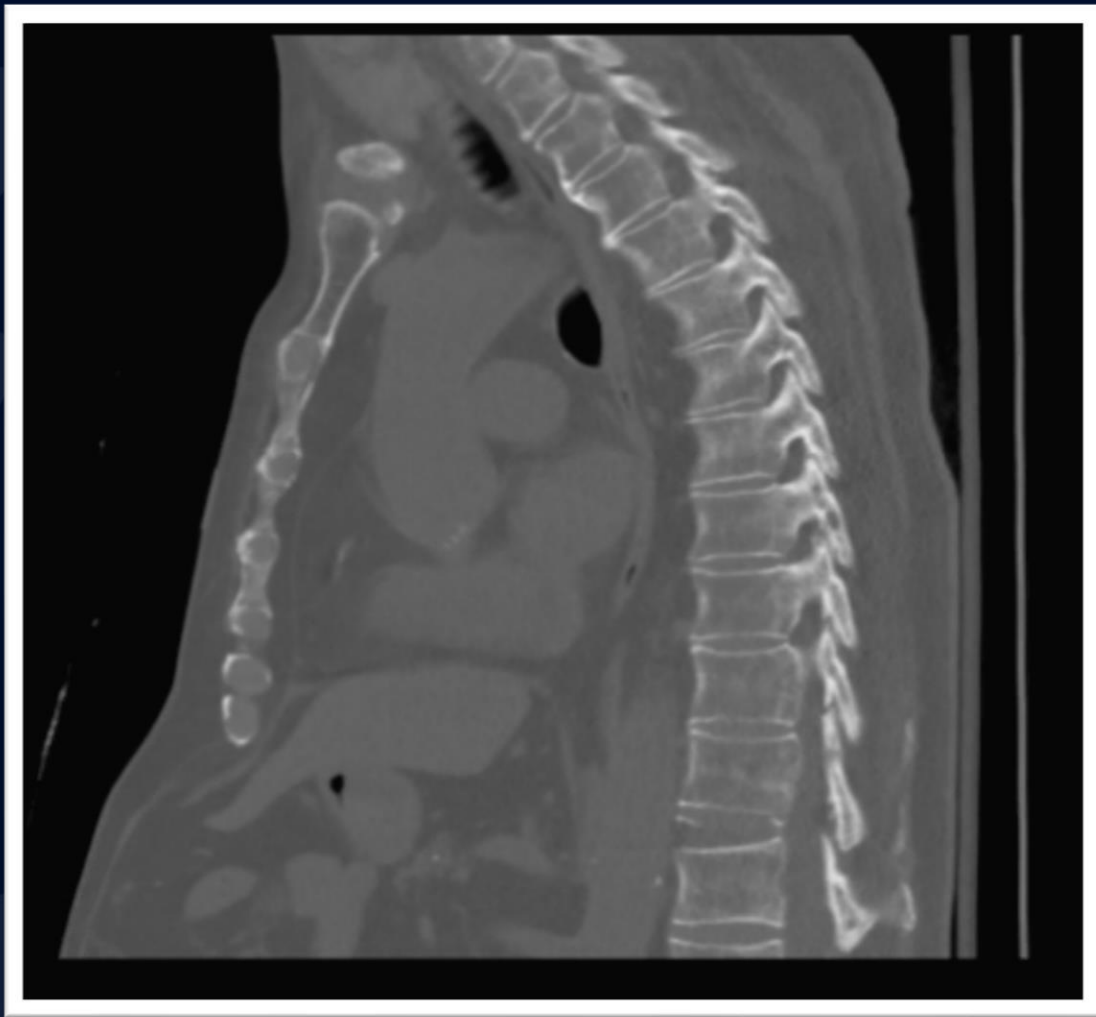
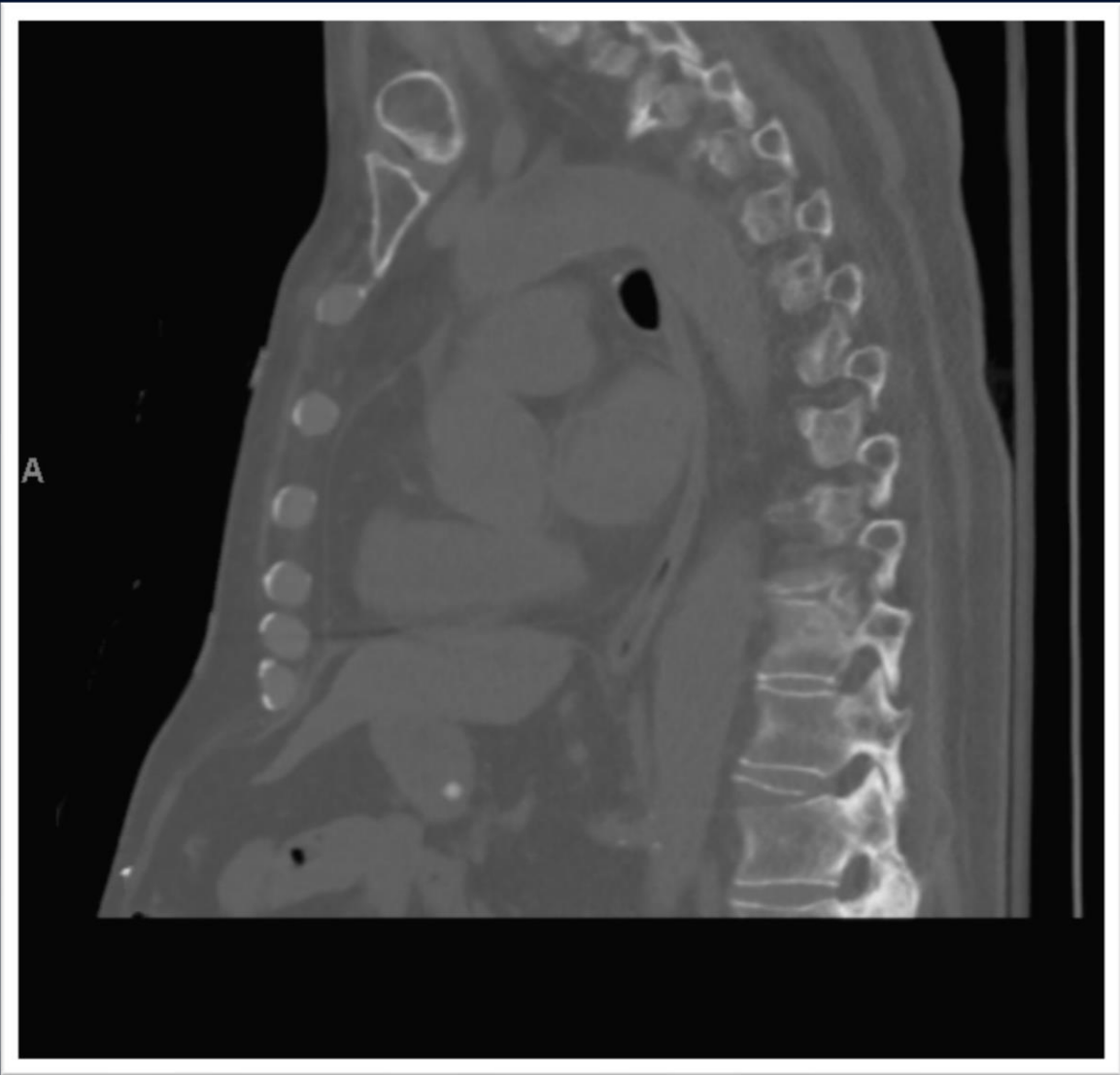


88 y/o male presents after syncope and fall

Edward Gillis, DO








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HEALTH

RADIOLOGY

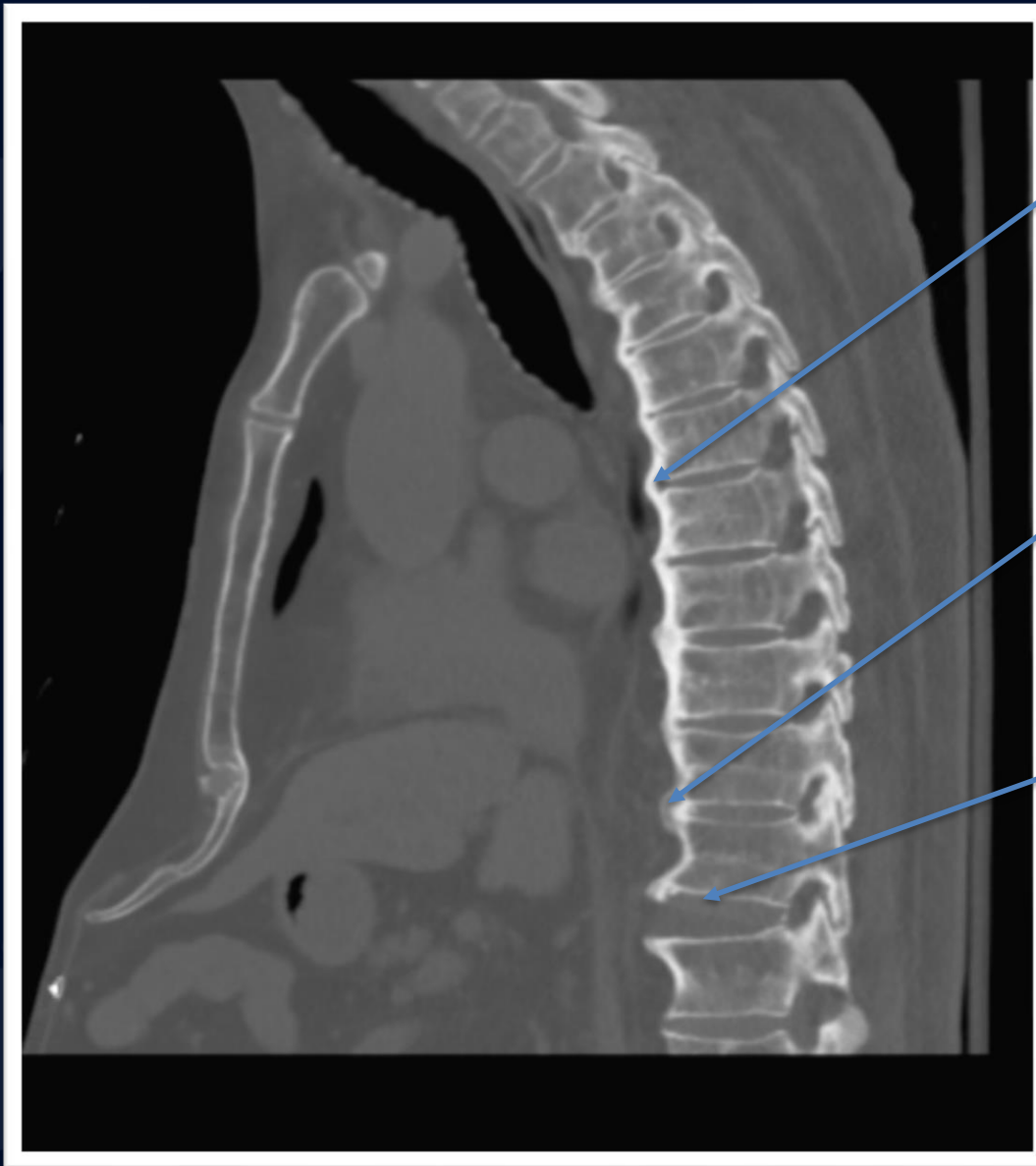




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A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the slide, partially overlapping the text.

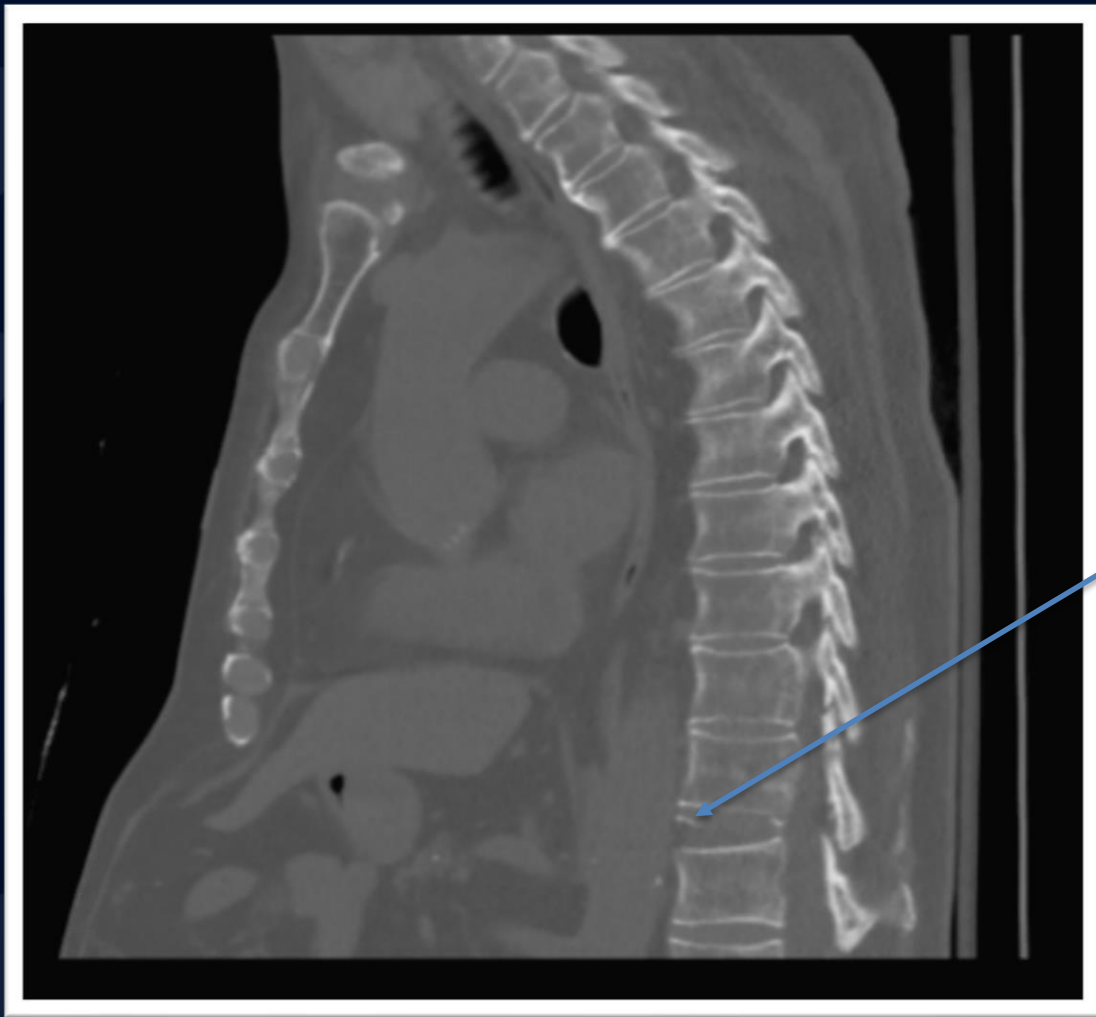
Chalk stick fracture with superior T12 endplate avulsion



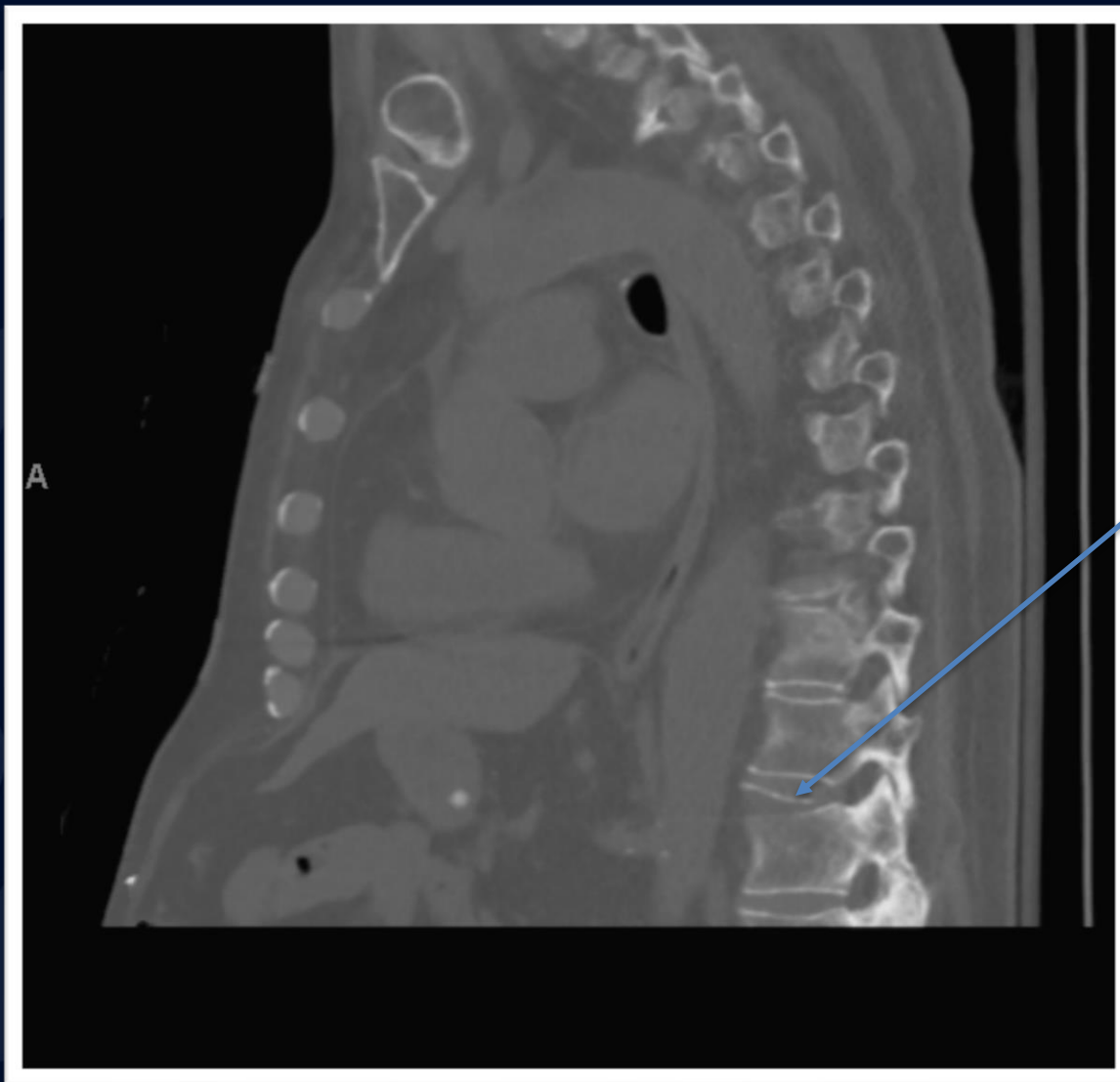
Ossification of the anterior longitudinal ligament

Vertical syndesmophytes

Disc space widening



Transverse fracture through the superior endplate at T12



Transverse
fracture through
the superior
endplate at T12



- Difficult to visualize the T12 superior endplate fracture on plain radiographs
- Better appreciated are the multilevel anterior syndesmophytes producing spinal fusion

Chalk Stick Fracture

- Fractures of a fused spine, classically seen in ankylosing spondylitis.
- Usually occur through the disco-vertebral junction.
- When several contiguous segments of the spine are fused, the fused column acts as a lever arm.
 - Increased stress on the fused segments.
 - Fractures often occur following minimal trauma due to fusion and osteoporosis.

Radiographic Findings

- Thin vertical syndesmophytes which form in the outer fibers of the annulus fibrosus
 - Better appreciated on radiograph than CT or MRI
 - Leads to spinal fusion
- Osteopenia or osteoporosis
- May see ossification of anterior or posterior spinal ligament
- Fractures are generally transverse
- Often at cervicothoracic or thoracolumbar junctions

References

- Chaudhary SB, Hullinger H, Vives MJ. Management of Acute Spinal Fractures in Ankylosing Spondylitis. *ISRN Rheumatology*. 2011;2011:150484. doi:10.5402/2011/150484.