63-year-old female with acute-on-chronic neck pain, unilateral right arm paresthesias, and bilateral leg weakness

Evan Risch, MS3

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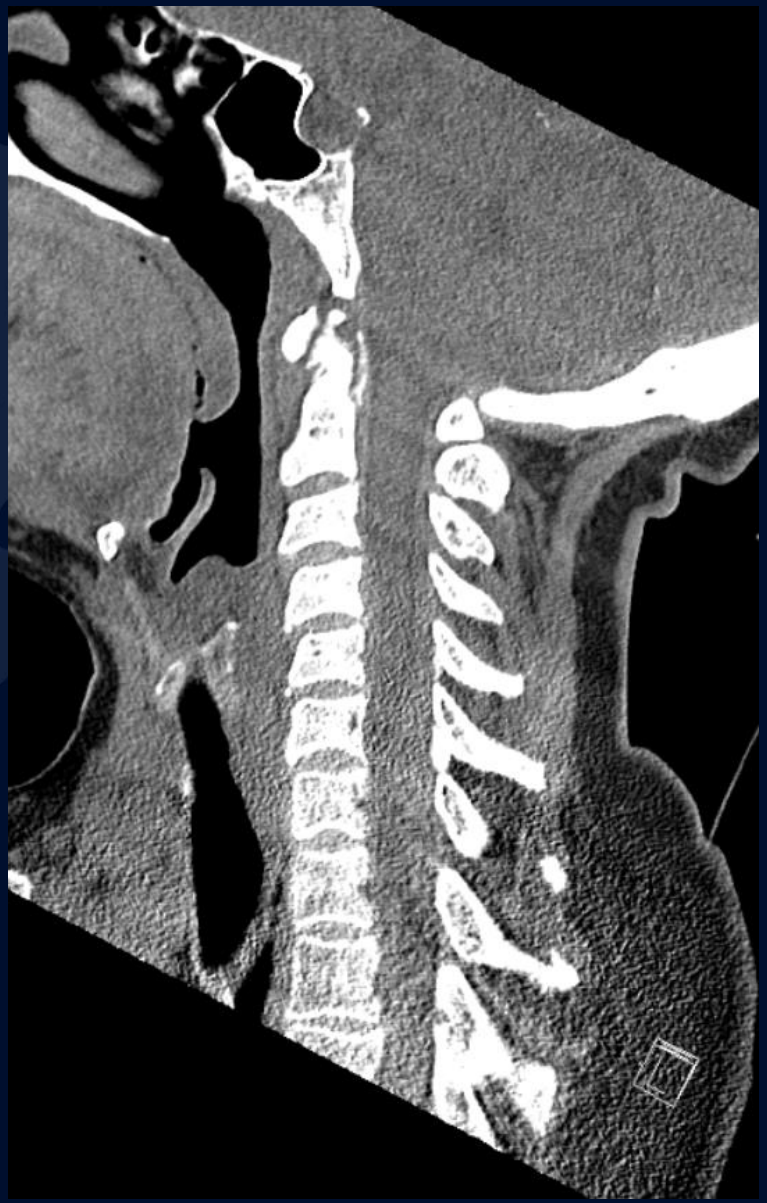
Non-contrast CT



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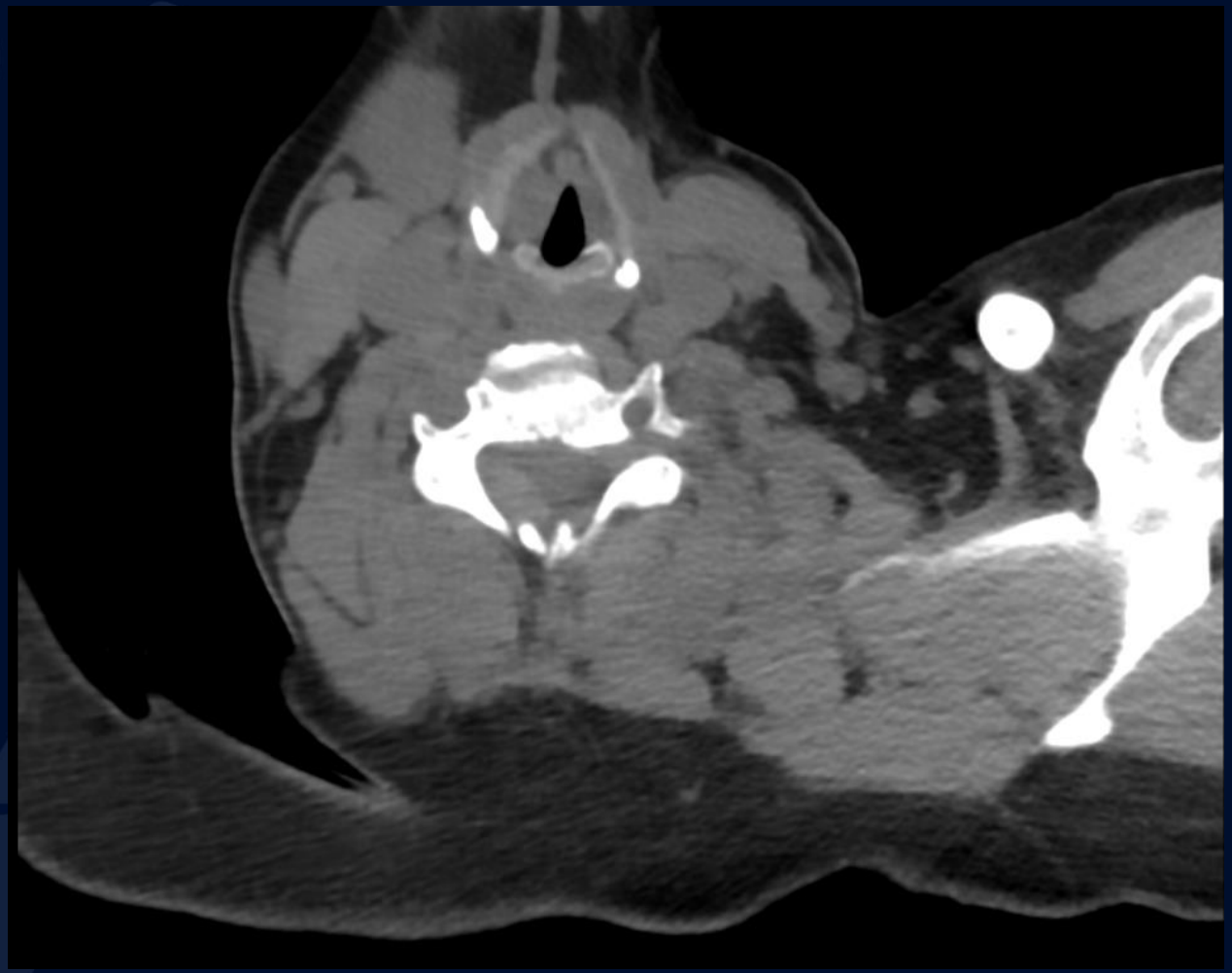
Non-contrast CT



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Spontaneous Spinal Epidural Hematoma

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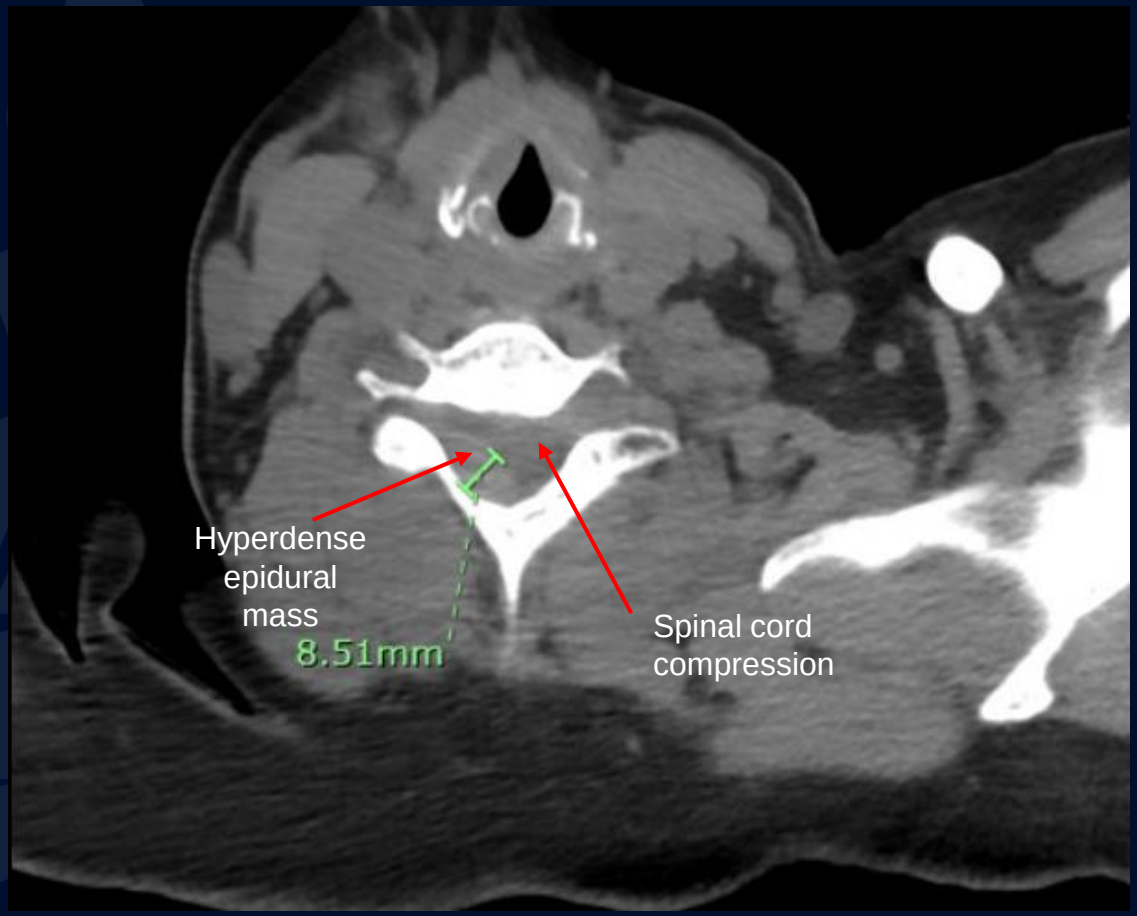
Non-contrast CT



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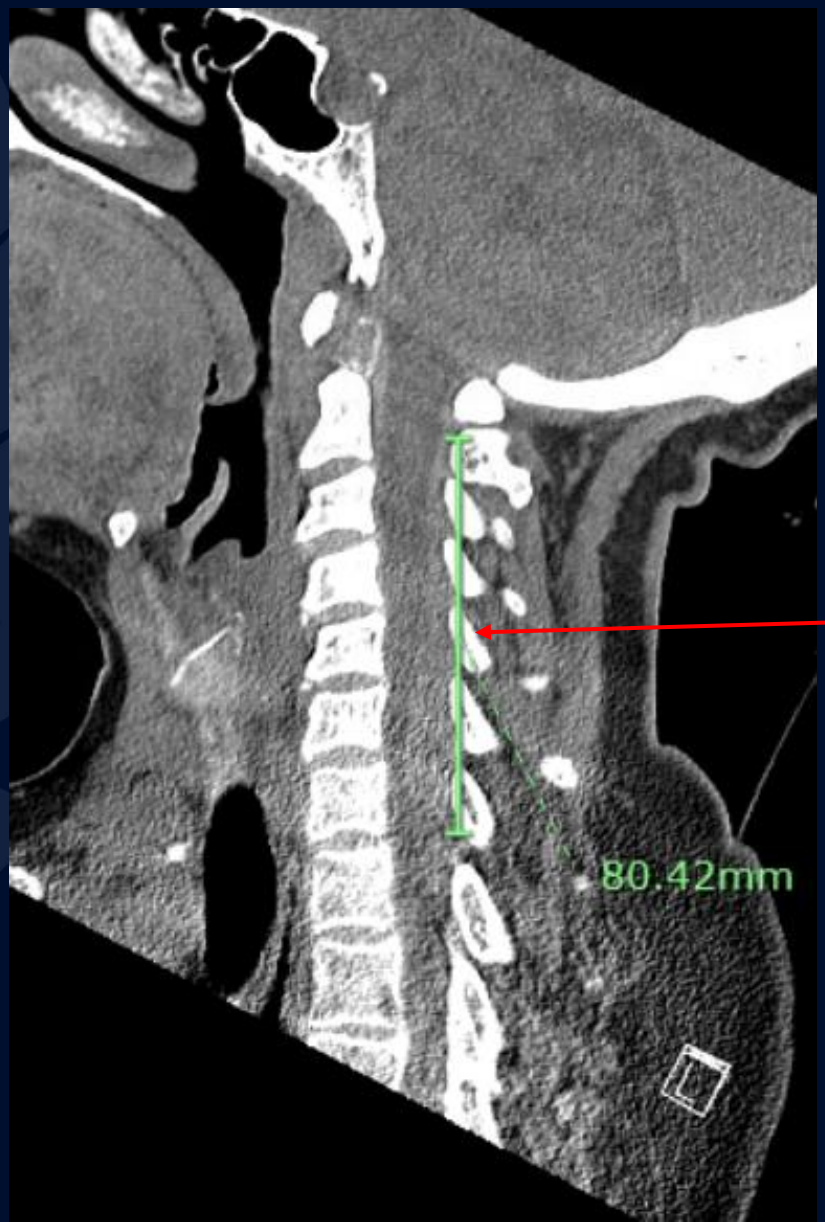
Non-contrast CT



Hyperdense epidural mass

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Spontaneous Spinal Epidural Hematoma

Rare neurological emergency in which there is accumulation of hemorrhage between the dura and spine which is not caused by significant trauma or iatrogenic procedures; unclear etiology

Clinical Presentation

- Acute onset neck and back pain, progressive paraparesis, bladder and bowel dysfunction

Differential diagnosis

- Stroke or TIA
- Multiple sclerosis
- Cervical spondylopathy leading to radiculopathy
- Vertebral fracture

Imaging findings

- Increased attenuation within the epidural space
- +/- mass effect on the spinal cord
- Diagnosis requires absence of identifiable triggers, traumatic events or other direct causes

Treatment

- Surgical decompression and hematoma evacuation
- Conservative management for less severe cases

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Imaging Findings

MRI

- Provides the most info regarding extent of hematoma and degree of cord compression
- Extradural multisegmented fluid collection

CT

- If MRI is unavailable or cannot be done quickly
- Hyperdense epidural mass; soft tissue window is essential
- Variable cord compression
- Sagittal reformation best evaluates for craniocaudal extent

Common sites

- C5-T1
- T10-L2

Sources of bleed

- Arterial (rapid)- meningeal branches of the ascending and deep cervical arteries
- Venous (slower)- vertebral venous plexus
  - More insidious onset of symptoms

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