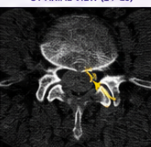
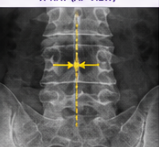
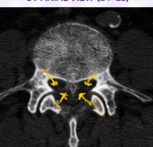
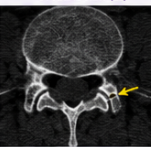
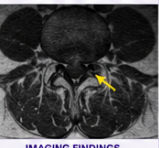
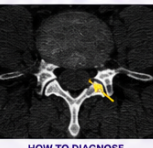
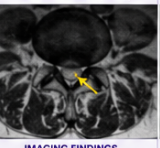
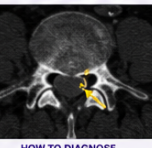
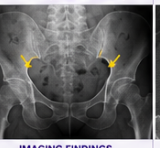


xray ct spine



1. LUMBAR DISC PROLAPSE (L4-L5)  IMAGING FINDINGS - Loss of normal disc contour - Posterior disc protrusion - May see reduced disc height  HOW TO DIAGNOSE - History of radicular pain +ve SLR / Slump test - CT/MRI shows posterior disc herniation compressing the nerve root	2. LUMBAR SPINAL STENOSIS (L4-L5)  IMAGING FINDINGS - Possible disc space narrowing - Facet joint hypertrophy - Osteophytes may be present  HOW TO DIAGNOSE - Neurogenic claudication - Relief on flexion - CT/MRI: Narrowed central canal (<10 mm AP diameter)	3. FACET JOINT ARTHROPATHY (L4-L5)  IMAGING FINDINGS - Facet joint space narrowing - Subchondral sclerosis - Osteophyte formation  HOW TO DIAGNOSE - Localized axial low back pain - Pain on extension/rotation - CT: Hypertrophy of facet joints, joint space narrowing	4. SPONDYLOLISTHESIS (L4 ON L5)  IMAGING FINDINGS - Anterior displacement of L4 over L5 - May be associated with pars defect  HOW TO DIAGNOSE - Low back pain, hamstring tightness - X-ray: Anterior slip >3-5 mm - Confirm with CT
5. PARS DEFECT (SPONDYLOLYSIS L5)  IMAGING FINDINGS - Defect (lucent line) in pars interarticularis "Scotty dog" sign - break in the neck  HOW TO DIAGNOSE - Chronic low back pain (young athletes) - Pain on hyperextension - CT/SPECT useful for early detection	6. VERTEBRAL COMPRESSION FRACTURE  IMAGING FINDINGS - Anterior wedging - Loss of anterior vertebral height - Endplate irregularity  HOW TO DIAGNOSE - History of trauma/osteoporosis - Localized back pain - CT/MRI: Loss of vertebral height, cortical break	7. DEGENERATIVE DISC DISEASE (L4-L5)  IMAGING FINDINGS - Reduced disc height - Endplate sclerosis - Marginal osteophytes - Vacuum phenomenon (±)  HOW TO DIAGNOSE - Chronic mechanical low back pain - Stiffness, pain on activity - Imaging shows disc degeneration changes	8. SCOLIOSIS (LUMBAR)  IMAGING FINDINGS - Lateral curvature of spine - Cobb angle >10° - Vertebral rotation  HOW TO DIAGNOSE - Clinical assessment - Measure Cobb angle on AP X-ray - Assess flexibility
9. OSTEOPHYTES (SPONDYLOSIS)  IMAGING FINDINGS - Bony outgrowths at anterior vertebral margins - May bridge across levels  HOW TO DIAGNOSE - Age >40 yrs, chronic pain - Mechanical symptoms - Seen on X-ray/CT as marginal spurs	10. NERVE ROOT COMPRESSION (L5)  IMAGING FINDINGS - Nerve root displaced/compressed by disc/osteophyte - Loss of perineural fat  HOW TO DIAGNOSE - Radicular pain in L5 distribution +ve SLR - MRI/CT: Nerve root compression	11. DISC BULGE (L4-L5)  IMAGING FINDINGS - Diffuse circumferential disc bulge - Thecal sac indentation  HOW TO DIAGNOSE - Axial low back pain - Heaviness/bilat. symptoms - MRI/CT: Broad-based bulge without focal herniation	12. SACROILIAC JOINT ARTHRITIS  IMAGING FINDINGS - Joint space narrowing - Sclerosis - Erosions, ankylosis (advanced)  HOW TO DIAGNOSE - Pain over SI joint +ve FABER, Gaenslen's test - Imaging confirms SI joint inflammation/degeneration