SPINAL CORD INJURY WITHOUT RADIOLOGICAL EVIDENCE

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PRESENTATION

A 51-year-old male, XYZ, was brought to the Emergency department with an alleged history of a heavy object (cement bag) falling on his back while working. He presented with severe back pain and loss of power and sensations below the level of T12.

PRIMARY SURVEY

- The airway was patent
  C-spine stabilized using hard philadelphia C-Collar
- Breathing-
  Respiratory rate was 18/min
  SpO2 was 88% on Room Air and 99% on 5LO2
- Circulation-
  Pulse rate was 58/min
  Blood Pressure was 80 mm Hg systolic
  Capillary refill time- normal
- Disability-
  GCS-E4V5M6

PRIMARY ADJUNCTS

- Chest x ray and pelvic x ray- NAD
- EFAST- negative
- No bleeding wound or long bone fractures
- ECG showed sinus bradycardia

SECONDARY SURVEY

No relevant findings

CNS:

conscious oriented

Power was 5/5 in both upper limbs and 0/5 in both lower limbs

Reflexes- absent; plantars- flexor

Sensations were absent below the T12 level

Pulses present

DIFFERENTIAL DIAGNOSIS

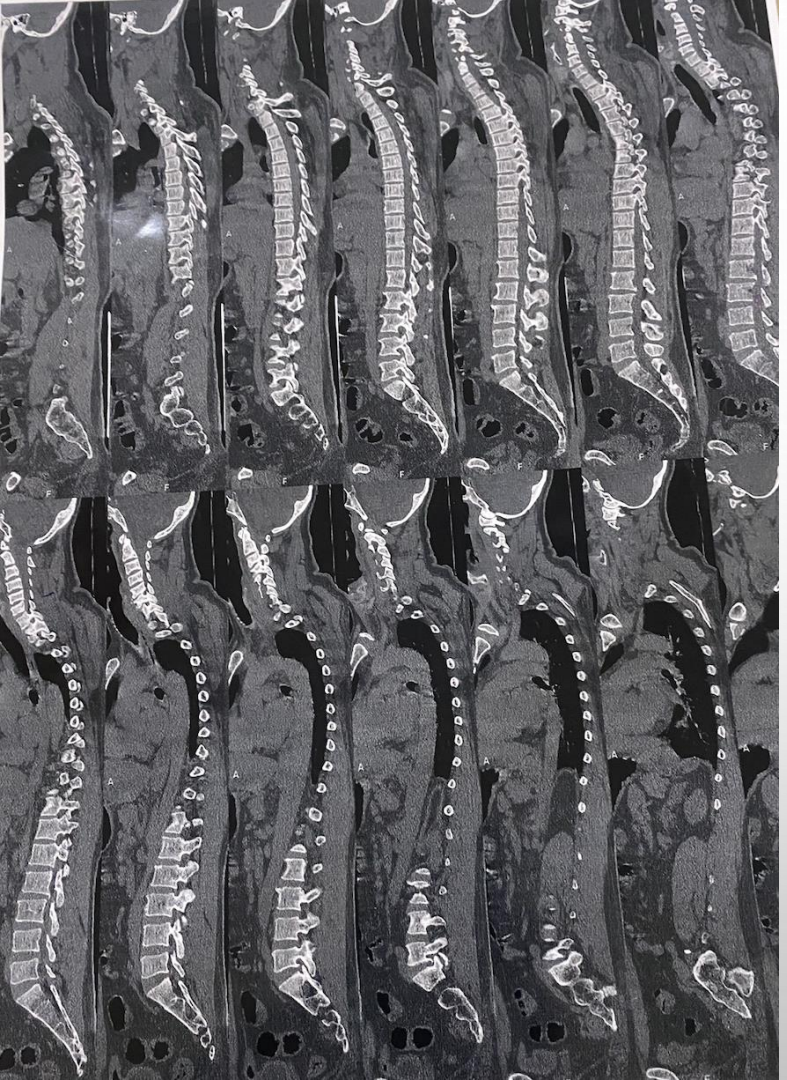
- Compressive Myelopathy
- Transverse Myelitis
- GBS

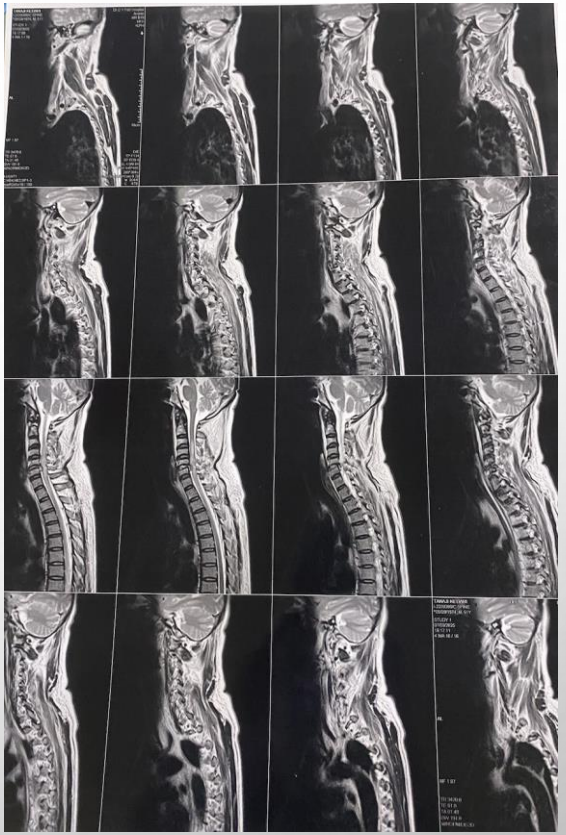
RADIOLOGY

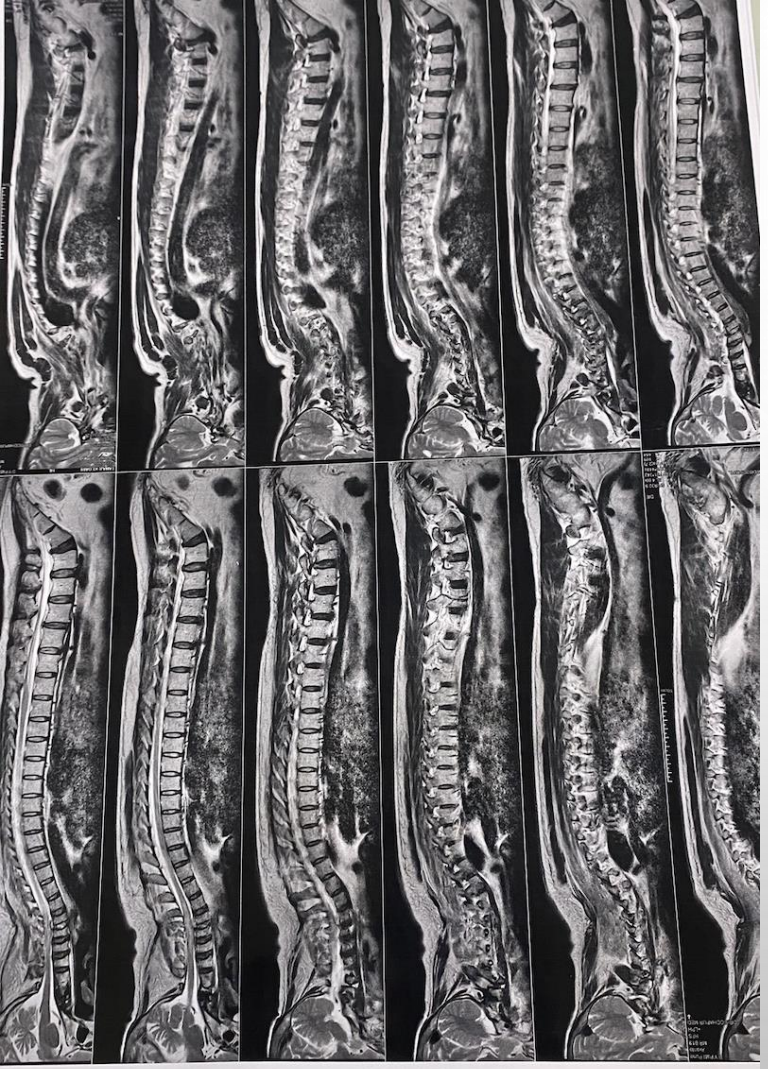
- X-rays and CT of the whole spine showed no evidence of any fracture.

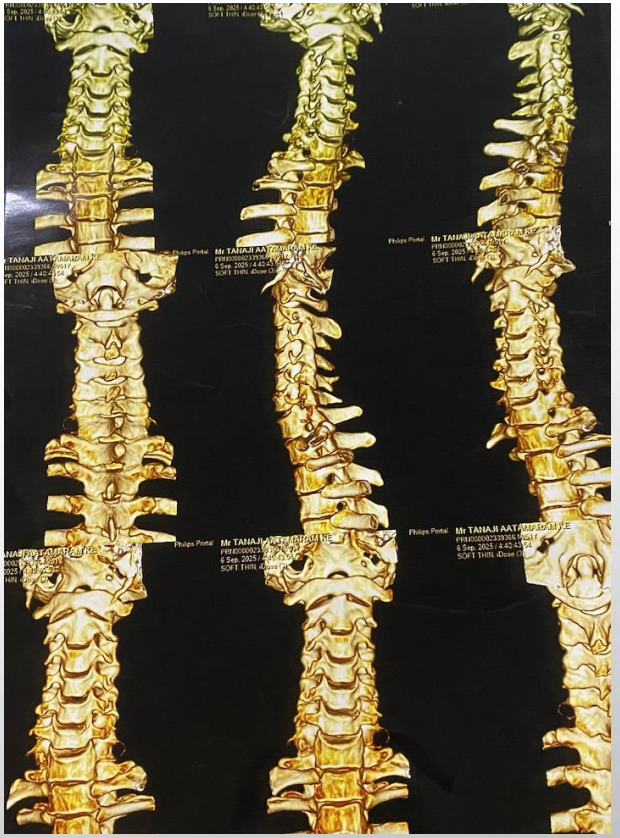
MRI-

- Cervical spine: cord edema/contusion from C4 to D1 with disc tear at C5-C6 level compressing the anterior thecal sac and spinal canal
- Lumbar spine: disc bulges from level L1 to S1and degenerative changes such as disc desiccation and osteophyte formation from L3 to S1









MANAGEMENT

- ANALGESIA- IV Tramadol
- BLOOD PRESSURE:
  - IV fluids
  - Noradrenaline infusion

DISCUSSION

- We see SCIWORA mostly in paediatric age group since the skeleton is malleable in children, so we see spinal cord trauma without fractures. Whereas in adults fractures are the cause for spinal trauma. It is rare to see SCIWORA in adults hence we are presenting this case.
- Neurogenic shock is a diagnosis of exclusion. When we have a trauma patient in shock, we first give warm IV fluids upto 1 liter, control any hemorrhage that is happening and then start inotropic support.

TAKE AWAY MESSAGE

- Spine stabilization and maintaining vitals is of utmost importance
- SCIWORA is a rare diagnosis in adults
- Neurogenic shock is a diagnosis of exclusion

REFERENCES

ATLS manual by American college of Surgeons,tenth edition

THANK YOU!