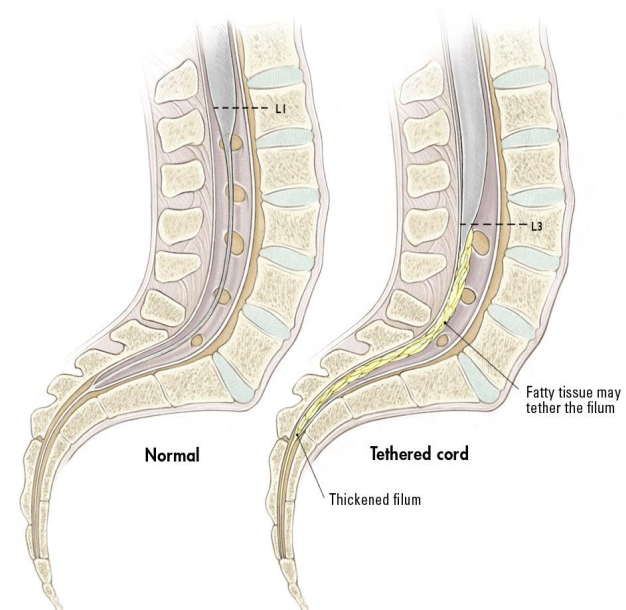


Fatty Filum what to do ?

Major General M.Dr.:
Ezzat Abd El Khalek

Fatty Filum

- * The filum is a band of tissue in babies that extends from the tip of the spine. It is naturally very thin, and when it gets thick with fatty tissue, it can cause tethered spinal cord syndrome.



Clinical Presentation

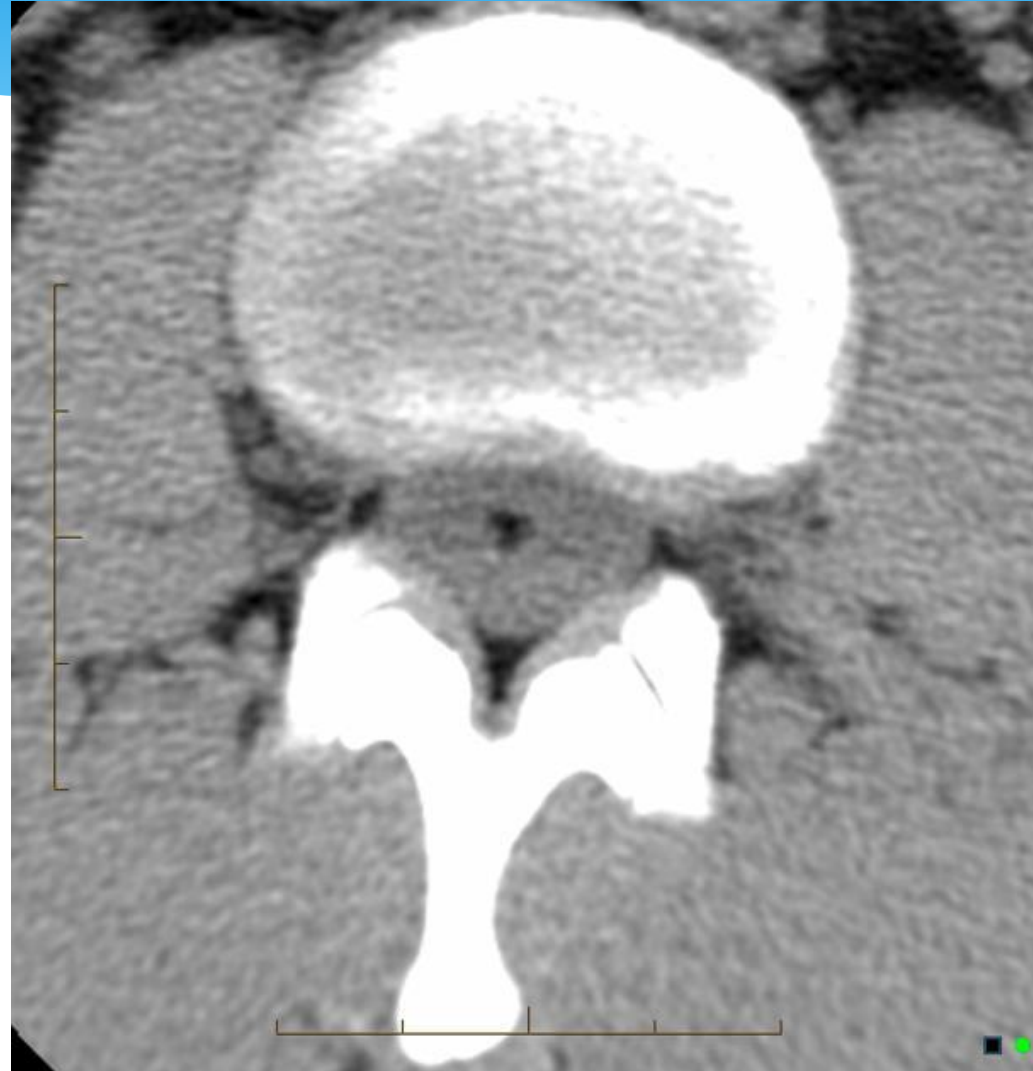
- * Asymptomatic Patient .
- * Tethered Cord Syndrome (TCS) is a condition where the spinal cord tissue attaches abnormally to the bones of the spine. The resulting tension causes symptoms such as bladder and bowel incontinence and weakness of the legs. Sometimes skin abnormalities develop over the attachment point, and can be a clue to the underlying problem.

Clinical Presentation Cont.

- * interestingly, some researchers have begun to link TCS to Chiari. Recently, a Spanish neurosurgeon put forth the idea that the herniation of Chiari is actually caused by the downward traction of a tight filum terminale. While a number of Chiari patients have been found to also have TCS, his idea has not been widely accepted. A case report was published with documented, via MRI, an acquired Chiari malformation due to a thickened filum.



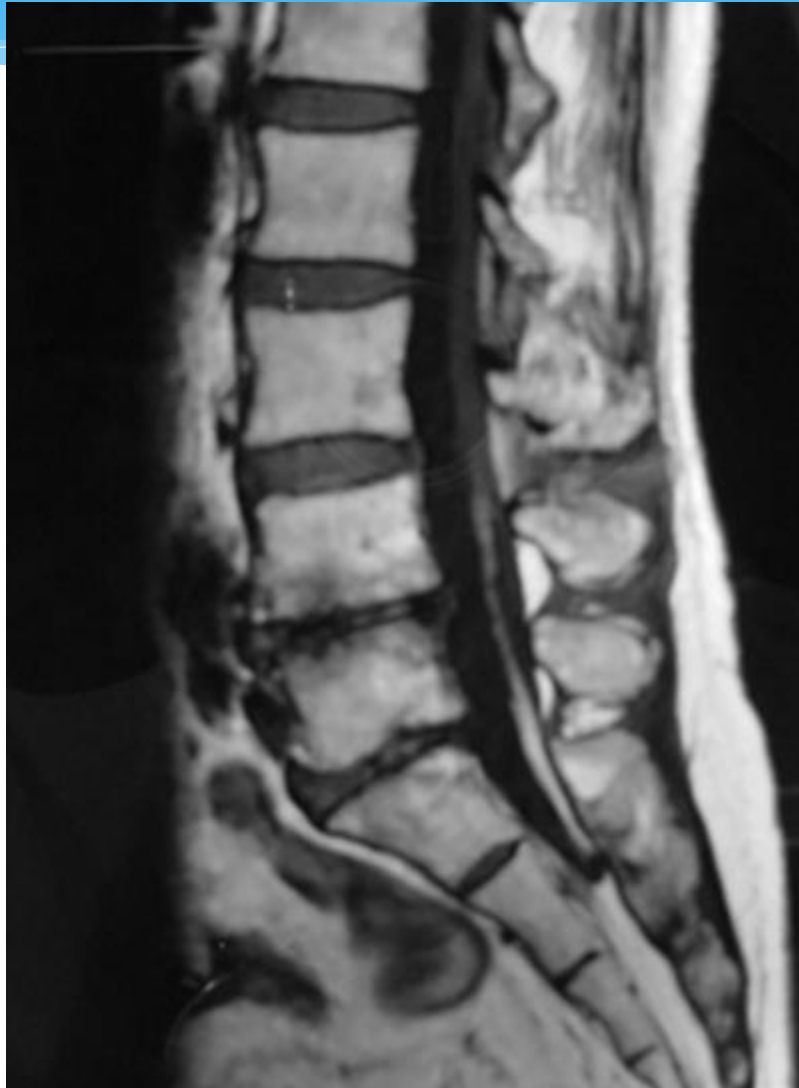
CT of Fatty Filum



CT sagittal View of Fatty Filum



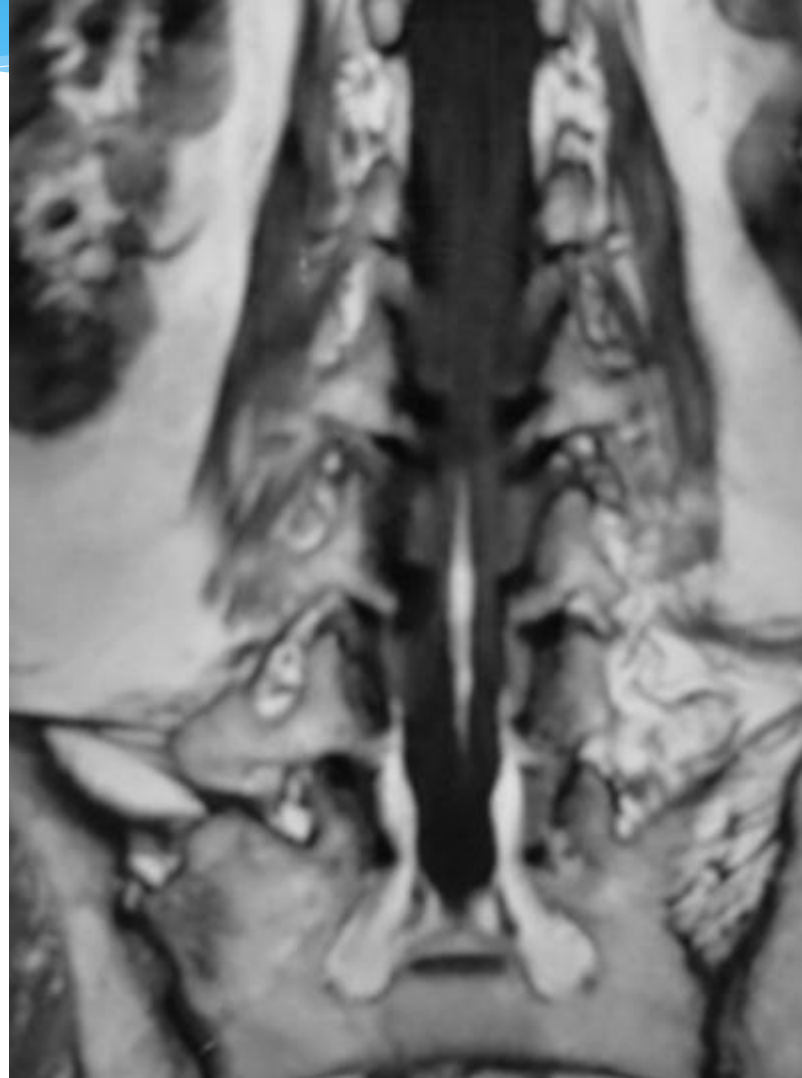
MRI T1 sagittal View of Fatty Filum



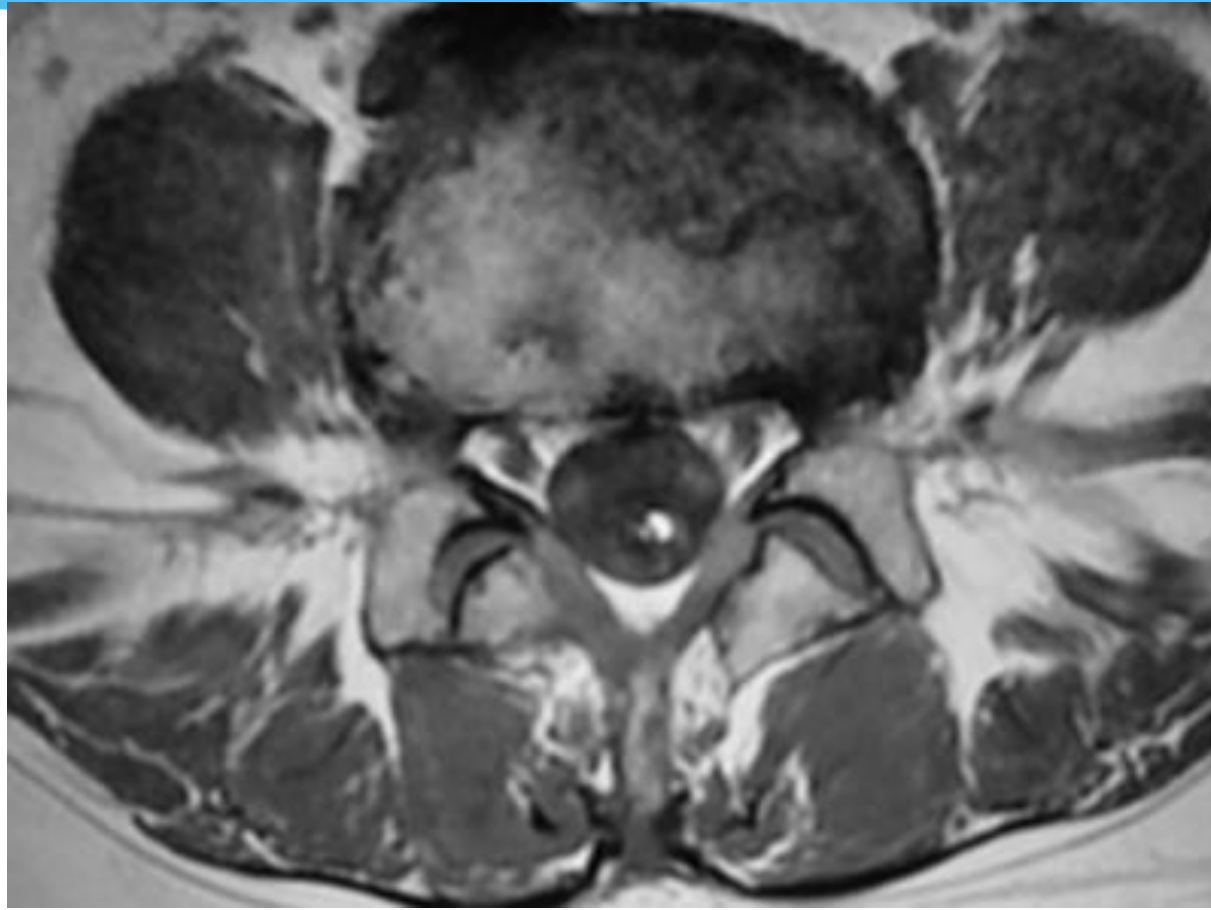
MRI T2 sagittal View of Fatty Filum



MRI Coronal View of Fatty Filum



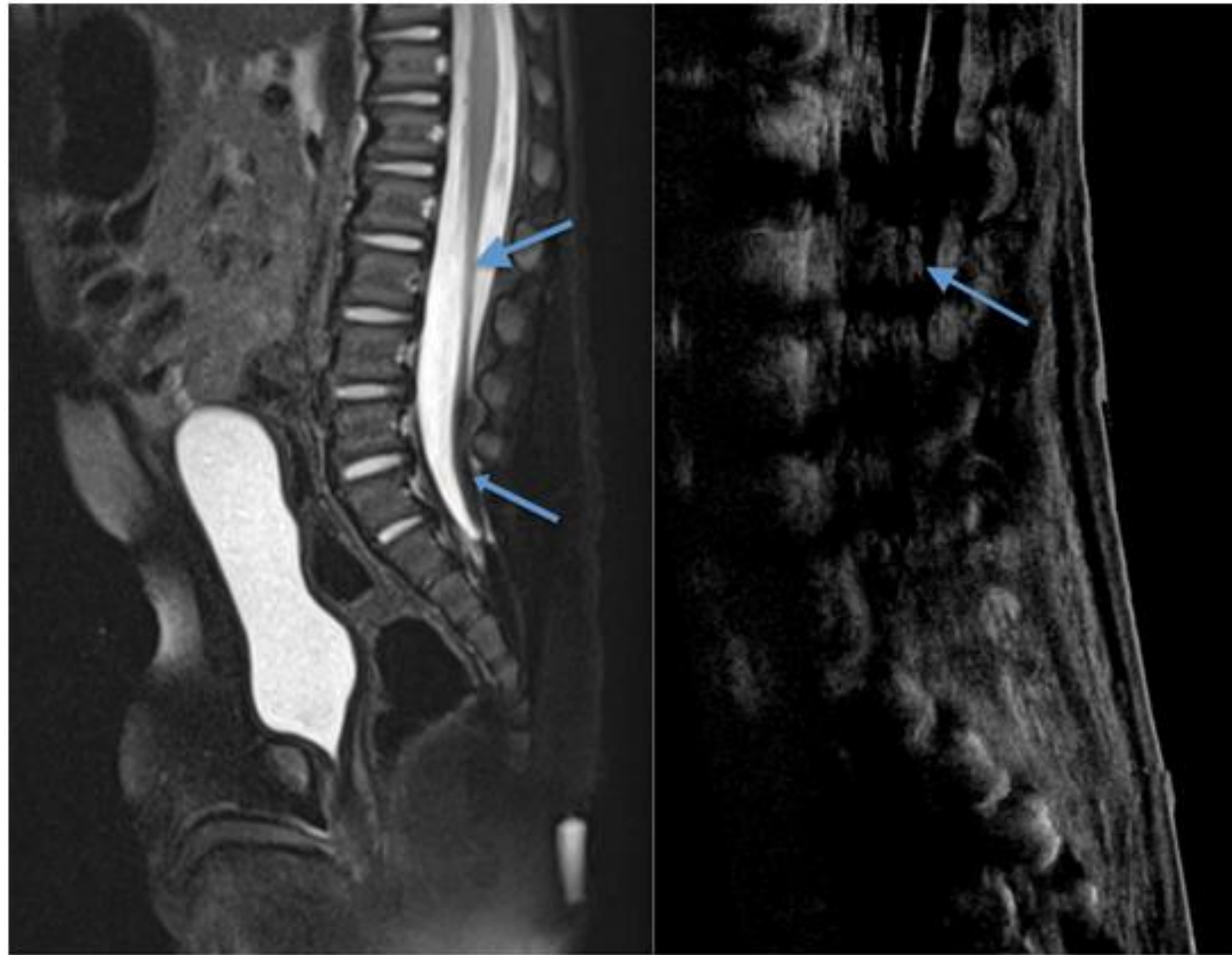
MRI Axial View of Fatty Filum



Management

Asymptomatic	conservative
Tethered cord	Surgery
Arnold Chiari	Surgery
Syringomyelia	Surgery

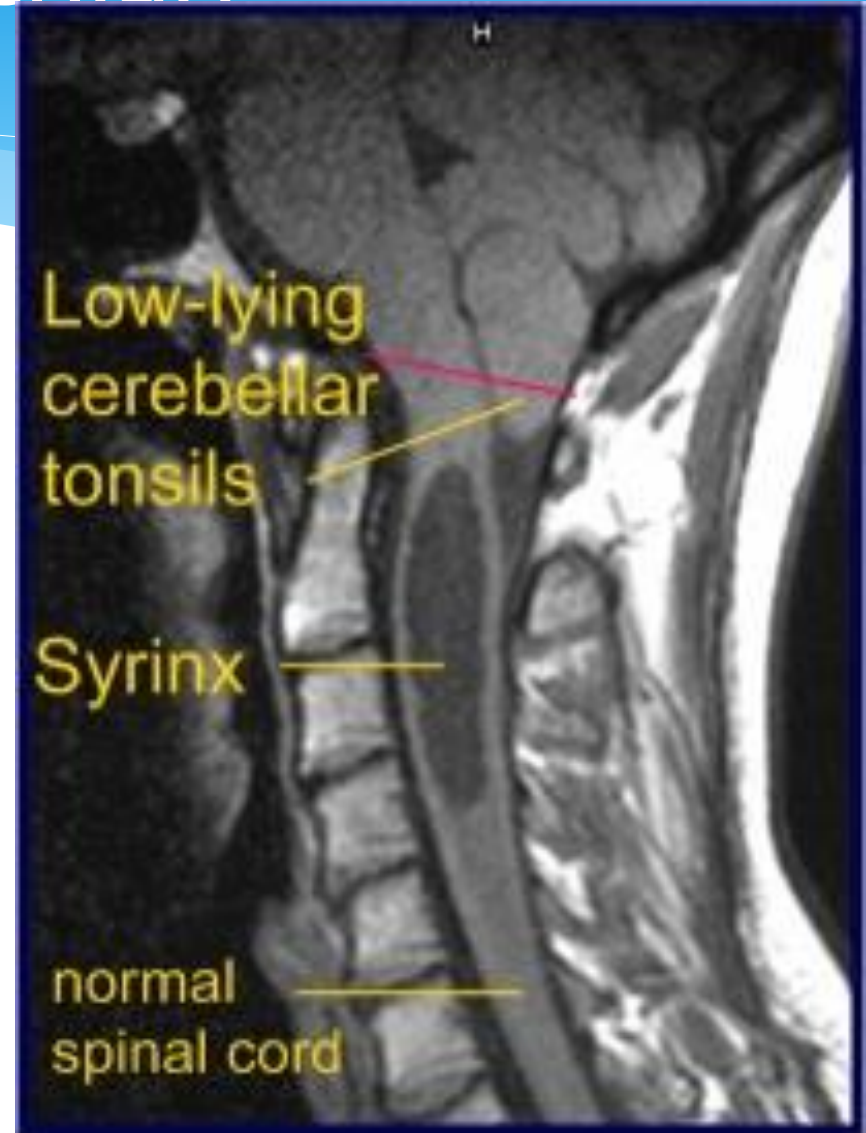
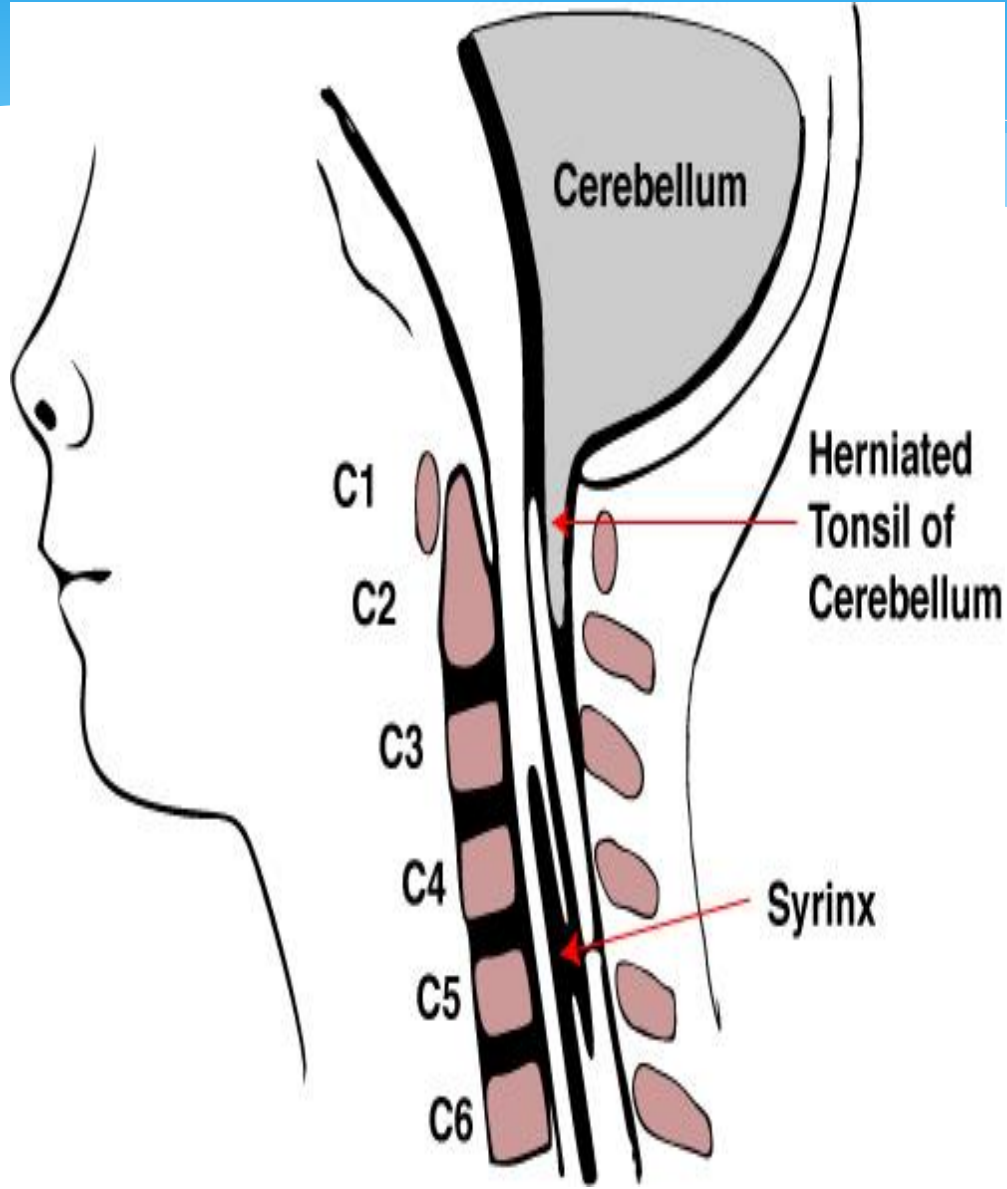
Tethered cord



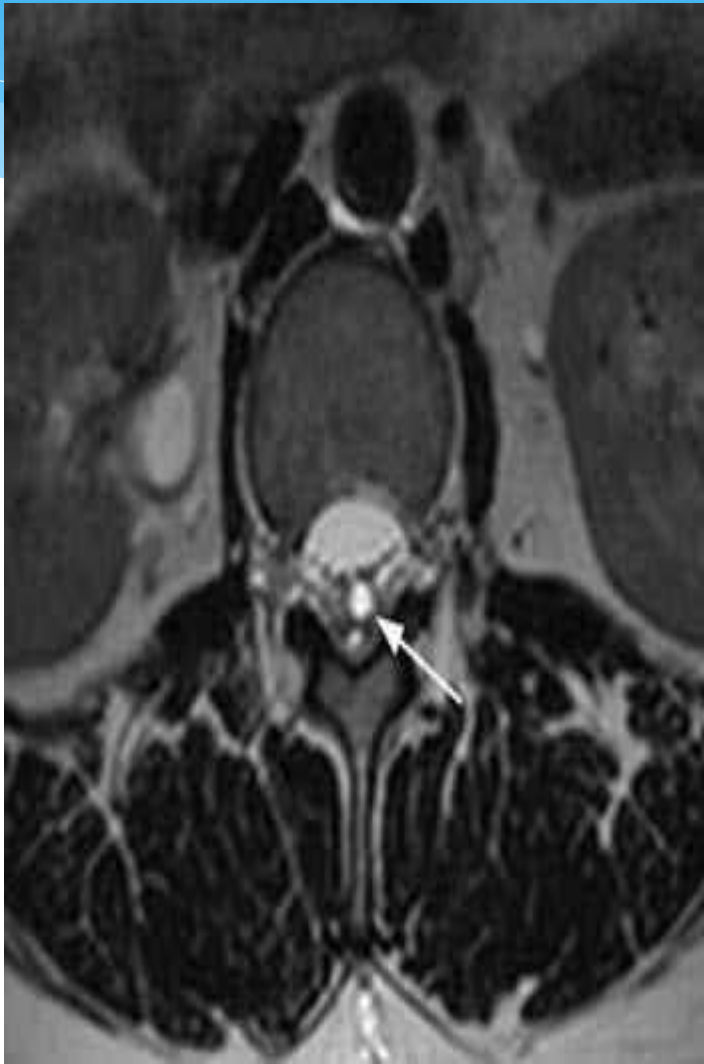
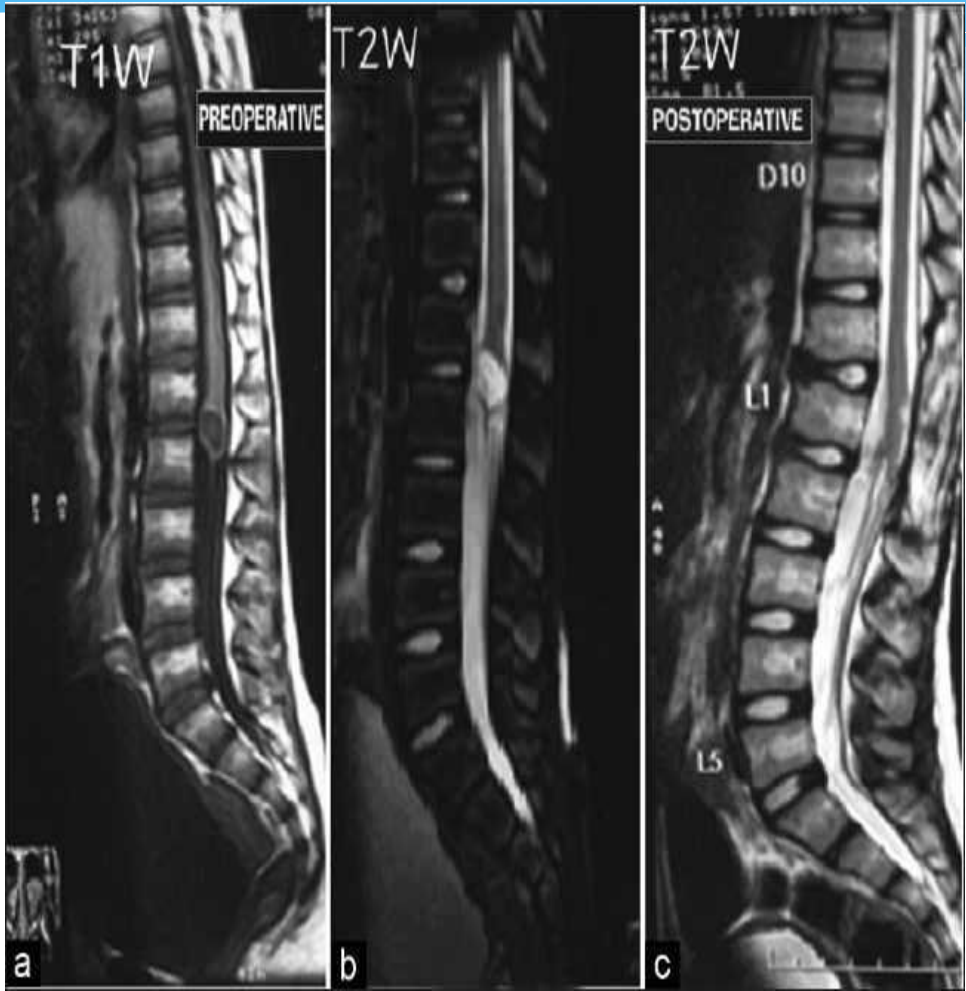
A

B

Arnold Chiari



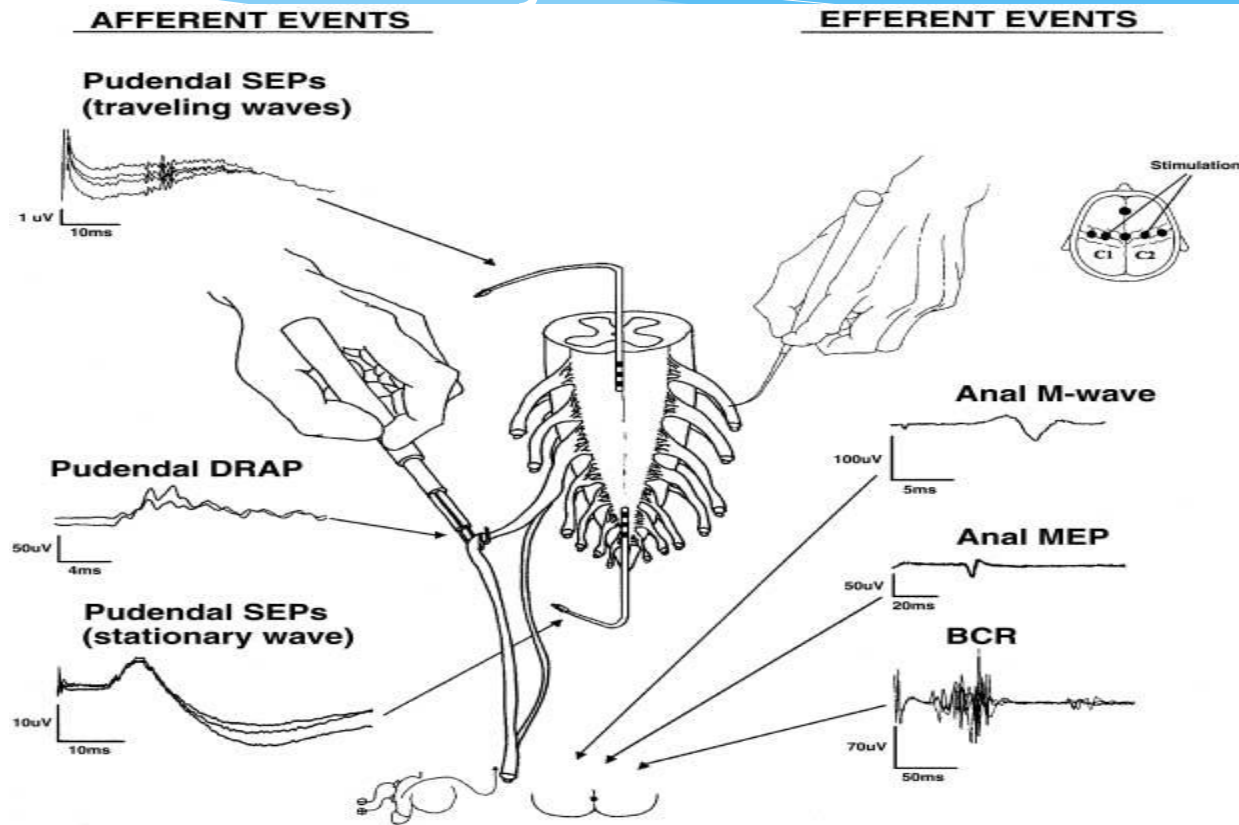
Syringomyelia



Technique

- * Anesthesia
- * Skin incision
- * Neurophysiological study
- * Dural repair

Intraoperative neurophysiology of the sacral system



Intraoperative neurophysiology of the sacral system Cont.

- * One of the applications of intraoperative neurophysiological monitoring is surgery for the tethered spinal cord, where the surgeon cuts the filum terminale or removes the tethering tissue that envelops the conus and/or the cauda equina nerve roots.

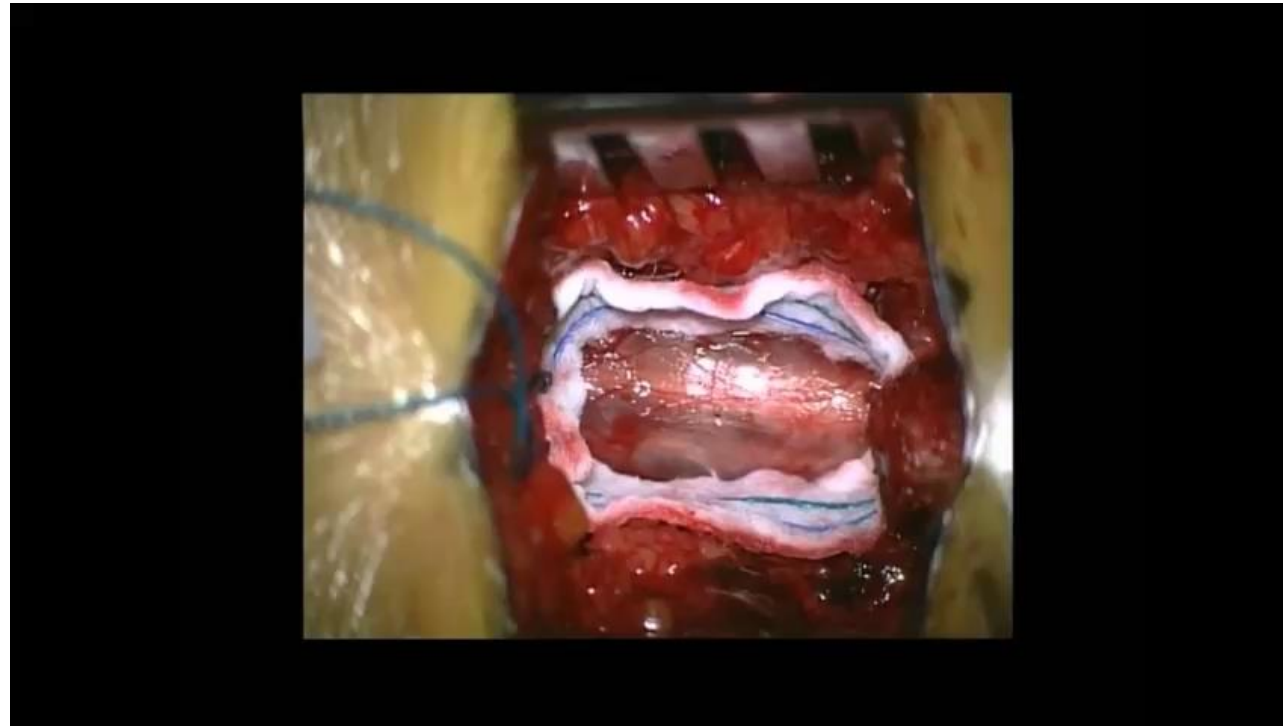
Intraoperative neurophysiology of the sacral system Cont.

- * During surgery of any spinal lesion involving nerve roots, a distinction between functional nervous tissue and fibrous bands is mandatory to avoid postoperative sensorimotor deficits and/or sphincter and sexual dysfunction.
- * Due to tethering, the lumbosacral nerve roots leave the spinal cord in a different direction than in a healthy cord. Furthermore, the cord may be skewed and sometimes a nerve root may pass through a lipoma.

Intraoperative neurophysiology of the sacral system Cont.

- * Direct stimulation of these structures in the surgical field, or direct recording from them after peripheral nerve stimulation, has proved helpful.
- * Using mapping techniques, functional neural structures of the lumbosacral region can be correctly identified and thus possibly preserved.

Surgery for tethered spinal cord with Lipoma of the Filum Terminale





Thank you

*Any Questions ?