

Imaging Findings	Cause
Conus and Spinal Canal Diameter and Contents	
MR, CT-myelo: intramedullary, intradural extramedullary, and extramedullary masses; MR: leptomeningeal enhancement.	Metastatic carcinoma
Reduced diameter of the spinal canal, subarticular recess, or neural foramen.	Spinal stenosis
Epidural soft tissue lesion showing decreased SI on T1WI and increased SI on T2WI lacking central enhancement.	Epidural abscess
Intradural tumor.	Spinal canal tumor
Paraspinal Structures and SI Joints	
MR, CT: retroperitoneal lymphadenopathy.	Metastatic carcinoma
Distended aorta.	Aortic aneurysm
MR, CT, XR: fused SI joints; MR: subchondral inflammatory changes.	Ankylosing spondylitis
Joint space narrowing, osteophyte formation, subchondral sclerosis/cysts.	Osteoarthritis
Appropriately located calculus; associated hydronephrosis.	Renal calculus
Adnexal and other pelvic masses.	Endometriosis
Bones	
MR, CT, XR: Destruction of bone cortex and marrow; replacement of marrow with tumor.	Metastatic carcinoma (including multiple myeloma)
MR, CT, XR: wedge compression deformity; CT, XR: demineralization; MR: decreased SI on T1 and increased SI on T2.	Osteoporotic compression fracture
MR, CT, XR: wedge compression deformity; CT, XR: demineralization; MR: decreased SI on T1WI and increased SI on T2WI.	Post-traumatic fracture
MR, CT, XR: squared vertebral bodies; CR, XR: "shiny corners".	Ankylosing spondylitis
MR, CT, XR: Destruction of bone cortex and marrow; replacement of marrow with tumor.	Osteomyelitis
Malalignment of vertebrae; associated pars defects in lytic spondylolisthesis.	Spondylolisthesis
Sacral mass.	Chordoma
Intervertebral Discs and Facet Joints (Each Visualized Level)	
Disc contour abnormality; intrathecal mass (with an extruded fragment), associated loss of disc height in some cases.	Herniated disc
Joint space narrowing, osteophyte formation, subchondral sclerosis/cysts. Synovial cyst.	Osteoarthritis
MR: decreased SI on T1WI and increased SI on T2WI; MR, CT, XR: bone destruction with associated osteomyelitis.	Diskitis

COMBINED CHECKLIST/REPORT TEMPLATE
FOR PLAIN FILMS DONE FOR BACK PAIN

LUMBAR SPINE RADIOGRAPHS

INDICATION: Back pain.

COMPARISON: [Check priors to see if following a known lesion.]

TECHNIQUE: []

Bones: [Bone destruction (metastasis, osteomyelitis). Lost vertebral body height (osteoporotic or post-traumatic fracture). Pars lucency (spondylolysis).]

Joints: [Osteophytes, joint space narrowing, subchondral sclerosis, or subchondral cysts along the intervertebral discs, facet joints, or SI joints (osteoarthritis and degenerative disc disease). Abnormal offset of vertebral bodies (spondylolisthesis). Vacuum phenomenon (degenerative disc disease). Fusion of the SI joints (ankylosing spondylitis).]

Visualized soft tissues: [Calcified distended aorta (aortic aneurysm). Renal, ureteral, or bladder stone (renal stone disease).]

IMPRESSION: []

COMBINED CHECKLIST/REPORT TEMPLATE
FOR MR DONE FOR BACK PAIN

LUMBAR SPINE MR UNENHANCED

INDICATION: Back pain.

COMPARISON: [Check priors to see if following a known lesion.]

TECHNIQUE: Sagittal and axial T1 and T2 weighted images of the lumbar spine were obtained.

The conus is normal and ends at the [] level. [no conus tumor or compression from metastatic disease]. [Intramedullary, intradural extramedullary, or extradural mass (tumor) or fluid collection (epidural abscess).]

Bones: [Discontinuous cortex or loss of vertebral body height and/or abnormal normal bone marrow signal intensity (osteoporotic, stress, or insufficiency fracture; subchondral marrow degenerative changes; metastatic or primary tumor; osteomyelitis; spondylolysis).]

Paraspinal tissues and SI joints: [Distended abdominal aorta (aortic aneurysm). Enlarged lymph nodes (lymphadenopathy from metastatic deposit or infection). Erosion or fusion of the SI joints (ankylosing spondylitis). Osteophytes of the SI joints (osteoarthritis). Renal, ureteral, or bladder stone or hydronephrosis (renal stone disease). Pelvic mass(es) (malignancy, endometriosis).]

L5/S1: [Abnormal disc contour (diffuse bulging from degeneration or focal contour abnormality from herniation). Decreased disc signal intensity (dehydration from degeneration). Increased disc signal on T2 weighted images (discitis or degeneration). Narrowed spinal canal, subarticular recess, and/or foraminal size (stenosis from degenerative processes). Osteophytes along the intervertebral disc or facet joints (degenerative joint disease). Fluid-filled lesion emanating from the facet joint (synovial cyst). Offset of vertebral bodies (spondylolisthesis).]

L4/L5 through T12/L1:[Repeat steps given for L5/S1.]

IMPRESSION:

[]