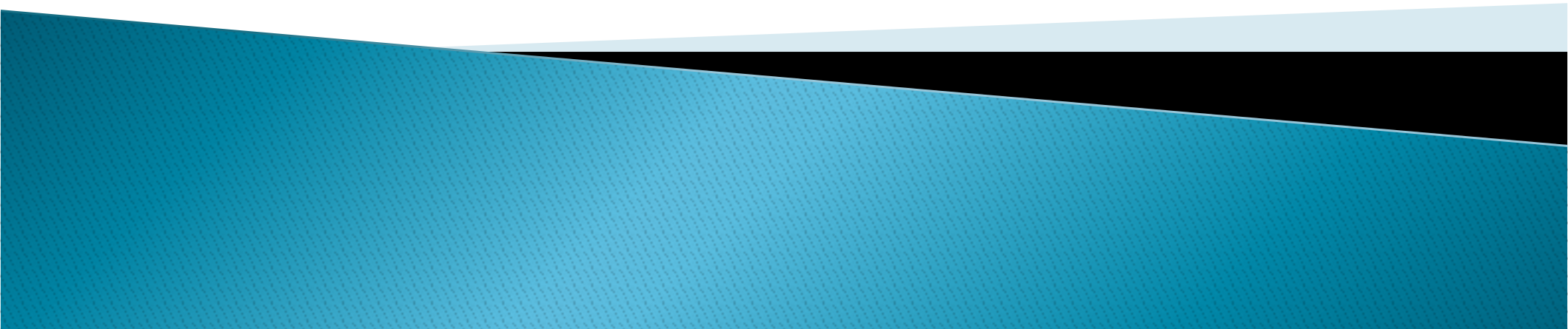


# A RARE CAUSE OF PARAPARESIS

-IV MU



# CHIEF COMPLAINTS


A 15 yr old female studying 10<sup>th</sup> std hailing from peraiyur presented with chief complaints of

Difficulty in walking \* 4 years





# History of present illness

She was apparently asymptomatic till 4 yrs back then she developed

- ⌘ pain and numbness over lateral aspect of her left foot followed by weakness of left lower limb. 6 months later she developed weakness of right lower limb
  - ⌘ spastic weakness
  - ⌘ distal > proximal
- 

- ⊠ Weakness of both lower limbs in the form of difficulty in getting up from squatting position, [ left> right]
- ⊠ Difficulty in holding slippers
- ⊠ H/O tripping of toes while walking
- ⊠ h/o buckling of knees
- ⊠ No H/O thinning or twitching of muscles
  - Not associated with involuntary movements
  - Able to roll over bed
  - H/O paraesthesia, numbness in both lower limbs below groin
- ⊠ No weakness or sensory symptoms in the upper limbs
- ⊠ No diurnal variation

- ⊠ No H/O radicular, vertebral, funicular pain
  - ⊠ No h/o constricting band like sensation around trunk
  - ⊠ Able to feel hot and cold sensation
  - ⊠ H/O cotton wool sensation on walking
  - ⊠ No History suggestive of Lhermitte's sign
  - ⊠ No symptoms suggestive of raised intracranial tension
  - ⊠ No history suggestive of higher function disturbance
  - ⊠ No history suggestive of cranial nerve involvement
- 

- ⌘ No H/O bowel and bladder disturbance
  - ⌘ No H/O postural giddiness, abnormal sweating
  - ⌘ No History suggestive of cerebellar involvement
  - ⌘ No H/O pain or swelling over the spine
  - ⌘ No H/O fever, rashes, joint pain
  - ⌘ No H/O loose stools
  - ⌘ No H/O recent vaccination or animal bite
  - ⌘ No H/O bleeding manifestations
- 

# PAST HISTORY

- ⌘ H/o trauma – 4 yrs back- fall due to tripping of toes
- ⌘ No H/O surgery, procedures in the past
- ⌘ No other comorbidities/chronic medication

## MENSURAL HISTORY:

RMP- 4/30

no excessive menstruation

## PERSONAL HISTORY:


mixed diet

no addiction


## FAMILY HISTORY:

no H/O similar illness in family members

# GENERAL EXAMINATION

- ⌘ Conscious
  - ⌘ Oriented
  - ⌘ Moderately built and nourished
  - ⌘ Afebrile
  - ⌘ No pallor/cyanosis/ clubbing
  - ⌘ Anicteric
  - ⌘ No pedal edema
  - ⌘ No generalized lymphadenopathy
  - ⌘ No markers of HIV/TB
  - ⌘ No neurocutaneous markers
- 




- ⊠ Thyroid – normal
  - ⊠ Breast- normal
  - ⊠ No KF ring
  - ⊠ No low hair line
  - ⊠ Height neck ratio- 12:1
  - ⊠ B/L pes cavus deformity +
  - ⊠ kyphosis +
  - ⊠ No marfanoid features
- 





# VITALS

- ⌘ PR-76/min
  - ⌘ BP- 120/70 in R UL in supine posture
  - ⌘ SPO2- 98% in RA
  - ⌘ Temperature- 98 degree F
  - ⌘ RR-18/min
- 

# CNS EXAMINATION

Higher functions- normal

Right handed

CRANIAL NERVES- normal

MOTOR SYSTEM-  
bulk

	RIGHT(cm)	LEFT(cm)
FOREARM	21	21
ARM	26	26
THIGH	36	36
LEGS	26	26

## TONE-

	RIGHT	LEFT
UL	normal	Normal
LL	hypertonia	Hypertonia

## POWER-

	RIGHT	LEFT
UL	5/5	5/5
HIP- FLEXION	4/5	4/5
EXTENSION	4/5	4/5
ADDUCTION	4/5	4/5
ABDUCTION	4/5	4/5
INT ROTATION	4/5	4/5
EXT ROTATION	4/5	4/5

	RIGHT	LEFT
Knee- flexion	4/5	4/5
extension	4/5	4/5
Ankle- dorsiflexion	2/5	2/5
Plantar flexion	4/5	4/5
Inversion	3/5	3/5
eversion	3/5	3/5

### Beevor's sign- negative

	RIGHT	LEFT
CORNEAL	+	+
CONJUNCTIVAL	+	+
ABDOMINAL	Present	present
PLANTAR	extensor	extensor

	RIGHT	LEFT
BICEPS	++	++
TRICEPS	++	++
SUPINATOR	++	++
KNEE	+++	+++
ANKLE- CLONUS +	+++++	+++++

No release reflexes, no patellar clonus

SENSORY:

Pain, temperature, crude touch- diminished below groin

fine touch, vibration- diminished below groin

vibration over spine- normal

no spinal tenderness

GAIT:

spastic gait





- ⊠ No cerebellar signs
- ⊠ No signs of meningeal irritation
- ⊠ Spine – kyphosis
- ⊠ Cranium - normal
- ⊠ No peripheral nerve thickening
- ⊠ Other system examination:

CVS: S1 S2+

No murmur

RS: NVBS+

no added sounds

P/A: Soft

no organomegaly

# DIAGNOSIS


Chronic spastic paraparesis- compressive  
myelopathy- extramedullary lesion

Sensory level- L1

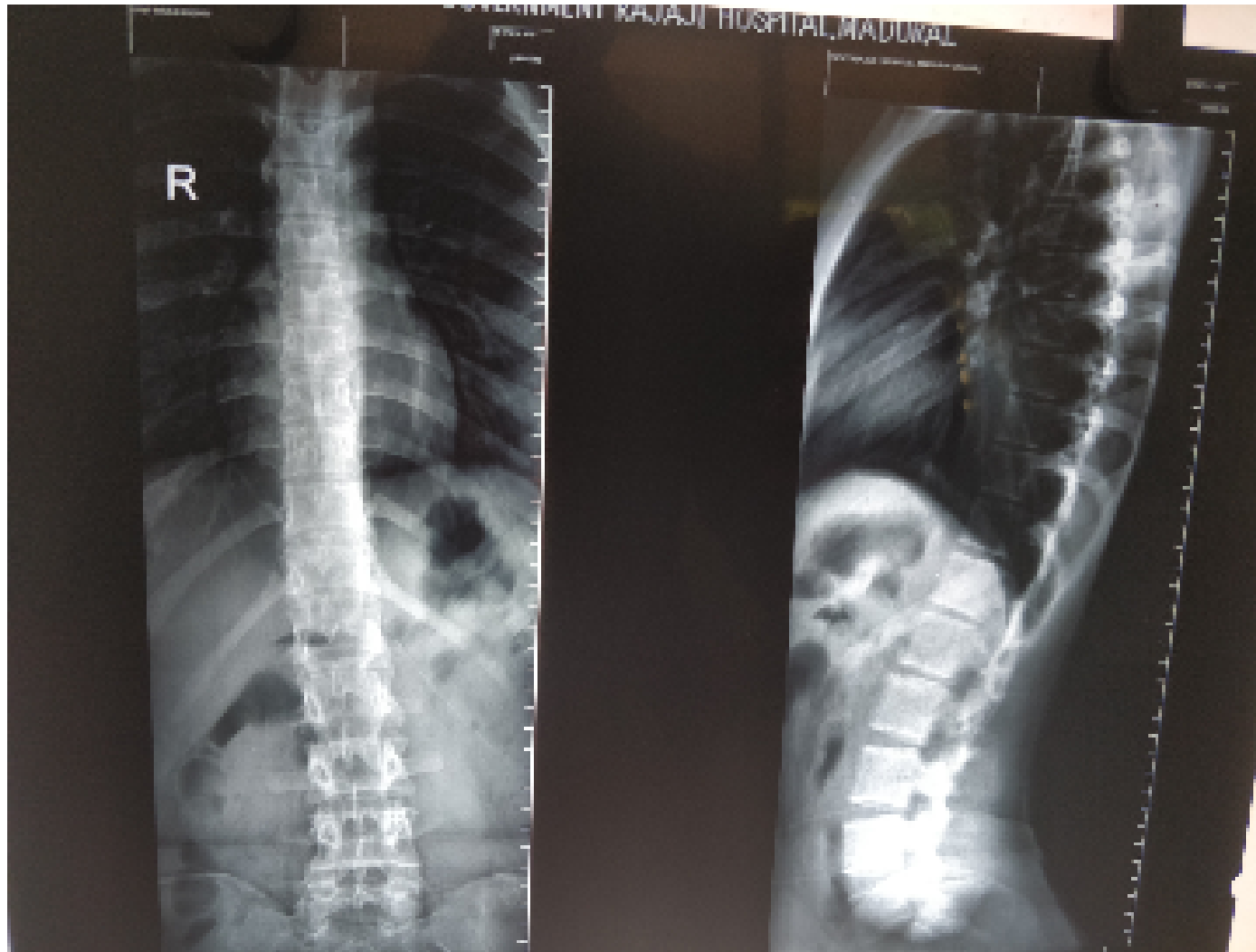
Motor level- L1

Reflex level- T12

# INVESTIGATIONS

- ⌘ RBS-77 mg/dl
  - ⌘ Urea-19 mg/dl
  - ⌘ creatinine- 0.9 mg/dl
  - ⌘ Bilirubin- 0.4 mg/dl
  - ⌘ SGOT-25 U/L
  - ⌘ SGPT- 17 U/L
  - ⌘ Hb-10.5g/dl
  - ⌘ TC- 7500 cells
  - ⌘ PCV-32%
  - ⌘ DC -P-60% L- 28% Mix- 12%
  - ⌘ PLC- 3.2 L
- 

# X-RAY DL SPINE

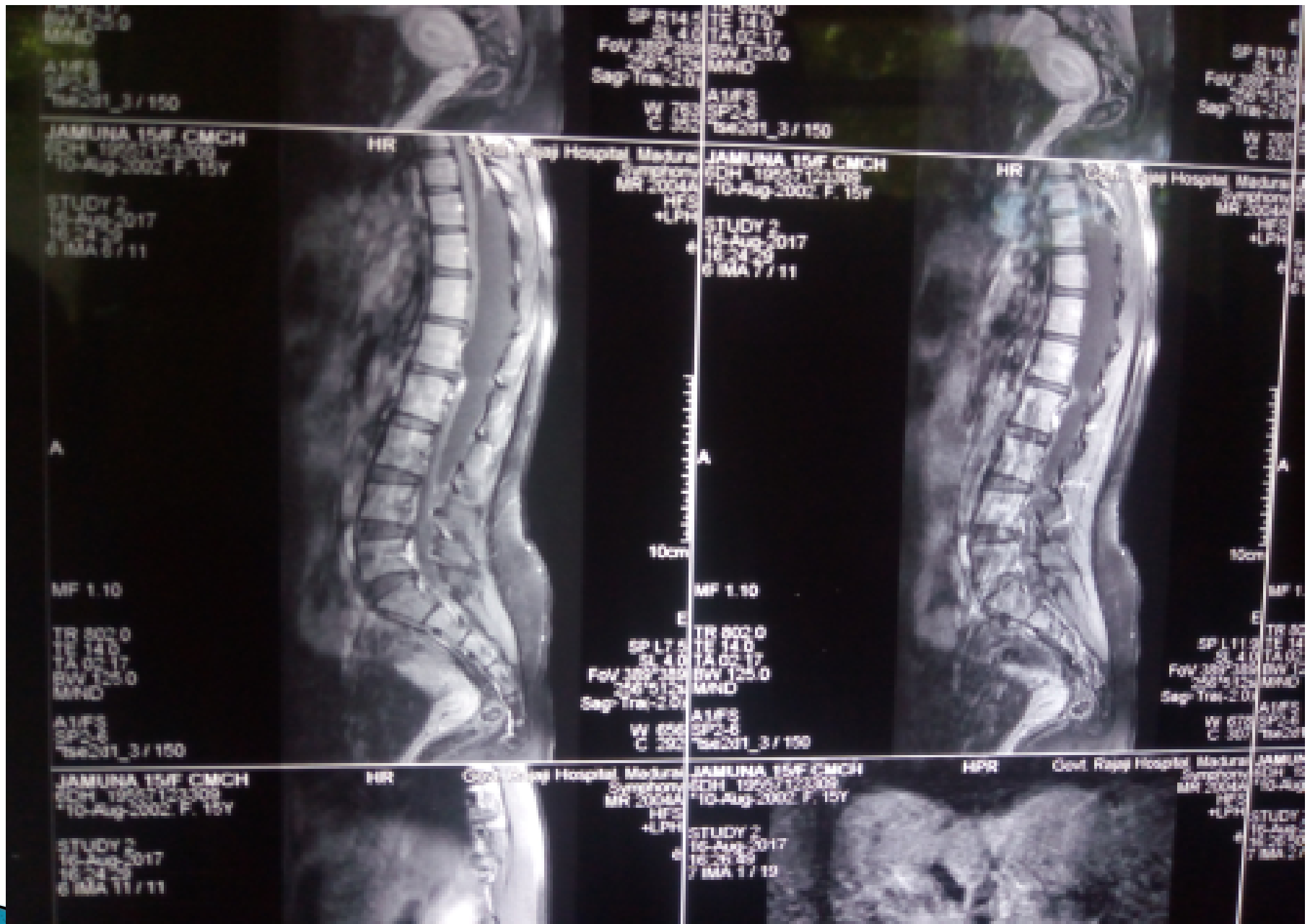


- ⊠ Showing exaggerated lumbar lordosis and kyphosis

# MRI- DL SPINE






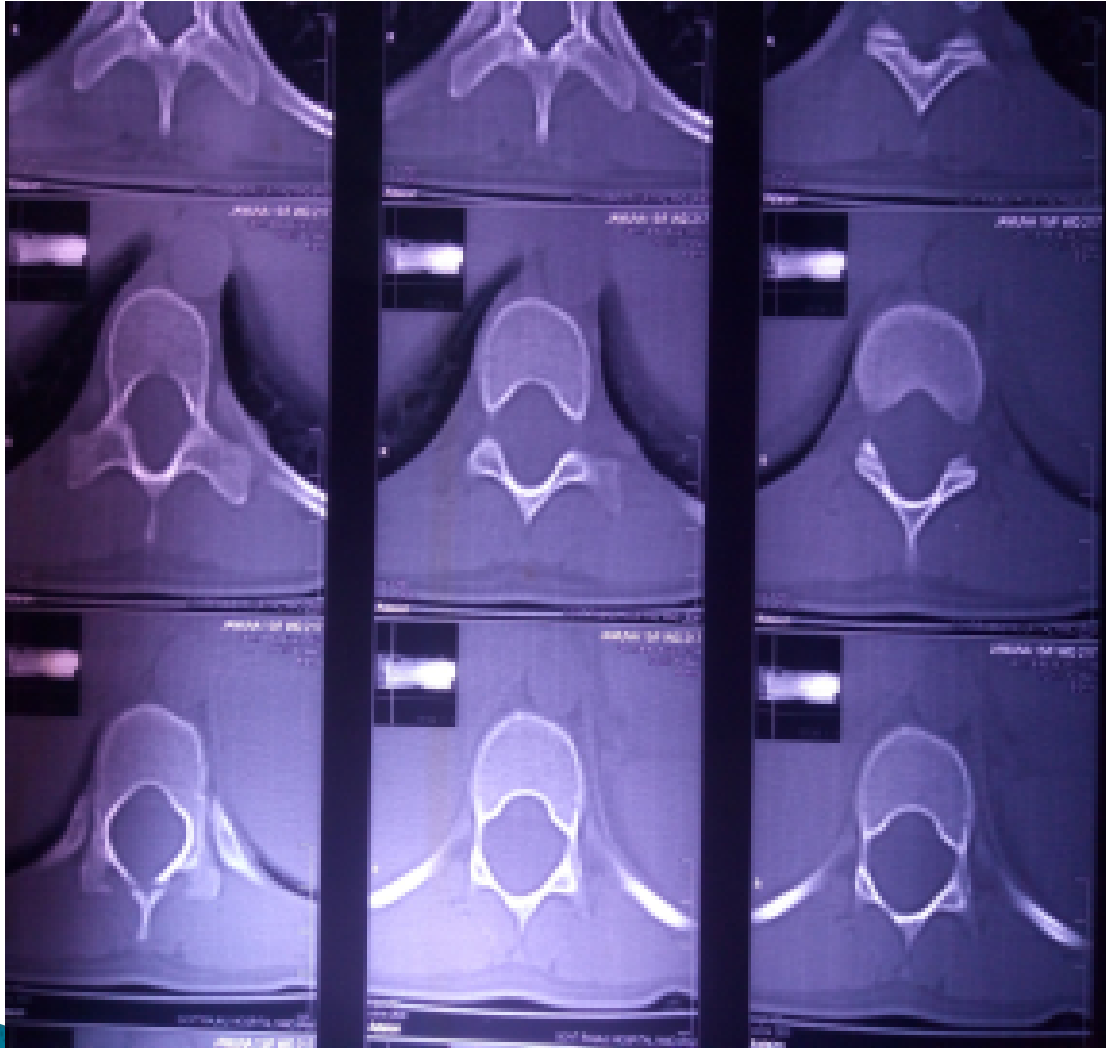




# MRI REPORT

- ⌘ E/O intradural extramedullary CSF intense lesion noted extending from D9-L3 LEVEL
  - ⌘ Lesion displacing the spinal cord anteriorly and the spinal cord appears thinned out
  - ⌘ s/o arachnoid cyst
  - ⌘ Spinal cord ends at L2 L3 level
  - ⌘ No e/o altered cord signal intensity
  - ⌘ On contrast- lesion does not enhance
- 


# CT SPINE



# CT- SPINE REPORT

- ⊠ Widened spinal canal
- ⊠ Thinning of lamina

# TAKE HOME MESSAGES

- ⌘ Most of the time arachnoid cysts are asymptomatic and incidental finding
  - ⌘ There are no symptoms or signs specific for arachnoid cyst
  - ⌘ It presents with variable and rare symptoms
  - ⌘ MRI is specific and sensitive
  - ⌘ Prognosis depends on the duration and extent of irreversible neurological damage
  - ⌘ Treatment- surgery if symptoms attributable to arachnoid cyst
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THANK YOU