The University of Jordan

School of Medicine

Lectures in Pictures

Degenerative Spine

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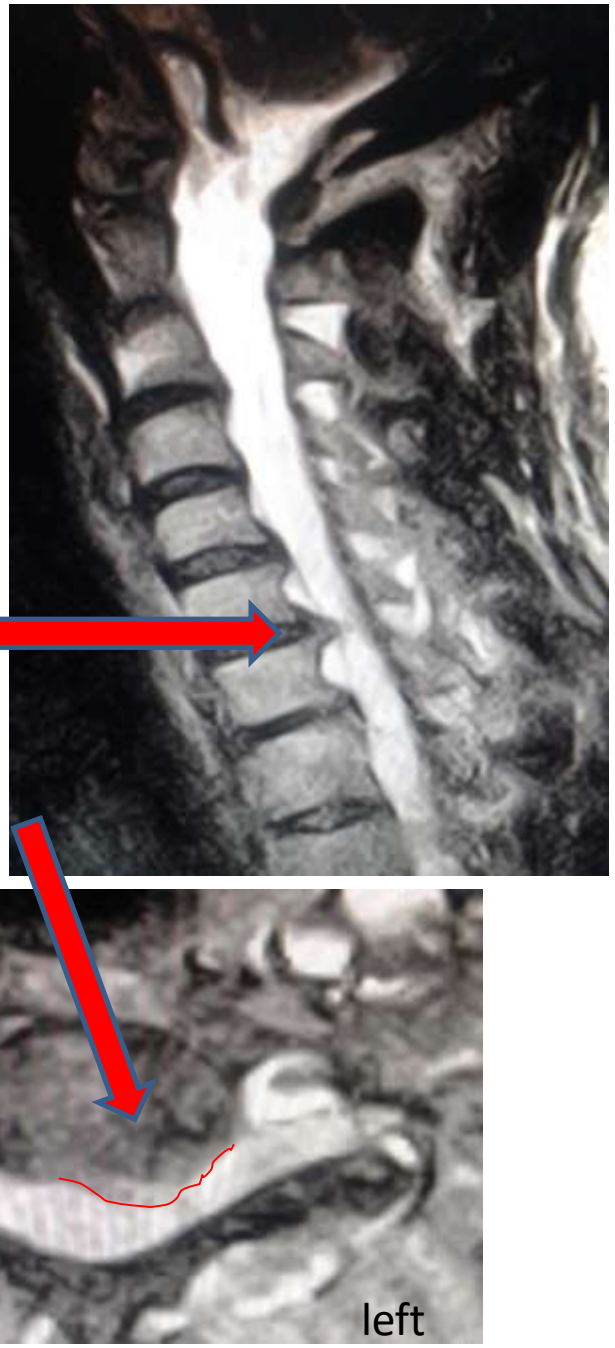
Trephination dates back to 10 000 BC.

Cervical disc prolapse

- Comprises 19 % of all prolapsed discs in spine
- (only next to lumbar 79% , leaving only 2% in thoracic).
- M.c. Level **C5-6** .
- If it is central it will compress the spinal cord causing **Myelopathy.**
- But mostly it is mediolateral , Rt or Lt ,compressing the nerve root -as in this case- and causing **Radiculopathey :** pain in the distribution of a particular nerve root or **Brachialgia** : UL in particular**.**

The prolapsed part of the disc inside the canal and foramen of the nerve root



Keypoints: be familiar with the above terminologies.

Cervical disc prolapse

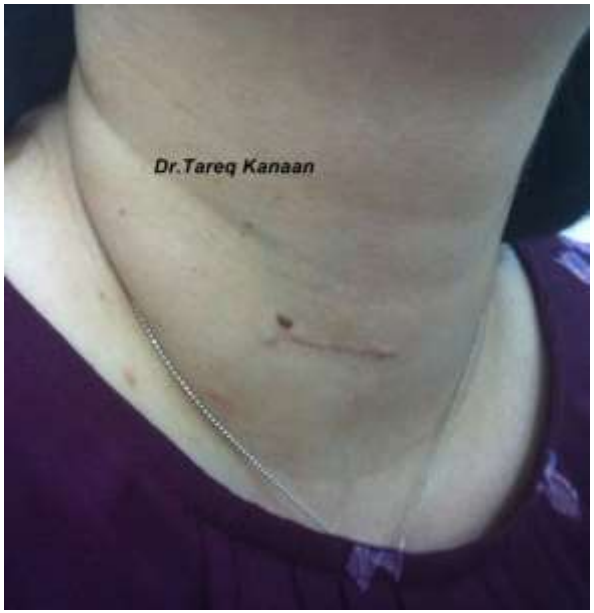
- Golden standard diagnostic image :

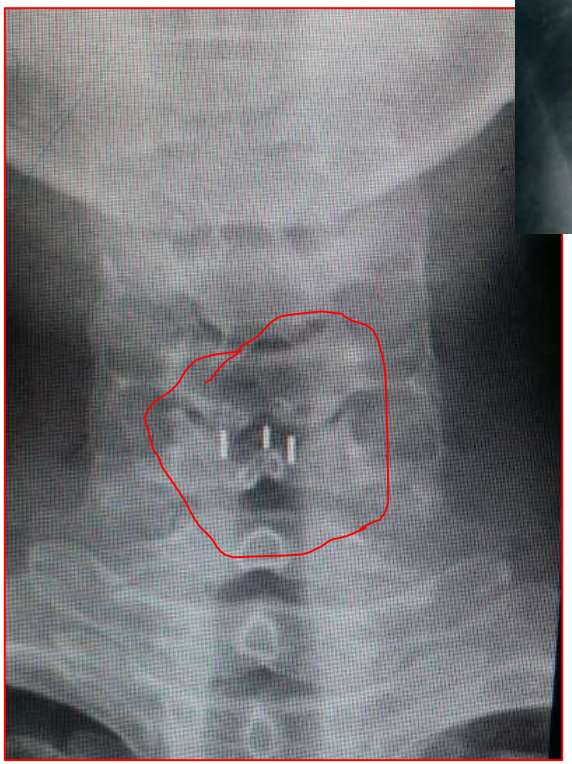
  cervical MRI.

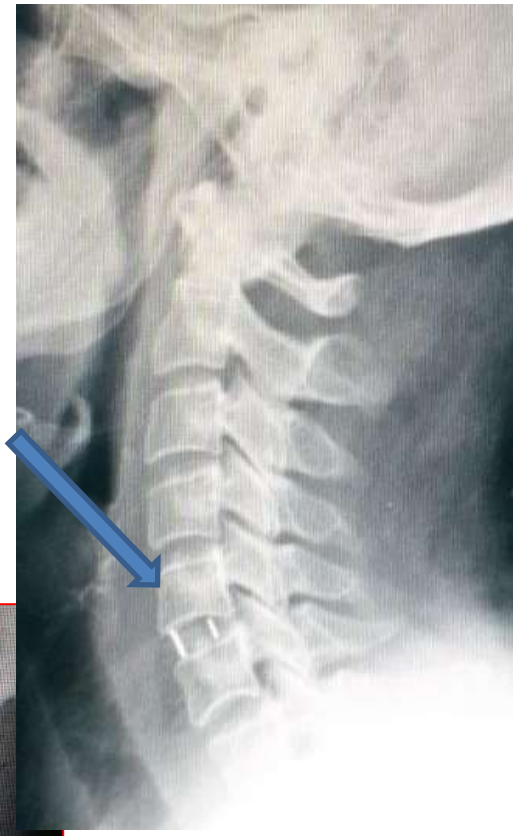
- Surgery:

Anterior **C**ervical **D**iscectomy and **F**usion

=ACDF.



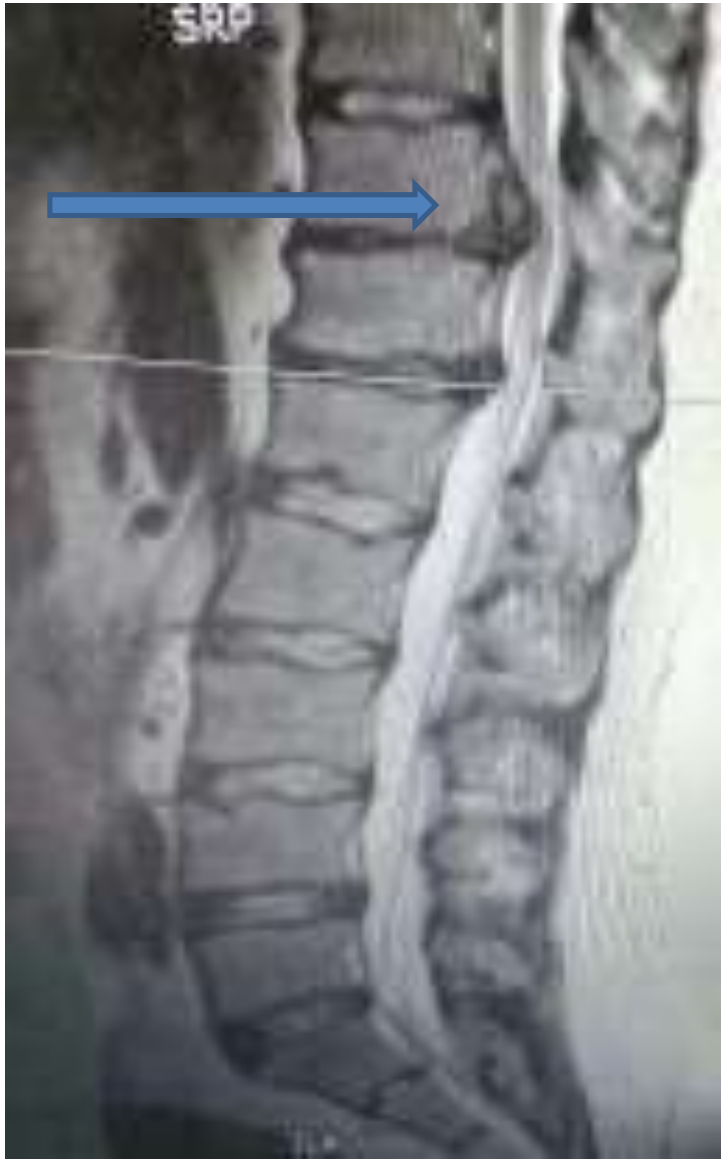




This is
a post-operative XR
showing the
implanted cage in
place

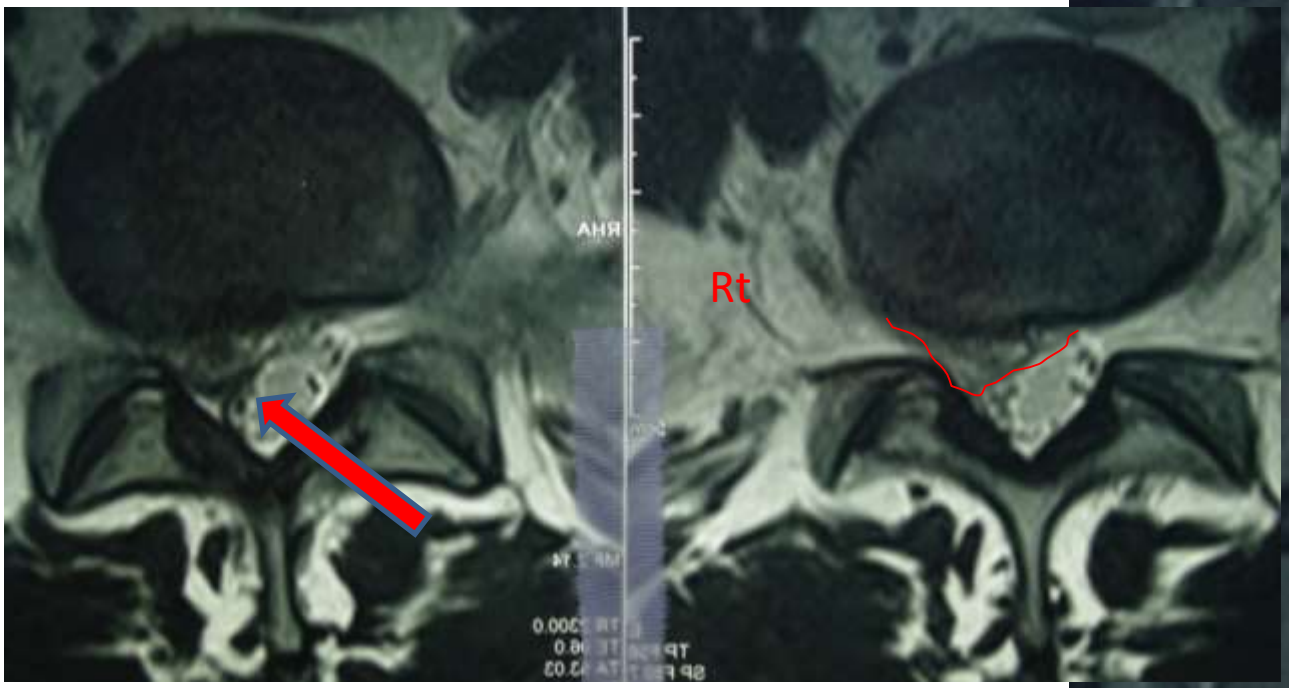
Thoracic (Dorsal) Disc Prolapse

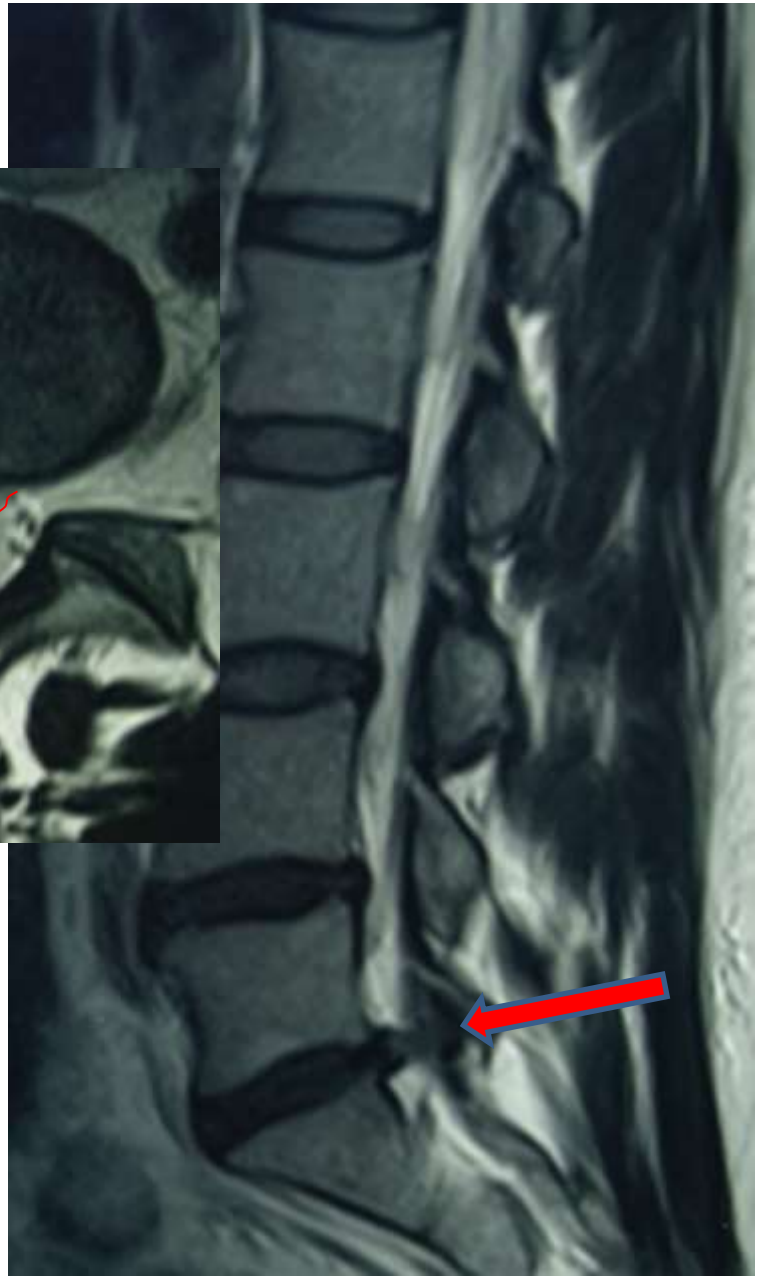
- very rare , 2% of aal DP of the spine
- Usually will compress the spinal cord centraly causing myelopathy signs .
- Comression of the nerve root at thoracic levels will rarely cause significant symptoms .
- Treatment :
  - Mostly conservative
  - Decompression
  - Endoscopic(thoracoscopic)discectomy



Sagital T2 WI MRI showing D11-12 DP

Lumbar Disc Prolapse





- The m.c in spine , 79%
- M.c. Level L4-5 &L5-S1 (95% together of all Lumbar DP).
- Mostly para central , causing radiculopathy or
- Sciatica (pain in sciaitic nerve distribution)

=**L 4,L5,S1**,S2,S3

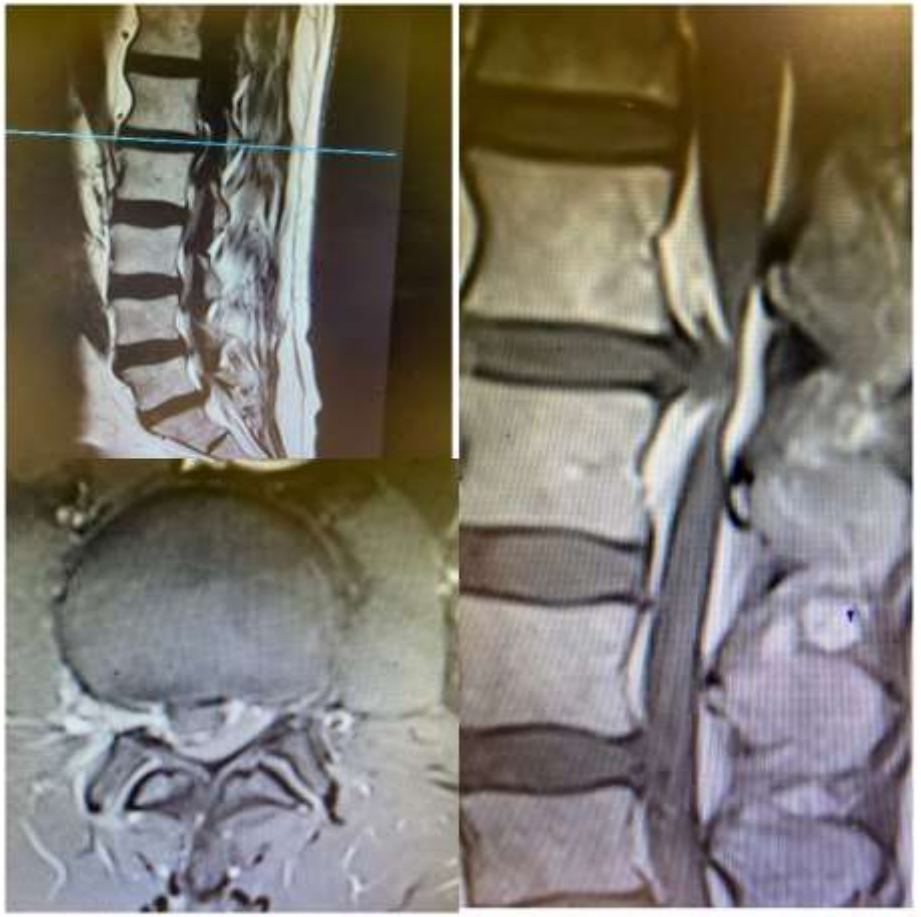
T2 WI sagital , L5-S1 DP

Lumbar Disc Prolapse

What syndrome do you expect this huge disc prolase to cause?

Conus Medullaris S.

- It starts with bladder dysfunction in the form of Overflow incontinence and usually this is the presenting symptom in comparison to Cauda equina S which starts with sciaitica.
- Here the disc prolase should always be at L1-2 level where the conus is.
- Cauda equina can be at any level between L2-S1 .

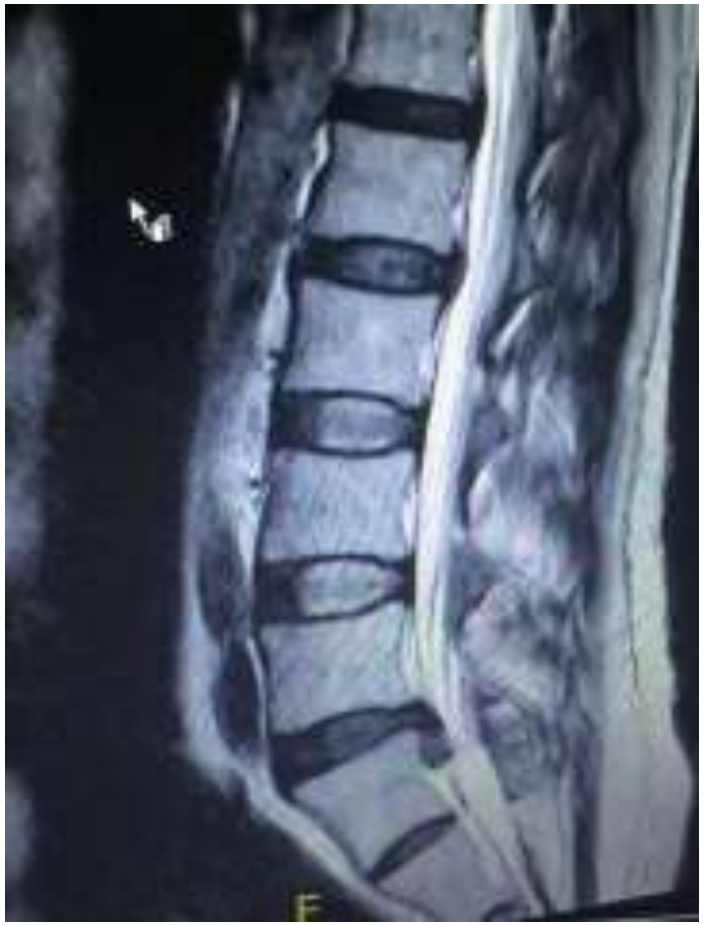


A rare L1-2 acute Rt posterolateral DP

L5- S1 down migrating disc prolapse

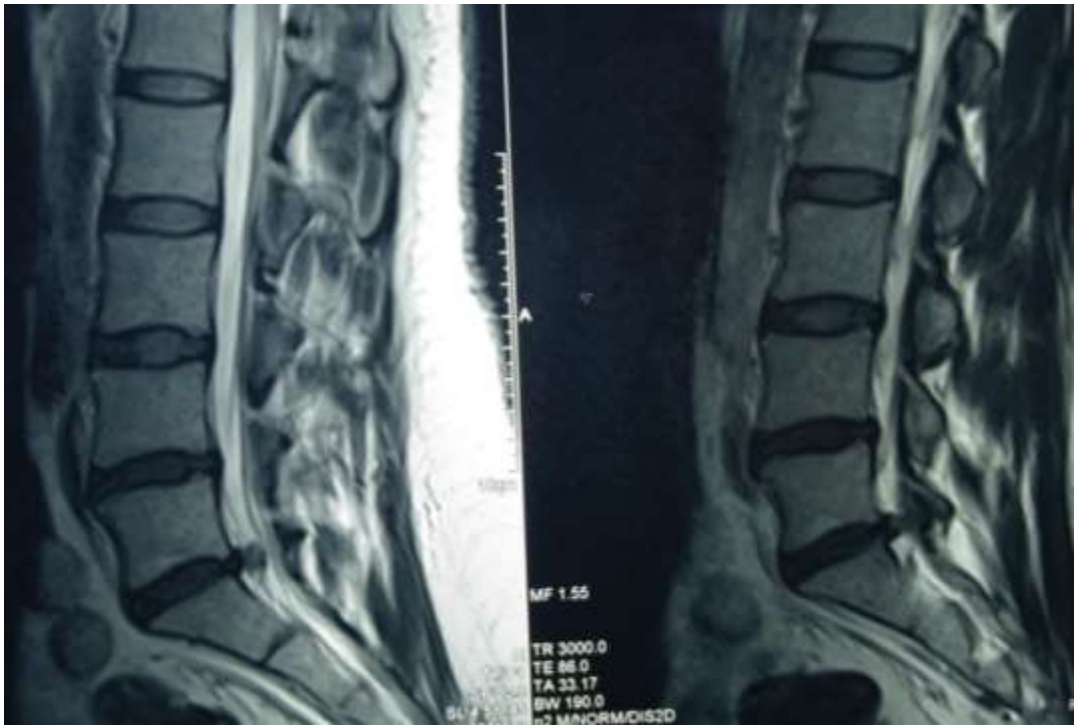
What is the typical presentation of this DP?

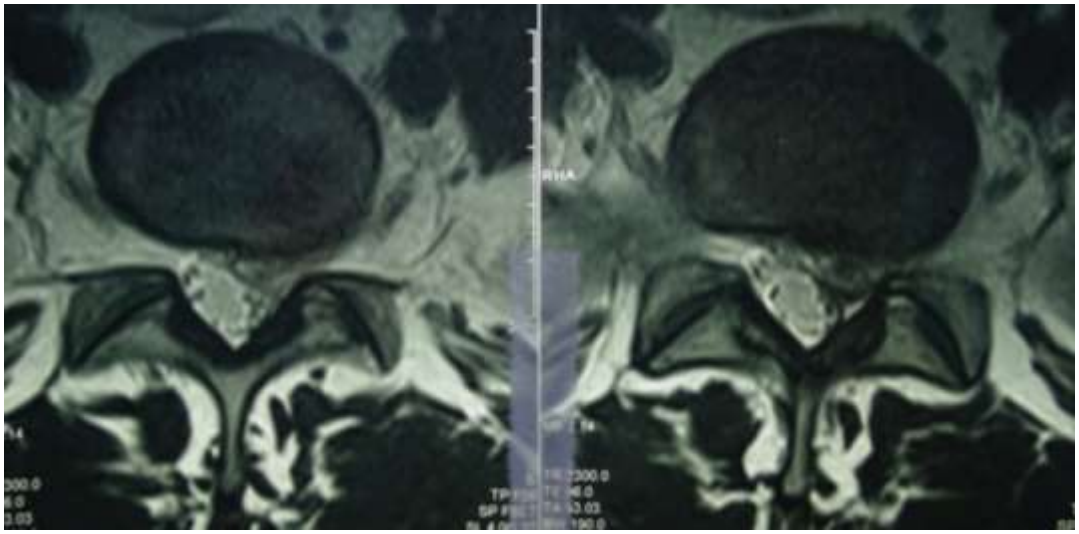
- S1 sciatica
- If the patient is C/O L5 sciatica , what would you do?
- L.S XR Ap and lateral bec. I will suspect he has a sacralized L5 and the disc prolapse is really at L4-5 level



What would this DP cause for a sciatica?

- Left S1 sciatica
- When would it be an emergency?
  - Acute foot weakness(here planter flexion)
  - Bladder incontinence
  - (overflow incontinence)
  - i.e cauda equina Synd.
  - Usually retention proceeds incontinence



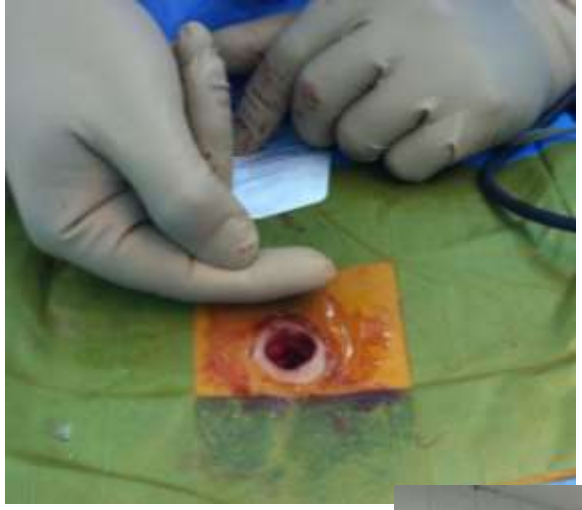


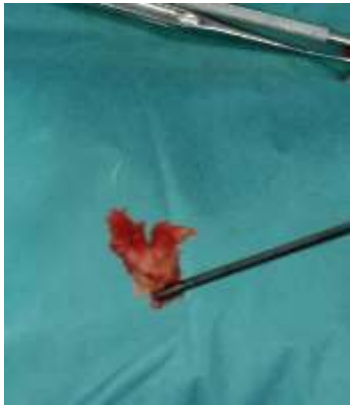
What is currnetly the standard surgery fo lumbar disc prolapse?

Microscopic or Endoscopic :

Interlaminar fenestration and **sequestrectomy**

(you can use discectomy instead but it is not really a discectomy , we remove the sequestrated disc)





Old disc surgery scar

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Lectures in Pictures

Lumbar Canal Stenosis

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