

Memorable Cases - Spine



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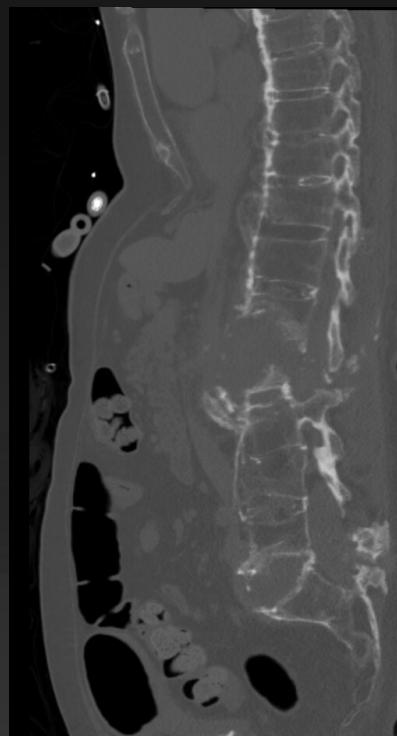
69 y/o M with remote cervical spine injury and subsequent quadriplegia presenting for elevated blood pressure



Sagittal MRI T2WI



Sagittal Noncontrast CT



Sagittal Noncontrast CT



Sagittal Noncontrast CT

Differentials



- Degenerative Disc Disease
- Discitis/Osteomyelitis
- Metastasis
- Charcot spine

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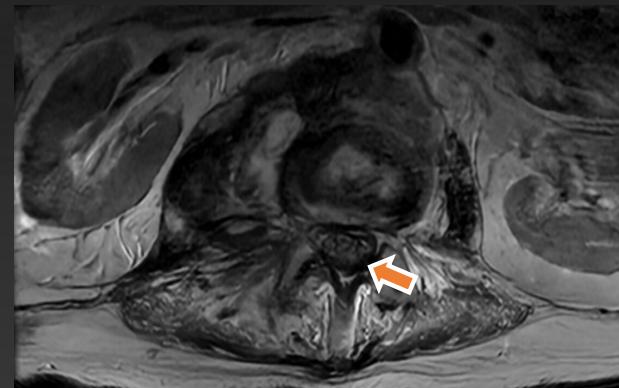
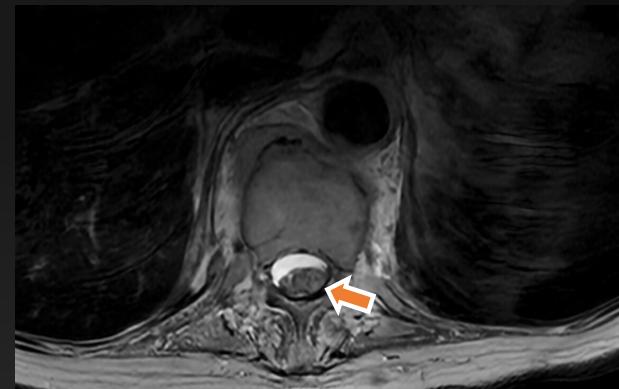
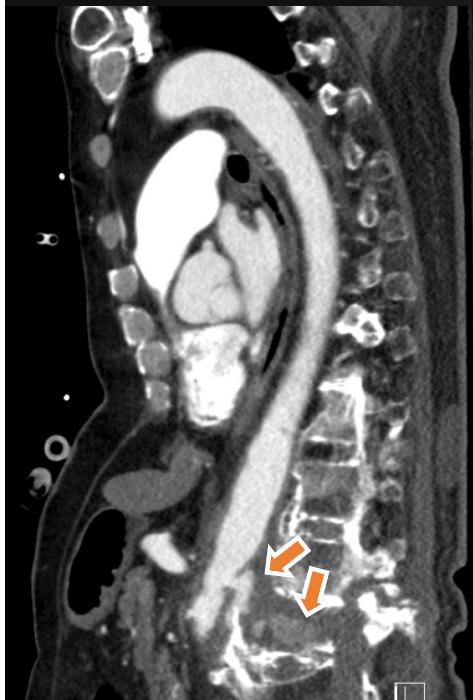


Sagittal Noncontrast CT



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Spinal Neuroarthropathy (Charcot Joint/Spine)



- Progressive degenerative joint disorder in patients with abnormal proprioception and pain sensation
- Pathophysiology
 - Inflammatory response from minor injury resulting in osteolysis
 - In setting of neuropathy, initial injury and inflammatory response not appreciated
 - Perpetuation of further inflammation and injury leading to joint destruction
- Etiology of neuropathy
 - Diabetes mellitus most common overall cause (foot and ankle)
 - Syringomyelia (upper extremity and shoulder)
 - Traumatic spinal cord injury (spine)

Spinal Neuroarthropathy (Charcot Joint/Spine)



- **Stages**
 - Atrophic – More common, occurs earlier, bone resorption
 - Hypertrophic – Bone formation, osteosclerosis, osteophytosis
- **Diagnosis keys**
 - Debris, Destruction, Density change, Distension, Disorganization, Dislocation
 - History of prior spinal injury, anterior and posterior element involvement, spinal malalignment

Aortic Spinal Fistula



- Aortic fistulas
 - Aortoenteric fistula is a more common variant with many cases described in the literature
 - Very few cases of fistulas between the aorta and spinal column
 - Most cases in the context of prior endovascular aortic aneurysm repair and infection
- This case
 - Rare example of a fistulous connection between the aorta and spinal canal/thecal sac
 - Rare association with Charcot spine

Thank You!

