbosacral etc.
- Specify the encounter type as initial, subsequent with normal healing, sequela etc.

Compression fractures may be due to either disease or to trauma. The coder should search the medical record for any recent significant trauma or for any indication of concurrent bone disease that might point to pathological fracture. If the diagnosis cannot be clarified, the physician should be asked to provide further specificity.

M48.56XA	M48 – Spondylopathies	5 - Collapsed vertebra	6 – Lumbar	X – Placeholder	A – Initial encounter
----------	-----------------------	------------------------	------------	-----------------	-----------------------

ICD-10 has further specification for compression fracture as fatigue, pathological, due to metastasis, osteoporotic etc.

Compression Fracture

ICD-9	ICD-10
733.13 Pathological fracture of vertebra	M48.46 Fatigue fracture of vertebra, lumbar XA - initial encounter of fracture XD - subsequent encounter for fracture with routine healing XG - subsequent encounter for fracture with delayed healing XS - sequela of fracture
	M48.56 Collapsed vertebra, NOS, lumbar region XA - initial encounter of fracture XD - subsequent encounter for fracture with routine healing XG - subsequent encounter for fracture with delayed healing XS - sequela of fracture
	M80.08 Age related osteoporosis with current pathological fracture, vertebra XA - initial encounter of fracture XD - subsequent encounter for fracture with routine healing XG - subsequent encounter for fracture with delayed healing XS - sequela of fracture
	M80.88 Drug induced osteoporosis with current pathological fracture, vertebra XA - initial encounter of fracture XD - subsequent encounter for fracture with routine healing XG - subsequent encounter for fracture with delayed healing XS - sequela of fracture
	M84.48 Pathological fracture XA - initial encounter of fracture XD - subsequent encounter for fracture with routine healing XG - subsequent encounter for fracture with delayed healing XS - sequela of fracture
	M84.58 Pathological fracture in neoplastic disease, other specified site, initial encounter for fracture XA - initial encounter of fracture XD - subsequent encounter for fracture with routine healing XG - subsequent encounter for fracture with delayed healing XS - sequela of fracture

Case Study – Diskectomy

Operative report

PREOPERATIVE DIAGNOSES:

1. Degenerative lumbar scoliosis, L2-S1.
2. Degenerative spondylolisthesis, L4-L5.
3. Foraminal and central and lateral recess stenosis, L2-L3, L3-L4, L4-L5, and L5-S1.

POSTOPERATIVE DIAGNOSES:

1. Degenerative lumbar scoliosis, L2-S1.
2. Degenerative spondylolisthesis, L4-L5.
3. Foraminal and central and lateral recess stenosis, L2-L3, L3-L4, L4-L5, and L5-S1.

PROCEDURE:

Anterior lumbar interbody fusion with placement of interbody fusion devices L2-L3, L3-L4, L4-L5, and L5-S1 with anterior buttress plate fixation for stabilization of previously placed anterior grafts, L4-L5 and L5-S1.

IMPLANTS:

Integra aPOD PEEK interbody fusion devices L4-L5 and L5-S1 with spin plate anterior buttress plating fixation system L4-L5 and L5-S1. Additional implants were Integra aPOD-L lateral PEEK intervertebral fusion devices L2-3 and L3-L4.

DESCRIPTION OF PROCEDURE:

The patient was taken to the operating room, placed in a supine position on the operating table where general anesthesia obtained. The patient was then carefully positioned to allow anterior approach to the lumbar spine via an anterior retroperitoneal approach. Once the patient was appropriately positioned, intraoperative fluoroscopy was brought in to confirm appropriate visualization of the operative levels of both L4-L5 and L5-S1. The abdomen was then prepped and draped, a surgical time-out was completed, and Dr. Ralph Dilley then performed anterior approach to the lumbar spine at L4-L5 and L5-S1 and this will be dictated under separate operative note. Once appropriate exposure of the lumbar disk spaces L4-L5 and L5-S1 were able to be achieved and radiographically confirmed with intraoperative fluoroscopy, annulotomy was first performed at L4-L5. Serial curettage of the disk space was then performed and then a thorough diskectomy was completed removing the cartilaginous endplate leaving the bony endplates intact. Using the trial devices for the interbody implants, I was able to restore disk space height very well as well as achieve some reduction of the spondylolisthesis of L4 and L5 posteriorly with moving for slightly superiorly and posteriorly. With excellent correction of disk space height and actual correction of the degenerative scoliotic deformity taking away the concavity on the left, an appropriate sized implant was selected to match patient's anatomy, packed with a small amount of bone morphogen protein and some additional beta-tricalcium phosphate, and then this

Discharge summary

ADMISSION DIAGNOSIS:

Degenerative disk disease with associated spondylolisthesis and degenerative scoliosis, L2-S1.

ADMISSION PROCEDURES:

Anterior lumbar interbody fusion with instrumentation, L2-S1.

HOSPITAL COURSE:

The patient was admitted on date of surgery and underwent an uncomplicated surgical procedure with stand-alone anterior interbody implants placed L2-L3, L3-L4, L4-L5, and L5-S1 with Buttress plating stabilization performed L4-L5 and L5-S1. Postoperative course was uneventful. The patient tolerated oral intake by postoperative day #2. Hemoglobin and hematocrit remained stable postoperatively. The patient was noted to have some very mild left-sided hip flexor weakness postoperatively consistent with the left-sided approach to the lumbar spine via both anterior and lateral approaches. Otherwise, she remained neurologically intact without radiculopathy. Her postoperative back pain was well controlled with initially IV medications and then transferred to oral medication regimen. She was considered stable for discharge to home with use of an external brace by postoperative day #5.

3M ICD-10 Procedure

Choose one:

Lumbar vertebral
Lumbar Vertebral Disc
Select operation on disk

1. Excision (partial body part)
 2. Resection (complete, total body part)

ICD-10 requires to specify diskectomy as partial or complete removal of the disk.

ICD-10 Documentation for diskectomy:

- Specify the body part as cervical, cervicothoracic, lumbar etc.
- Specify if partial or complete disc removed
- Specify the approach used as open, percutaneous or endoscopic.

M41.9	M41 – Scoliosis	9 – Unspecified	
M43.16	M43 – Other deforming dorsopathies	1 – Spondylolisthesis	6 – Lumbar
M48.06	M48 – Other spondylopathies	0 – Spinal stenosis	6 - Lumbar

Name	ICD-10 PCS coding	Medical and surgical	Lower joints	Replacement	Body part	Approach (Open)	Device (no device)	Qualifier (diagnostic)
Diskectomy	0S*20ZZ	0	S	B Excision T Resection	2	0	Z	Z

ICD-10 requires to specify diskectomy as partial or complete removal of the disk.

Case Study – Disk Herniation

Transfer summary

INDICATIONS:

Ginger McJunkin is a 78-year-old female with a history of a lumbar laminectomy. She developed intractable lumbosacral radiculopathies to her left lower extremity. A CT myelogram of the lumbar sacral spine revealed a far lateral left L4-5 and L5-S1 disk herniation. The patient underwent conservative care, but ultimately failed. It was then indicated she undergo surgical intervention at that time.

HOSPITAL COURSE:

Postoperatively, the patient was transferred to 4 west in stable condition. Her pain was well controlled on a PCA Dilaudid. She was effectively transitioned to oral Percocet without difficulty. The patient participated in physical therapy and occupational therapy. On postoperative day three, the patient did complain of intermittent left lower extremity pain. A CT scan of the lumbar spine was performed, which showed no evidence of hardware failure or malposition. Physical therapy and occupational therapy consultation was requested. It was felt that the patient would benefit from inpatient rehab. The patient was then transferred accordingly.

H&P

CHIEF COMPLAINT:

Low back pain.

HISTORY OF PRESENT ILLNESS:

Ginger McJunkin is a pleasant 78-year-old female with a history of multiple lumbar spine surgeries, including placement of a spinal cord stimulator.

DIAGNOSIS AND MEDICAL DECISION MAKING:

Ginger McJunkin is an elderly 78-year-old female who has unfortunately failed conservative care. She complains of severe low back pain radiating down her left lower extremity. The patient has been consented for L4-5 and L5-S1 lumbar decompression and posterolateral instrumented fusion.

M51.0 Thoracic, thoracolumbar and lumbosacral intervertebral disc disorders with myelopathy

M51.04 Intervertebral disc disorders with myelopathy, thoracic region

M51.05 Intervertebral disc disorders with myelopathy, thoracolumbar region

M51.06 Intervertebral disc disorders with myelopathy, lumbar region

M51.07 Intervertebral disc disorders with myelopathy, lumbosacral region

M51.1 Thoracic, thoracolumbar and lumbosacral intervertebral disc disorders with radiculopathy

M51.14 Intervertebral disc disorders with radiculopathy, thoracic region

M51.15 Intervertebral disc disorders with radiculopathy, thoracolumbar region

M51.16 Intervertebral disc disorders with radiculopathy, lumbar region

M51.17 Intervertebral disc disorders with radiculopathy, lumbosacral region

M51.2 Other thoracic, thoracolumbar and lumbosacral intervertebral disc displacement

M51.24 Other intervertebral disc displacement, thoracic region

M51.25 Other intervertebral disc displacement, thoracolumbar region

M51.26 Other intervertebral disc displacement, lumbar region

M51.27 Other intervertebral disc displacement, lumbosacral region

ICD-10 Documentation for herniation :

- Specify the body part as cervical, cervicothoracic, lumbar etc.
- Specify presence of myelopathy, radiculopathy, radiculitis, neuritis etc.

M51.17

M51 – Thoracic, thoracolumbar, and lumbosacral intervertebral disc disorder

1 – With radiculopathy

7 - Lumbosacral

ICD-10 requires to specify the presence of radiculopathy with disc herniation. Disk herniation will be coded to disk displacement . Disk herniation with radiculopathy will be coded to disk disorder with radiculopathy

Case Study – Spondylolisthesis

Discharge summary

DISCHARGE DIAGNOSIS(ES):
Spondylolisthesis/sciatica.

PROCEDURE PERFORMED:
Posterior lumbar fusion, L5-S1.

HOSPITAL COURSE:
Ms. Bowditch was admitted on her date of surgery. She underwent the above-noted posterior lumbar fusion, L5-S1. Postoperative course has been uncomplicated. She has reported significant and dramatic relief of her previously-severe sciatica. Her incisional pain is better with each passing day.

H&P

BRIEF HISTORY/REASON FOR ADMISSION:
Ms. Loyola Bowditch is a 56-year-old woman who first experienced a work-related injury on November 27, 2012, where she slipped and fell to the ground. She, thereafter, developed severe left-sided radiating leg pain, which has failed to respond to a course of conservative care including the passage of time, an extensive course of medications including anti-inflammatory and pain medications and injections including 3 lumbar epidural steroid injections. Diagnostic studies reveal spondylolisthesis at the L5-S1 level and possible intraforaminal disk herniation at the L5-S1 level. Because of her continued symptoms and failed to respond to conservative care, she presents at this time for a planned procedure including posterior lumbar fusion, pedicle screws, laminectomy, discectomy, foraminotomy, posterior interbody fusion, and cage and allograft bone graft.

ICD-10 Documentation for spondylolisthesis :

- Specify the body part as cervical, cervicothoracic, lumbar etc.
- Specify the cause as congenital, traumatic (subluxation or dislocation), or acquired as applicable.

M43.1 Spondylolisthesis

- M43.10 Spondylolisthesis, site unspecified
- M43.11 Spondylolisthesis, occipito-atlanto-axial region
- M43.12 Spondylolisthesis, cervical region
- M43.13 Spondylolisthesis, cervicothoracic region
- M43.14 Spondylolisthesis, thoracic region
- M43.15 Spondylolisthesis, thoracolumbar region
- M43.16 Spondylolisthesis, lumbar region
- M43.17 Spondylolisthesis, lumbosacral region
- M43.18 Spondylolisthesis, sacral and sacrococcygeal region
- M43.19 Spondylolisthesis, multiple sites in spine

M43.17

M43 - Other deforming dorsopathies

1 – Spondylolisthesis

7 - Lumbosacral

ICD-10 requires to specify the site for Spondylolisthesis.

Case Study – Spinal Stenosis

Discharge summary

REASON FOR HOSPITALIZATION:
The patient hospitalized for lumbar decompressive and stabilization procedure at L3-4, L4-5.

ADMISSION DIAGNOSIS:
1. Chronic anemia, status post liver transplant.
2. Chronic immunosuppression.
3. Hypercholesterolemia.
4. Lumbar stenosis.

DISCHARGE DIAGNOSIS:
1. Chronic anemia, status post liver transplant.
2. Chronic immunosuppression.
3. Hypercholesterolemia.
4. Lumbar stenosis.

ICD-10 Documentation for spinal stenosis:

- Specify the body part as cervical, cervicothoracic, lumbar etc.

Operative report

PREOPERATIVE DIAGNOSIS:
1. Lumbar L3-4 instability with stenosis at the foramen.
2. L4-5 residual stenosis, restenosis.

POSTOPERATIVE DIAGNOSIS:
1. Left lumbar L3-4 instability with stenosis at the foramen.
2. L4-5 residual stenosis, restenosis.

M48.0 Spinal stenosis

- M48.00 Spinal stenosis, site unspecified
- M48.01 Spinal stenosis, occipito-atlanto-axial region
- M48.02 Spinal stenosis, cervical region
- M48.03 Spinal stenosis, cervicothoracic region
- M48.04 Spinal stenosis, thoracic region
- M48.05 Spinal stenosis, thoracolumbar region
- M48.06 Spinal stenosis, lumbar region
- M48.07 Spinal stenosis, lumbosacral region
- M48.08 Spinal stenosis, sacral and sacrococcygeal region

M48.06

M48 - Other spondylopathies

0 – Spinal stenosis

6 – Lumbar region

ICD-10 requires to specify the site for spinal stenosis.

Case Study – Degenerative Disk Disease

Discharge summary

DIAGNOSES:

1. Status post prior left-sided L3-L4 foraminal lumbar interbody fusion.
2. Advanced L2-L3 and L4-L5 lumbar degenerative disk disease.
3. Lumbar degenerative scoliotic deformity at L2-L3 through L4-L5.
4. Intractable left lower extremity sciatica.

HOSPITAL COURSE:

Postoperatively, the patient was transferred to 4 west, in stable condition. A Dilaudid PCA was initiated at that time. He was effectively transitioned to oral Percocet without difficulty. The patient remained neurologically intact with good bilateral upper and lower extremity strength. Physical therapy and occupational therapy consultation was requested. The patient was able to ambulate with minimal assist. Lumbar x-rays postoperatively revealed good position on instrumentation from L2-L5. with increased activity, the patient continued to complain of improved but persistent left leg pain, which he stated was intermittent. The patient's symptoms were treated conservatively. The patient was instructed that we will continue to monitor symptoms and if need be a spinal cord stimulator could be performed if conservative measures fail.

H&P

CHIEF COMPLAINT:

Left leg pain.

HISTORY:

The patient is a 65-year-old man who significantly had undergone a prior left-sided L4-5 transforaminal lumbar interbody fusion in February 2011. Prior to that surgery, he stated that he had had left-sided sciatica beginning about September 2010. A CT scan of the lumbar spine was reviewed as well, and demonstrates advanced degenerative disk disease combined with lumbar spinal stenosis at L2-3 and L4-5. In addition, there is concern from the CT study of possible residual left-sided L3-4 nerve impingement. Also appreciated on the CT scan is the presence of degenerative lumbar scoliosis relating to advanced degenerative disk disease at L2-3 through L4-5.

DIAGNOSTIC IMPRESSION:

1. Status post prior left L3-4 transforaminal lumbar interbody fusion.
2. Advanced L2-3 and L3-4 adjacent segment degenerative disk disease.
3. Secondary degenerative scoliosis (L2-3 to L4-5).
4. Intractable left sciatica and neuropathic pain syndrome.

ICD-10 Documentation for degenerative disk disease :

- Specify the body part as cervical, cervicothoracic, lumbar etc.
- Specify presence of myelopathy, radiculopathy, radiculitis, neuritis etc.

M51.0 Thoracic, thoracolumbar and lumbosacral intervertebral disc disorders with myelopathy
M51.04 Intervertebral disc disorders with myelopathy, thoracic region
M51.05 Intervertebral disc disorders with myelopathy, thoracolumbar region
M51.06 Intervertebral disc disorders with myelopathy, lumbar region
M51.07 Intervertebral disc disorders with myelopathy, lumbosacral region

M51.1 Thoracic, thoracolumbar and lumbosacral intervertebral disc disorders with radiculopathy
M51.14 Intervertebral disc disorders with radiculopathy, thoracic region
M51.15 Intervertebral disc disorders with radiculopathy, thoracolumbar region
M51.16 Intervertebral disc disorders with radiculopathy, lumbar region
M51.17 Intervertebral disc disorders with radiculopathy, lumbosacral region

M51.3 Other thoracic, thoracolumbar and lumbosacral intervertebral disc degeneration
M51.34 Other intervertebral disc degeneration, thoracic region
M51.35 Other intervertebral disc degeneration, thoracolumbar region
M51.36 Other intervertebral disc degeneration, lumbar region
M51.37 Other intervertebral disc degeneration, lumbosacral region

M51.36

M51 – Thoracic, thoracolumbar, and lumbosacral intervertebral disc disorder

3 – Intervertebral disc degeneration

7 - Lumbar

ICD-10 requires to specify the presence of radiculopathy with disc degeneration. Disk degeneration with radiculopathy will be coded to disk disorder with radiculopathy.

Case Study – Herniation and Degeneration

Operative report

PREOPERATIVE DIAGNOSIS:

Lumbar radiculopathy, left, recurrent, chronic, severe.

POSTOPERATIVE DIAGNOSES:

1. Disk herniation L5-S1, left, small.
2. Disk degeneration L5-S1, severe.
3. Epidural fibrosis L5-S1, left, modest.

PROCEDURES:

1. Laminotomy/foraminotomy L5-S1, left.
2. Discectomy L5-S1, left.
3. Spinal fusion L5-S1, intertransverse, bilateral.
4. Segmental instrumentation L5-S1, bilateral, with NuVasive Armada instrumentation.
5. Harvest right posterior iliac cancellous bone graft through a separate oblique incision.

DESCRIPTION OF PROCEDURE:

Anesthesia instituted. The patient turned to the prone position on the Wilson frame. Final positioning performed. Back prepped and draped in a sterile fashion. A midline incision fashioned L5-S1, and a unilateral left-sided strip carried out. The previous laminotomy was identified, expanded minimally cranially and caudally. Caudal foraminotomy was performed. There was modest epidural fibrosis, but no evidence of synovial cyst or extruded disk fragment. The disk space was explored, noted to be modestly protruding. The disk space was entered, and only a minimal amount of degenerative material obtained.

It was elected to proceed with fusion L5-S1. Through a sacrospinalis-splitting approach, the transverse processes of L5 and the sacral ala were exposed bilaterally and decorticated. Under image intensifier control, NuVasive Armada instrumentation applied at the base of the pedicles of L5 and S1 utilizing 6.5 mm diameter screws of appropriate length.

Through an oblique incision over the posterior ilium, right, cancellous bone graft harvested of excellent quality and quantity. This was utilized to bridge the transverse process of L5 to the sacral ala bilaterally. At this point, contoured rods and retaining nuts were applied to the four pedicle screws, and the nuts tightened to appropriate tension.

Prior to implantation of bone graft, the wound was copiously irrigated with antibiotic solution.

The fascial incisions closed in standard fashion, as was subcutaneous tissue, and the lumbar incision as well as the incision over the right posterior ilium. Sterile dressings applied. Patient tolerated procedure well, left the operating room in excellent condition.

3M Diagnosis

Choose one:

Degeneration of lumbosacral intervertebral disc

- 1. With neuritis, radiculitis, radiculopathy or sciatica
- 2. Other/unspecified

3M Diagnosis

Choose one:

Lumbosacral intervertebral disc displacement

- 1. With neuritis, radiculitis, radiculopathy or sciatica
- 2. Other/unspecified

ICD-10 Documentation for herniation & degeneration:

- Specify the body part as cervical, cervicothoracic, lumbar etc.
- Specify presence of myelopathy, radiculopathy, radiculitis, neuritis etc.

ICD-10 has specific codes for lumbosacral disc displacement and degeneration with radiculopathy that was not present in ICD-9.

M51.17

M51 – Thoracic, thoracolumbar, and lumbosacral intervertebral disc disorder

1 – With radiculopathy

7 - Lumbosacral

Name	ICD-10 PCS coding	Medical and surgical	Lower joints	Fusion	Body part (Lumbosacral joint)	Approach (Open)	Device (Interbody fusion device)	Qualifier (Posterior approach posterior column)
Spinal fusion	0SG30A1	0	S	G	3	0	A	1

ICD-10 requires to specify the presence of radiculopathy with disc displacement and degeneration.

Radiculopathy

ICD-9	ICD-10
724.4 Thoracic or lumbosacral neuritis or radiculitis, unspecified	M51.14 Intervertebral disc disorders with radiculopathy, thoracic region
	M51.15 Intervertebral disc disorders with radiculopathy, thoracolumbar region
	M51.16 Intervertebral disc disorders with radiculopathy, lumbar region
	M51.17 Intervertebral disc disorders with radiculopathy, lumbosacral region
	M54.14 Radiculopathy, thoracic region
	M54.15 Radiculopathy, thoracolumbar region
	M54.16 Radiculopathy, lumbar region
	M54.17 Radiculopathy, lumbosacral region

Case Study – Spinal Fusion

Operative report

PREOPERATIVE DIAGNOSES:

1. Severe thoracic spondylosis.
2. Thoracic disk disease, T11-T12.
3. Right thoracic radiculopathy.

POSTOPERATIVE DIAGNOSES:

1. Severe thoracic spondylosis.
2. Thoracic disk disease, T11-T12.
3. Right thoracic radiculopathy.

PROCEDURES PERFORMED:

1. Right-sided transthoracic anterior approach to the T11-T12 space.
2. T11-T12 discectomy.
3. T11-T12 application of intervertebral cage.
4. T11-T12 fusion.
5. Harvest of local autologous rib graft.
6. Intraoperative neurophysiological monitoring (Dr. Alex Ahumada).

DESCRIPTION OF PROCEDURE:

After obtaining informed consent, the patient was brought to the operating room, general anesthesia was induced. He was given Ancef, double lumen intubation was performed. The patient was placed in the lateral decubitus position with the right side up. Recording electrodes were placed by Dr. Ahumada. There were no abnormalities noted at the conclusion of the case. The right side of the chest was prepped and draped in the usual sterile fashion. Refer to Dr. Tyner's separately dictated operative report for details of the approach.

Once the Nuvasive minimally invasive retractor system was placed to expose the T11-T12 disk space, a large bridging anterior osteophyte correlating to the abnormalities noted on the CT was identified. The large osteophyte was carefully removed using rongeurs as well as the Anspach high-speed air drill. We then entered the disk space. There was a bridging osteophyte spanning the anterior portion of the T11-T12 disk space as well, which was similarly removed with the drill and Kerrison rongeurs. The disk space was completely cleared of the degenerative disk material and the endplates were prepared in preparation for fusion.

It should be noted we did confirm the correct anatomical location with intraoperative C-arm fluoroscopic images. We used the various trialing instruments and spacers to prepare the T11-T12 disk space. We used an 8 mm tall by 40 mm in length, PEEK intervertebral cage. This was packed with morselized autologous rib graft previously harvested by Dr. Tyner. The graft filled cage was impacted using C-arm fluoroscopic guidance with excellent purchase. The operative site was irrigated. Hemostasis was achieved.

Dr. Tyner then returned to the operating room to perform the closure and placement of a chest tube. Refer to his separately dictated note for details. The patient tolerated the procedure. There were no noted intraoperative complications. The sponge and instrument count were correct at the end of surgery.

ICD-10 Documentation for Spinal Fusion:

- Specify the vertebral joint (occipital-cervical, cervical, cervicothoracic, lumbar, lumbosacral, thoracic, thoracolumbar)
- Specify the number of joints fused
- Specify the type of fusion done (use of interbody fusion device, autologous tissue, non-autologous tissue, synthetic substitute)
- Specify the levels involving fusion device (1, 2, 3.. joint levels)
- Specify approach (open, percutaneous, or percutaneous endoscopic)
- Specify the approach and column (anterior approach anterior column, posterior approach anterior column, or posterior approach posterior column)

M51.14

M51 – Thoracic, thoracolumbar, and lumbosacral intervertebral disc disorder

1 – With radiculopathy

4 – Thoracic region

M47.24

M47 – Spondylosis

2 – with radiculopathy

4 – Thoracic region

Name	ICD-10 PCS coding	Medical and surgical	Upper joints	Fusion	Body part (Thoracic vertebral joint)	Approach (Open)	Device (Interbody fusion device)	Qualifier (Anterior approach anterior column)
Spinal fusion	0RG60A0	0	R	G	6	0	A	0

ICD-10 requires to specify the vertebral joint, the type of fusion device used, the approach used and the column fused.

Spine Conditions

Intervertebral Disc Disorders

1) Document site as:

- Cervical
- Thoracic
- Lumbar
- Sacral

2) Document any associated:

- Myelopathy
 - Radiculopathy
- or
- Sciatica

Pathological Fracture

1) Specify whether etiology is:

- Age related or disuse osteopenia
 - Neoplastic
- or
- Some other disease

2) Document encounter as initial, subsequent with nonunion, subsequent with delayed healing

Traumatic Fractures

1) Document the specify vertebra involved

- First lumbar vertebra, First thoracic vertebra

2) Document open versus closed

3) Document Type of fractures, such as Burst, wedge compression

4) Document if stable or unstable

5) Document encounter as initial, subsequent with nonunion, subsequent with delayed healing

6) For sacral fractures, document:

- Zone I, II and III
- and
- Minimally versus severely displaced
- or
- Type 1, 2, 3, or 4

Congenital deformity of spine

1) Document type of deformity

- Hyperlordosis
- Kyphosis
- Scoliosis

2) Document the specific region:

- Cervical
- Lumbar
- Thoracic
- Cervicothoracic
- Thoracolumbar

Spina bifida

1) Document the specific region:

- Cervical
- Lumbar
- Cervicothoracic
- Thoracolumbar

2) Specify if spina bifida occulta, Arnold-Chiari syndrome, type II

3) List any associated paraplegia

4) Identify the presence of hydrocephalus.

Spondylosis

1) Document by type

- Anterior spinal artery compression syndrome
- Vertebral artery compression syndrome
- Other spondylosis
- with or without myelopathy and/or radiculopathy

2) Document site as:

- Occipito-atlanto-axial
- Cervical or Cervical-thoracic
- Thoracic or Thoracolumbar
- Lumbar or Lumbosacral
- Sacral or Sacrococcygeal

Congenital Anomaly of the Spine

ICD-9	ICD-10
756.19 Other congenital anomaly of spine	Q76.411 congenital kyphosis, occipito-atlanto-axial region
	Q76.412 congenital kyphosis, cervical region
	Q76.413 congenital kyphosis, cervicothoracic region
	Q76.414 congenital kyphosis, thoracic region
	Q76.415 congenital kyphosis, thoracolumbar region
	Q76.419 congenital kyphosis, unspecified region

ICD-9	ICD-10
724.5 Congenital musculoskeletal deformity of spine	Q76.3 Congenital scoliosis due to congenital bony malformation
	Q76.425 Congenital lordosis, thoracolumbar region
	Q76.426 Congenital lordosis, lumbar region
	Q76.427 Congenital lordosis, lumbosacral region
	Q76.428 Congenital lordosis, sacral and sacrococcygeal region
	Q76.429 Congenital lordosis, unspecified region

Spine Procedures

Procedure	Body section	Root operation	Body Part	Approach	Device/ Substance	Qualifier
Spinal fusion	Document body section: Cervical, thoracic, lumbar Cervicothoracic		Document Levels: One, two, three cervical vertebra	Document Approach: Open, percutaneous, percutaneous endoscopic	Document use of: Interbody fusion device (BAK, PEEK etc), autologous tissue, synthetic substitute, non- autologous tissue etc.	Document approach and column: Anterior approach anterior column, posterior approach posterior column etc.
Biopsy		Document: Extraction or drainage (spinal tap)	Document body part: Iliac, sternum, vertebral	Document Approach: Open or percutaneous		
Diskectomy		Document: Excision or resection	Document body part: Cervical, thoracic, lumbar vertebral, Cervicothoracic etc.	Document Approach: Open, percutaneous, percutaneous endoscopic		
Neurostimulat or placement			Document body part for generator in: Abdomen, chest back. Document lead in: Spinal canal or spinal cord	Document Approach: Open, percutaneous, percutaneous endoscopic	Document generator as: Single array, multiple array and rechargeable or non-rechargeable.	
Injection			Document body part as: Epidural space or spinal canal		Document substance as: Anti- inflammatory, contrast agent, antineoplastic etc.	Document antineoplastic agent as: High dose interleukin-2, low-dose interleukin-2, monoclonal antibody etc.

Acuity- acute, chronic, intermittent

Severity- mild, moderate, severe

Etiology- trauma, diabetes, renal failure, exercise or infection induced

Location- where is it- be specific about which joint, chest, femur, posterior thorax

Laterality- which side is it? Left, right, both?

Detail: Present on admission status, associated symptoms (hypoxia, loss of consciousness), additional medical diagnoses, initial versus subsequent encounter



Sharieff.Ghazala@scrippshealth.org

For any questions:

QUESTIONS? CONCERNS?

ICD-10 Hotline: 858-336-0293

ICD10Help@scrippshealth.org

