8 Imaging spinal stenosis
Degenerative lumbar spinal stenosis is a condition in which there is diminished space available for the neural and vascular elements in the lumbar spine secondary to degenerative changes in the spinal canal. The diagnosis of spinal stenosis relies primarily on imaging to provide objective evidence of neurovascular compromise. This article discusses pertinent anatomy, updated nomenclature, indications for imaging, and qualitative and quantitative criteria, illustrating the discussion of stenosis with examples for clarity.
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Mary Beth Massat

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Vertebral compression fractures (VCFs) are common, particularly in the osteoporotic population, with over 700,000 new fractures per year in the U.S. alone. The healthcare expenditures stemming from the morbidity and disability of these fractures now exceed $5 billion in direct costs alone from inpatient admissions and emergency room visits. Since osteoporosis is primarily a disease of the elderly and the population of individuals aged 65 and over is growing rapidly, the cost of caring for VCFs could increase 53% by 2025.
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Each day clinicians deal with patients that have chest pain. A combination of clinical history, an electrocardiogram, appropriate laboratory data, pertinent physical findings, clinical decision rules and clinical judgment leads to a likely group of differential diagnoses. Specific clinical scenarios may benefit from the use of contrast-enhanced pulmonary magnetic resonance angiography for the primary diagnosis of pulmonary embolism.
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