

72 y/o male
with H/O Adenocarcinoma of the Lung
with New Saddle Anesthesia.
R/O Compression of Cord or Cauda Equina

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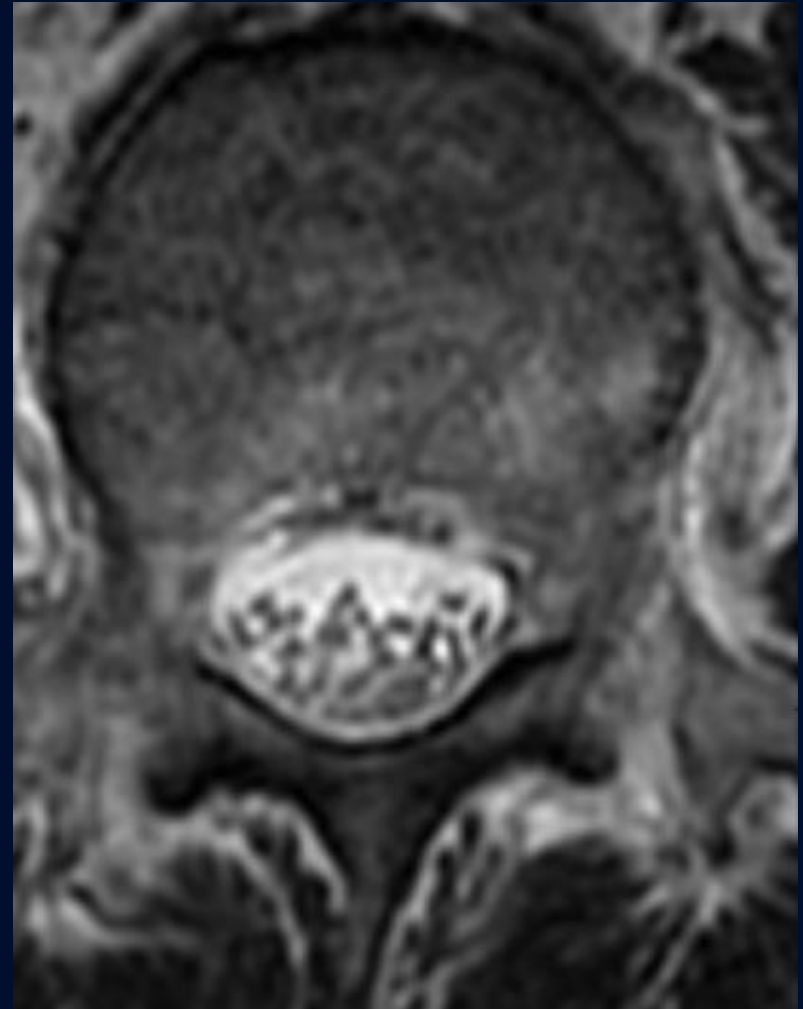
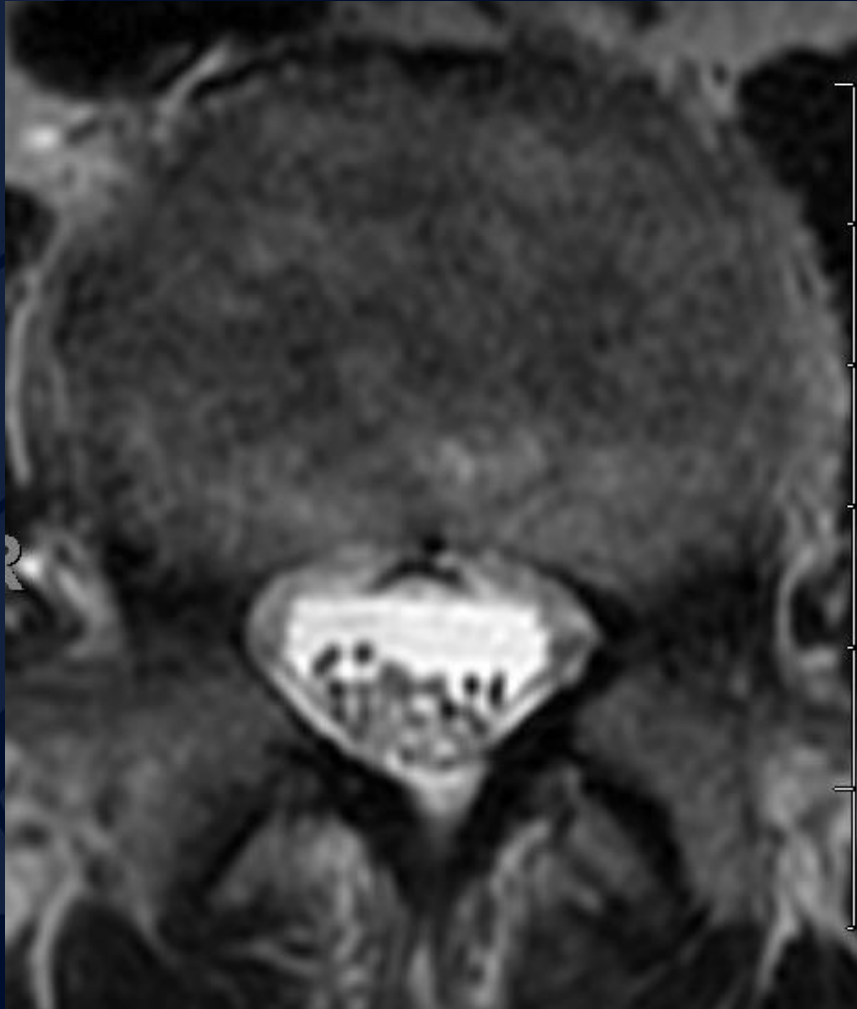
T2



T1



STIR



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 background is a solid dark blue.

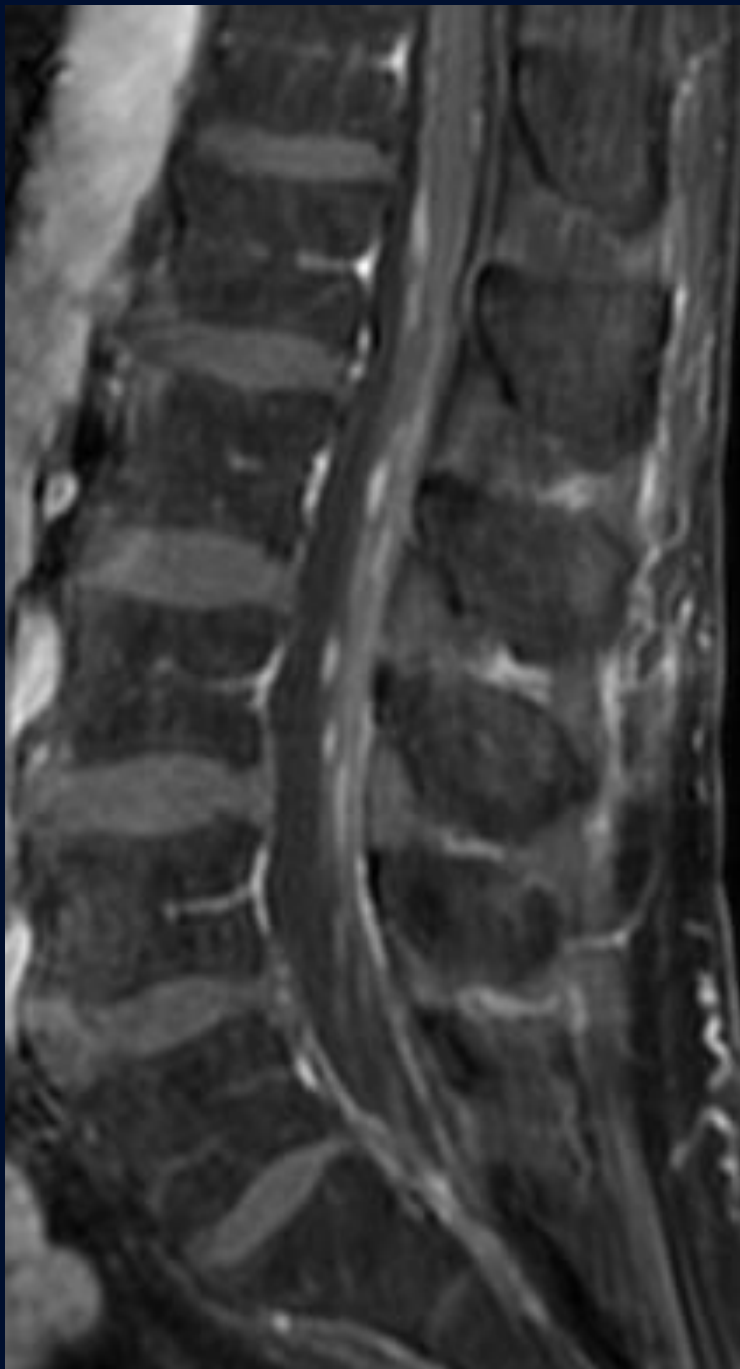
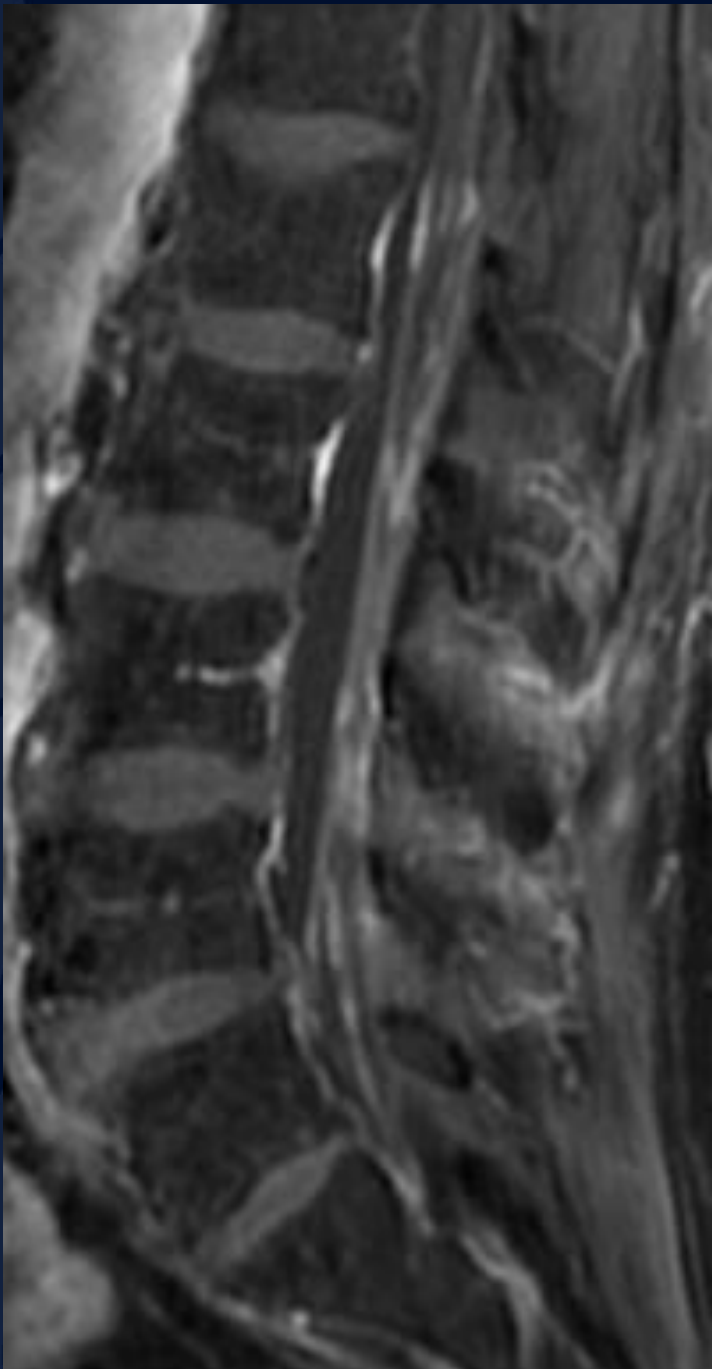
What is the next study?

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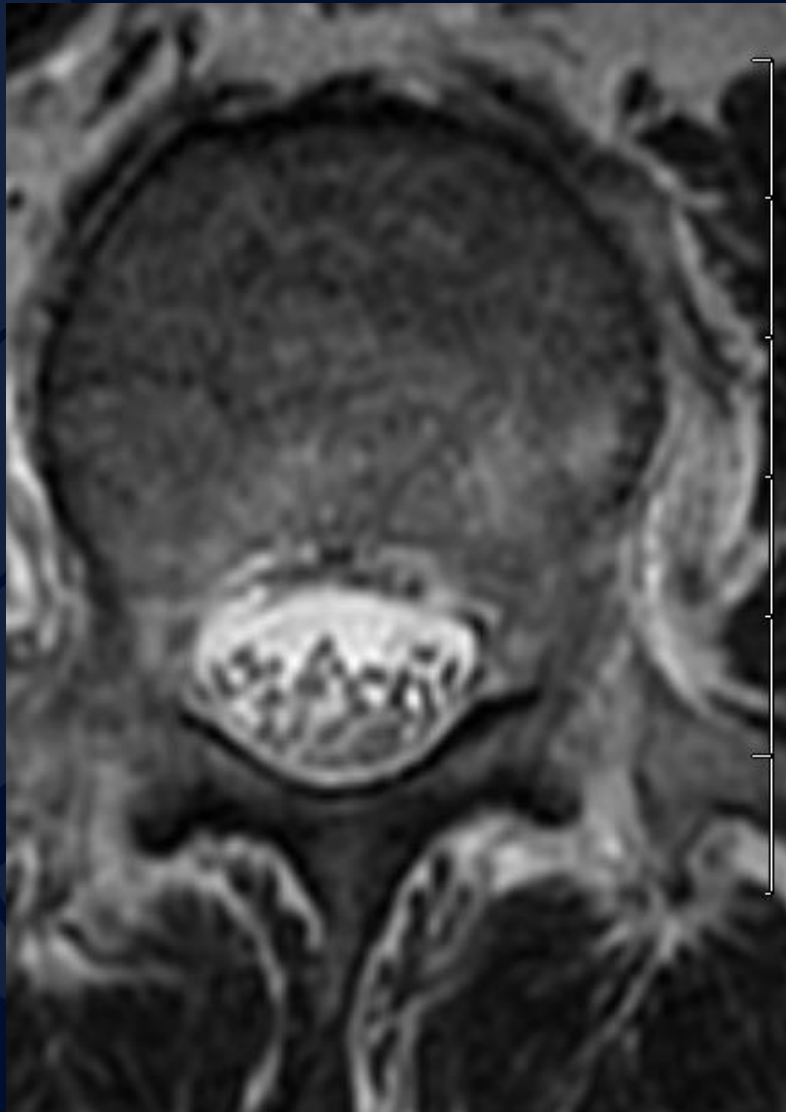
- A) Gd-MRI
- B) Lumbar Puncture for CSF
- C) CT
- D) CT-Myelography

What is the next study?

- A) **Gd-MRI**
- B) Lumbar Puncture for CSF
- C) CT
- D) CT-Myelography



Gd-T1
Fat-Sat



T2



Gd-T1



T2

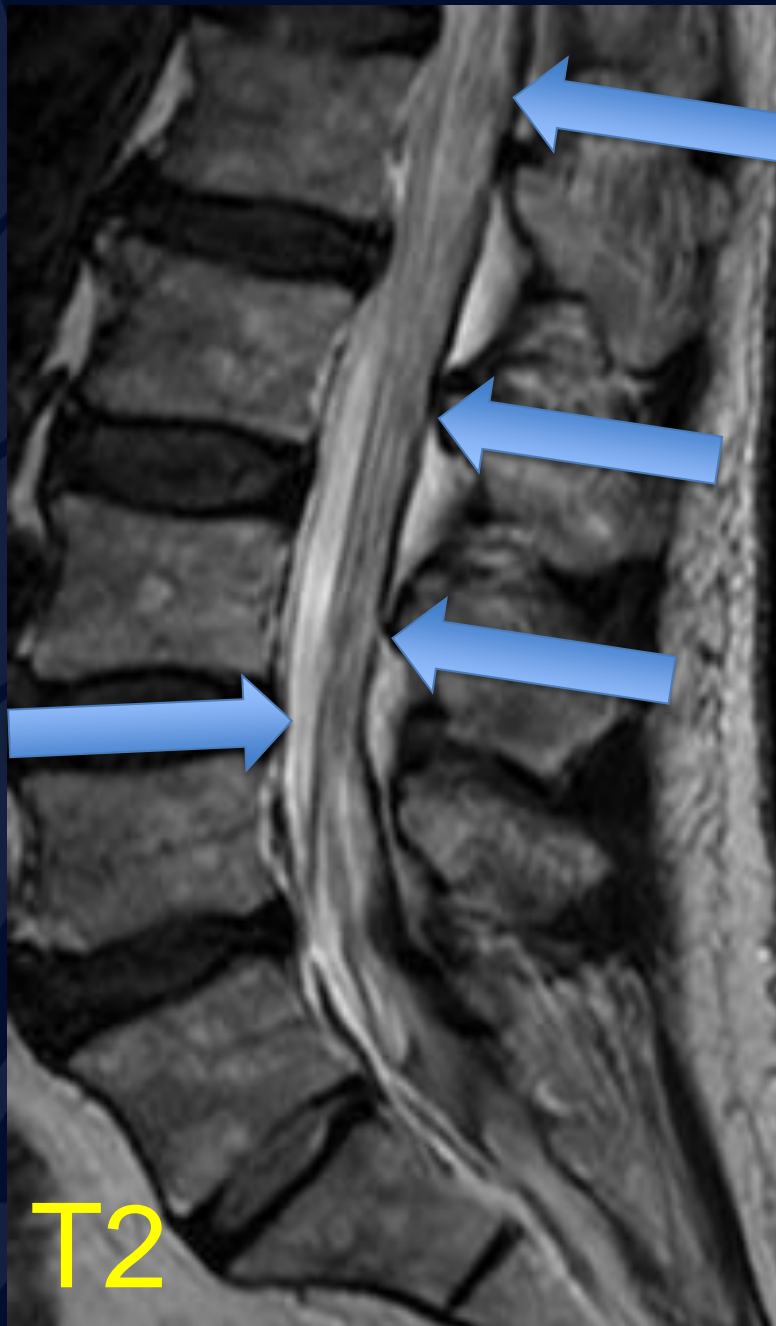


Gd-T1

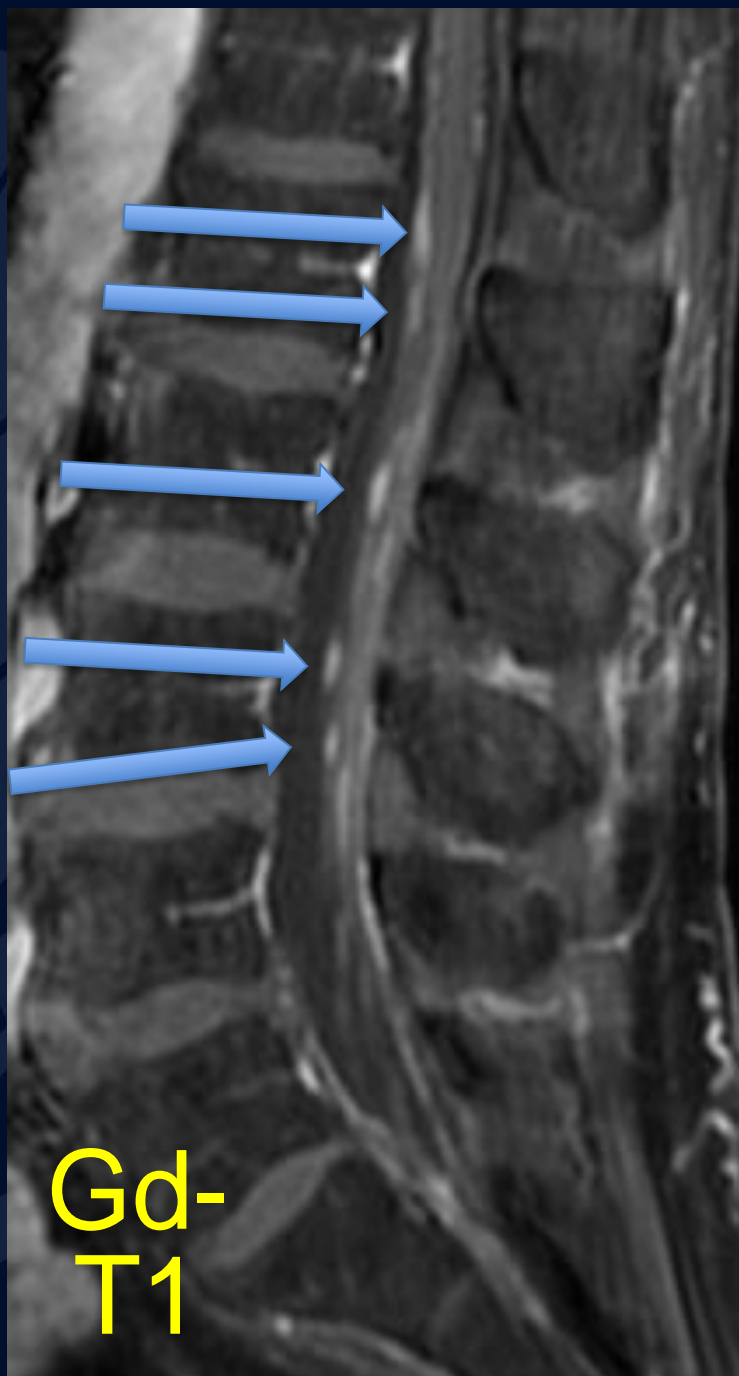
A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the slide. The leaf has a prominent central vein and several smaller veins branching off, with a scalloped edge.

Dx?

Spinal leptomeningeal metastases

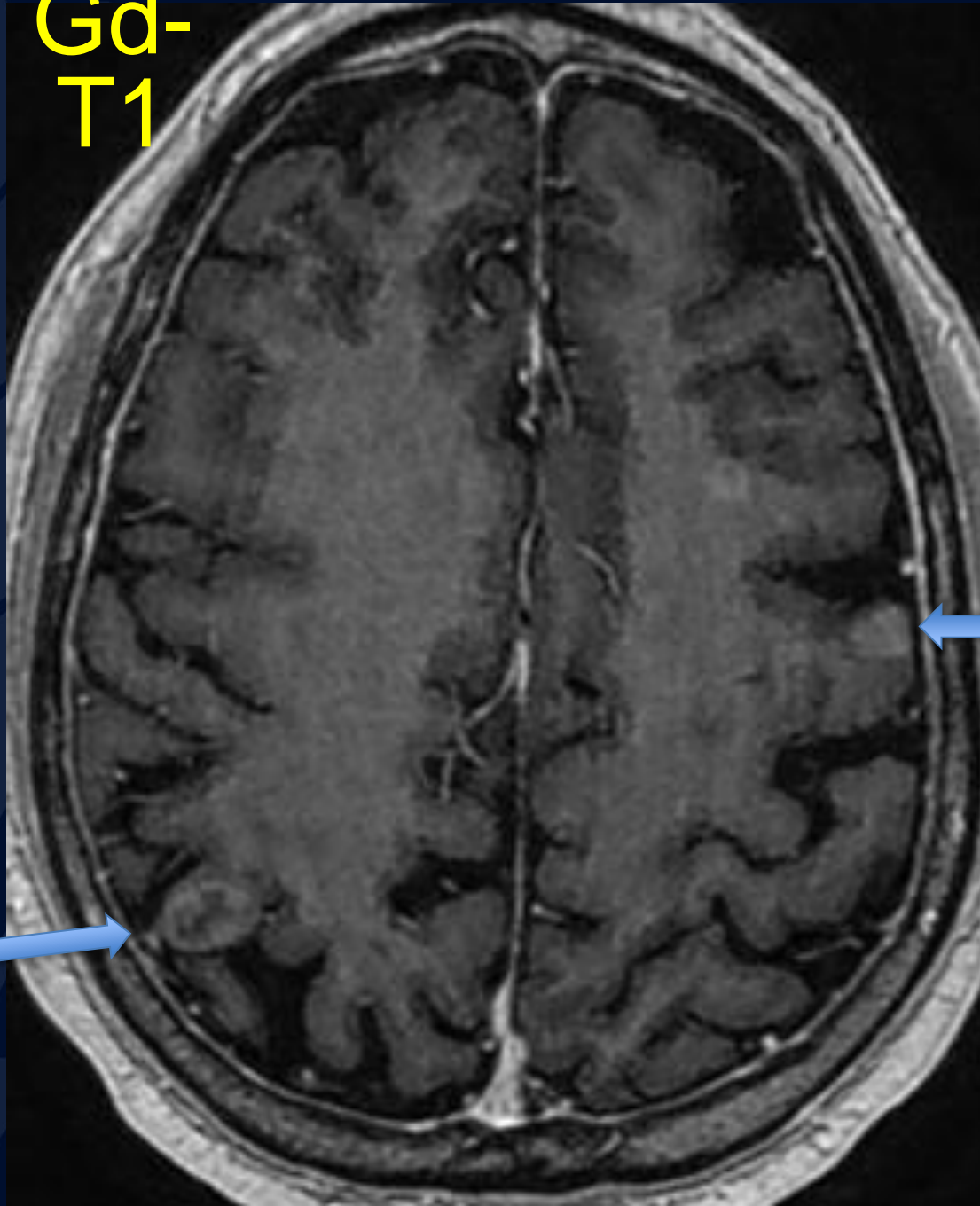


- Noncontrast exam is nearly normal
- Subtle nodularity represents mets



Contrast demonstrates obvious nodular enhancing leptomeningeal mets (arrows)

Gd-
T1



MRI of the Brain revealed cerebral Metastases (arrows), which may have seeded the spinal CSF or arisen synchronously

Spinal Leptomeningeal Metastases

Clinical Features

- Multifocal neurologic signs and symptoms are common and indicate multilevel involvement.
- The most common presenting symptoms include headache, nausea and vomiting, leg weakness, cerebellar dysfunction, altered mental status, diplopia, and facial weakness.

Spinal Leptomeningeal Metastases

Imaging Features

- MRI may show linear or nodular enhancement along the surface of the spinal cord, cauda equina, or both.
- Contrast enhanced MRI is usually essential for the Dx.
- Occasionally, clumping of nerve roots at the cauda equina may suggest the diagnosis even on noncontrast scans.

References

- Clarke JL, Perez HR, Jacks LM, Panageas KS, Deangelis LM. Leptomeningeal metastases in the MRI era. *Neurology*. 2010 May 4;74(18):1449-54.
- Demopoulos A, Loeffler JS. Clinical features and diagnosis of leptomeningeal metastases from solid tumors. UpToDate. Waltham, Mass.: UpToDate; 2022 [cited August 7, 2022]. Available from: <https://www.uptodate.com/contents/clinical-features-and-diagnosis-of-leptomeningeal-disease-from-solid-tumors#H2330625590>
- Sze G, Soletsky S, Bronen R, Krol G. MR imaging of the cranial meninges with emphasis on contrast enhancement and meningeal carcinomatosis. *American Journal of Neuroradiology* September 1989, 10 (5) 965-975
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