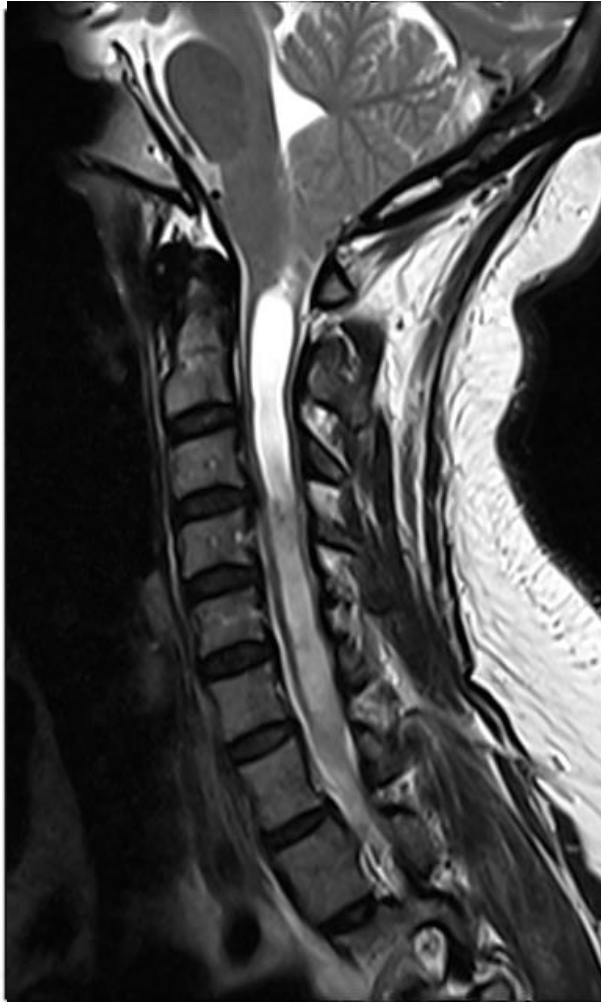


44 year old female with left upper
extremity paresthesia and
decreased sensation to
temperature

Sarah Germaine, DO

Leo Wolansky, MD

MRI C-spine



Sagittal T2



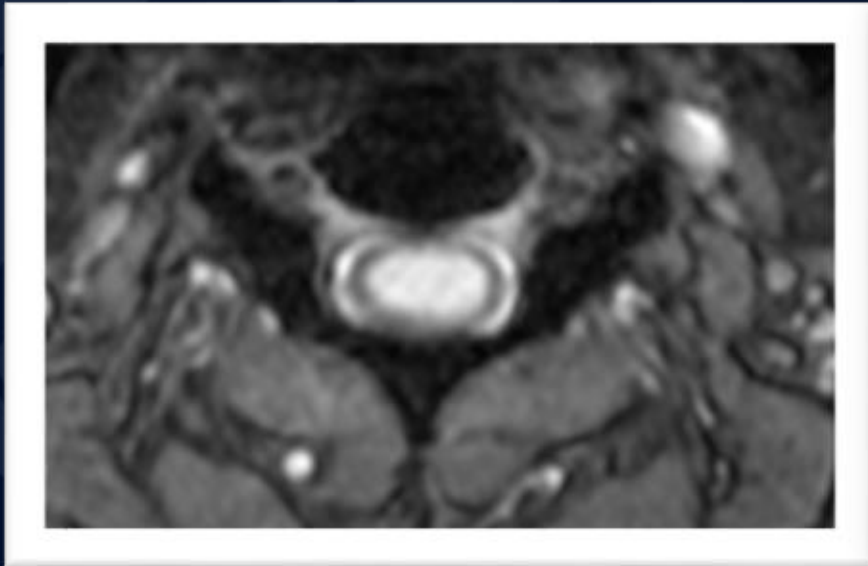
Sagittal T1

MRI T-spine sagittal T2

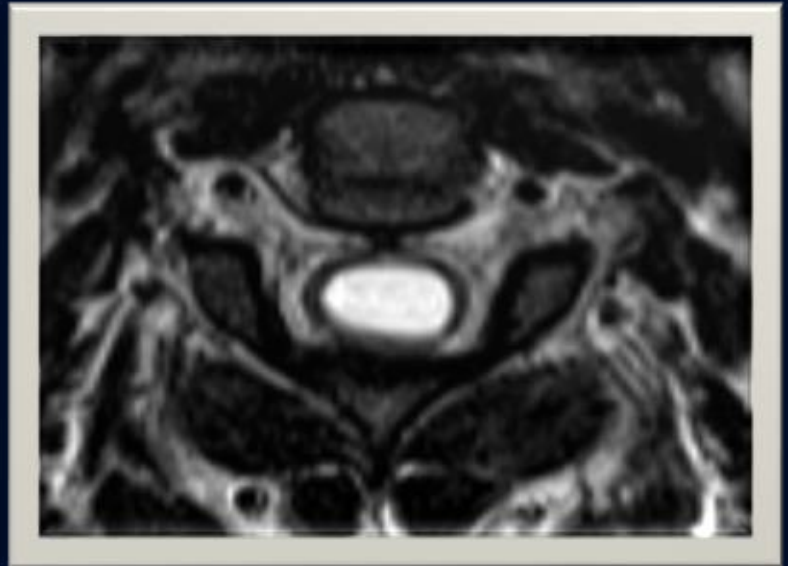


MRI cervical spine

Axial GRE T2*



Axial T2





A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the slide. The leaf has a prominent central vein and several smaller veins branching off it. The leaf's edge is serrated.

Syringomyelia Due to Chiari I

MRI C-spine



Sagittal T2

- Syrinx (blue arrow)
Elongated CSF intensity lesion within the cord, often with septations
- Chiari I malformation (yellow arrow): Cerebellar tonsillar herniation with inferior pointing, effacing cisterna magna

Sagittal T1

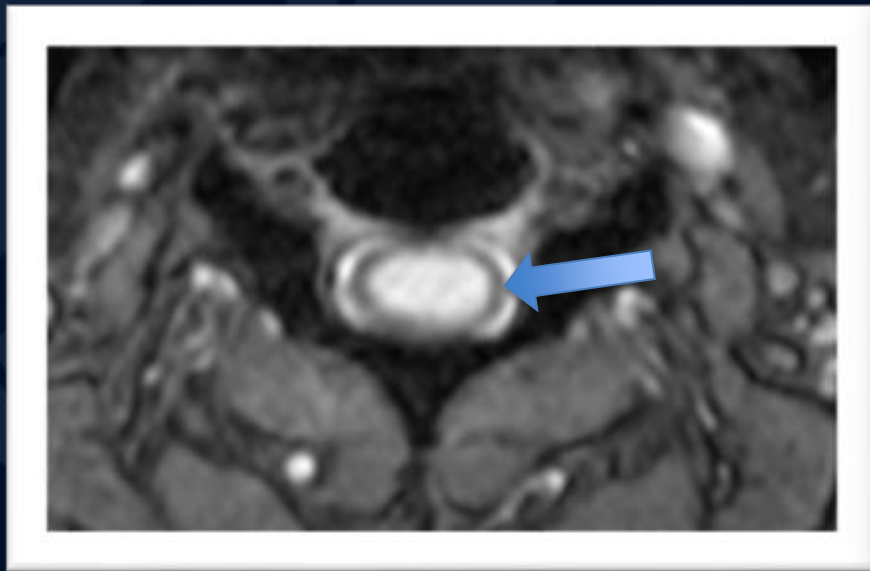
MRI T-spine sagittal T2

- Syrinx (blue arrow)
Can extend variable
distance down the
cord

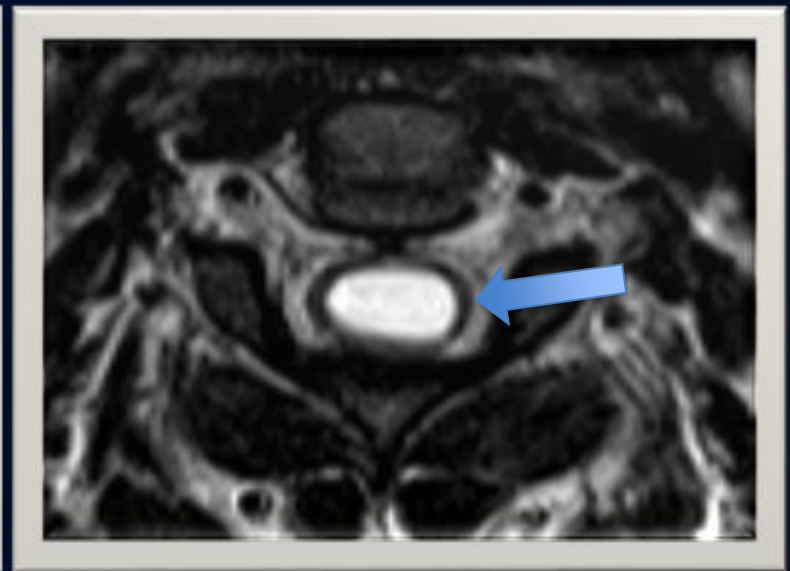


MRI C-spine

- Syrinx (blue arrows) can extend centrally or eccentrically. In this case syrinx was central at higher levels but eccentric at lower levels (not shown), accounting for the asymmetric symptoms



Axial GRE T2*



Axial T2

Syrinx

- fluid-filled, gliosis-lined cavity within the spinal cord
- Elongates over time destroying the center of the spinal cord
- Most lesions occur between C2-T9
 - Can extend upward into brainstem (syringobulbia)
- Etiology: congenital, trauma, tumor
 - Most common cause being Chiari I
 - Gd typically shows enhancement if tumor

Clinical Presentation

- Symptoms dependent on syrinx location, may be asymptomatic
- Classic presentation:
 - Suspended sensory level
 - Cape like loss pain/temperature sensation back/arms
 - Symptoms may progress to atrophy and hand deformity (claw hands)

References

- Schünke M, Ross LM, Lamperti ED et-al. Thieme atlas of anatomy, Head and neuroanatomy. George Thieme Verlag. (2007) ISBN:3131421215
- Eisen, A. Disorders affecting the spinal cord. May 1,2019. Uptodate.
- Foster, T. Jones, Jeremy et-al. Syrinx. Radiopaedia