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KARNATAKA RADIOLOGY EDUCATION PROGRAM



TUBERCULAR SPONDYLITIS

BY

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DEPT OF RADIO DIAGNOSIS.

SUBBAIAH MEDICAL COLLEGE, SHIMOGA.

HISTORY

- ▶ **K/C/O Pulmonary Tuberculosis completed ATT.**
- ▶ **Now, presented with back ache and paraplegia.**
- ▶ **No h/o trauma/ surgical history.**

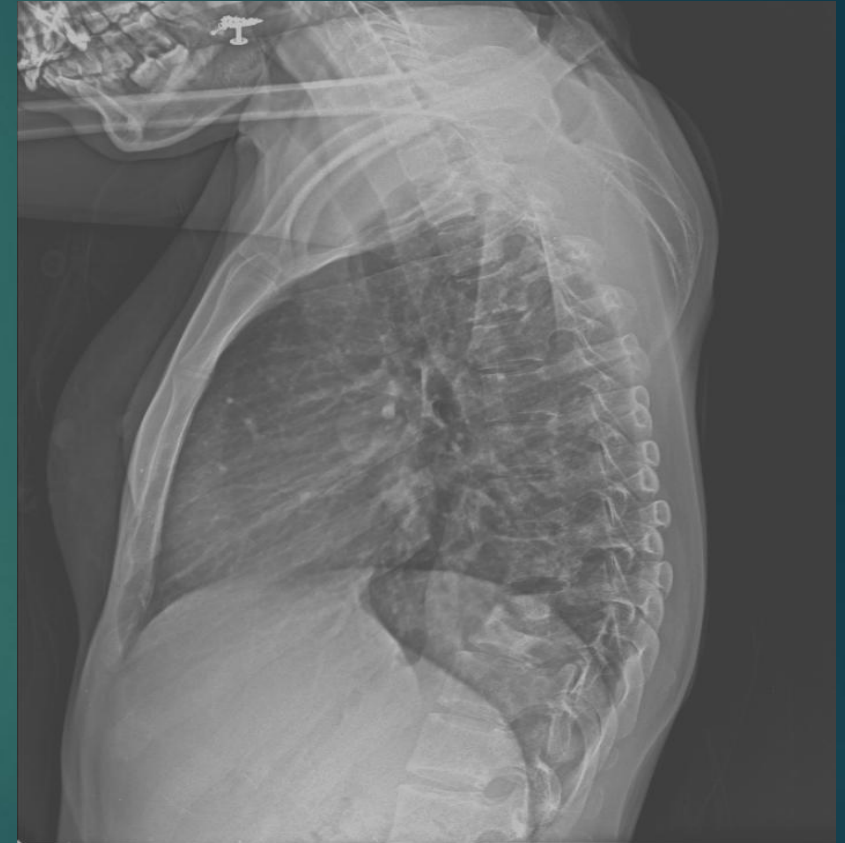
Chest X Ray:

- ▶ Lung fields – ill-defined opacities noted in left upper zone,
- ▶ Rest of the lung parenchyma normal
- ▶ Widening of bilateral paravertebral stripes from
- ▶ D7 –D10. Increased radio opacity of D9 & D10
- ▶ vertebra with decreased vertebral body height.
- ▶ Cardia, CP angles are clear.



LATERAL CHEST X RAY:

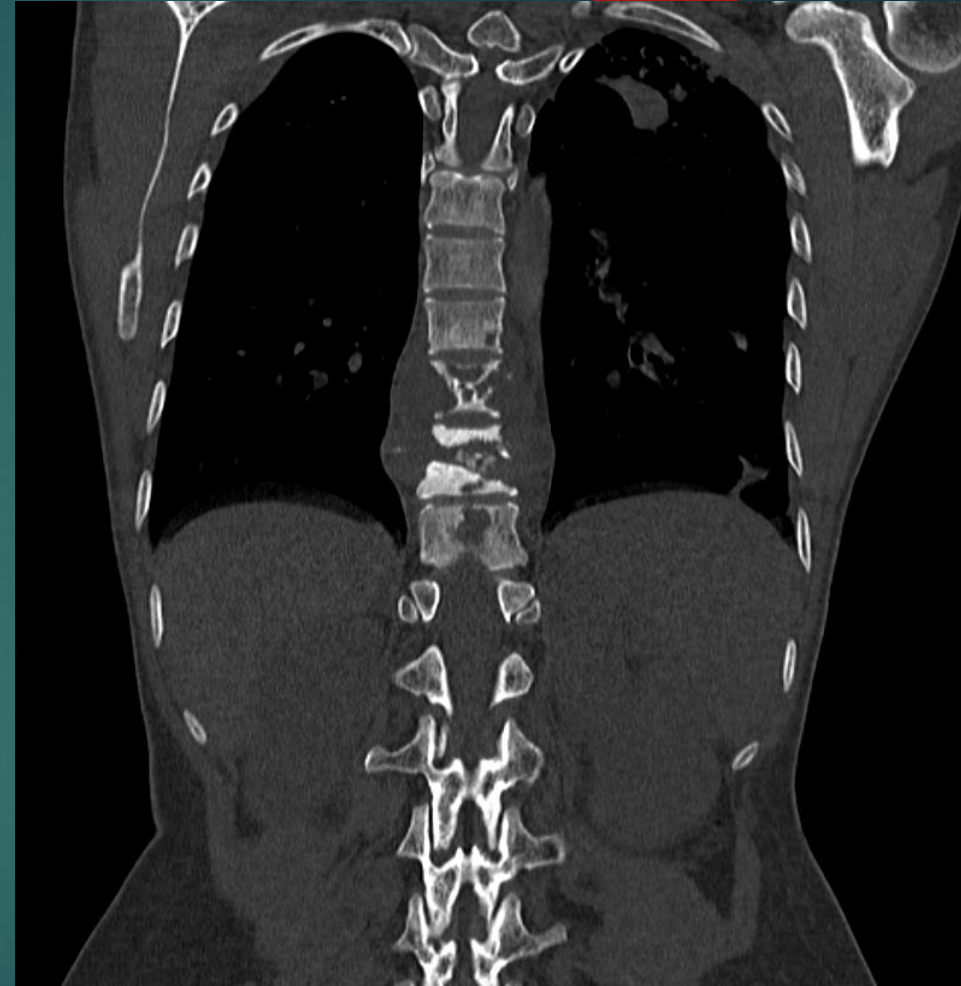
- ▶ Lateral chest radiograph shows sclerosis of D9 & D10 vertebra with reduced height.
- ▶ Anterior collapse of the D9 vertebra with posterior angulation – Gibbus deformity.



PLAIN CT:

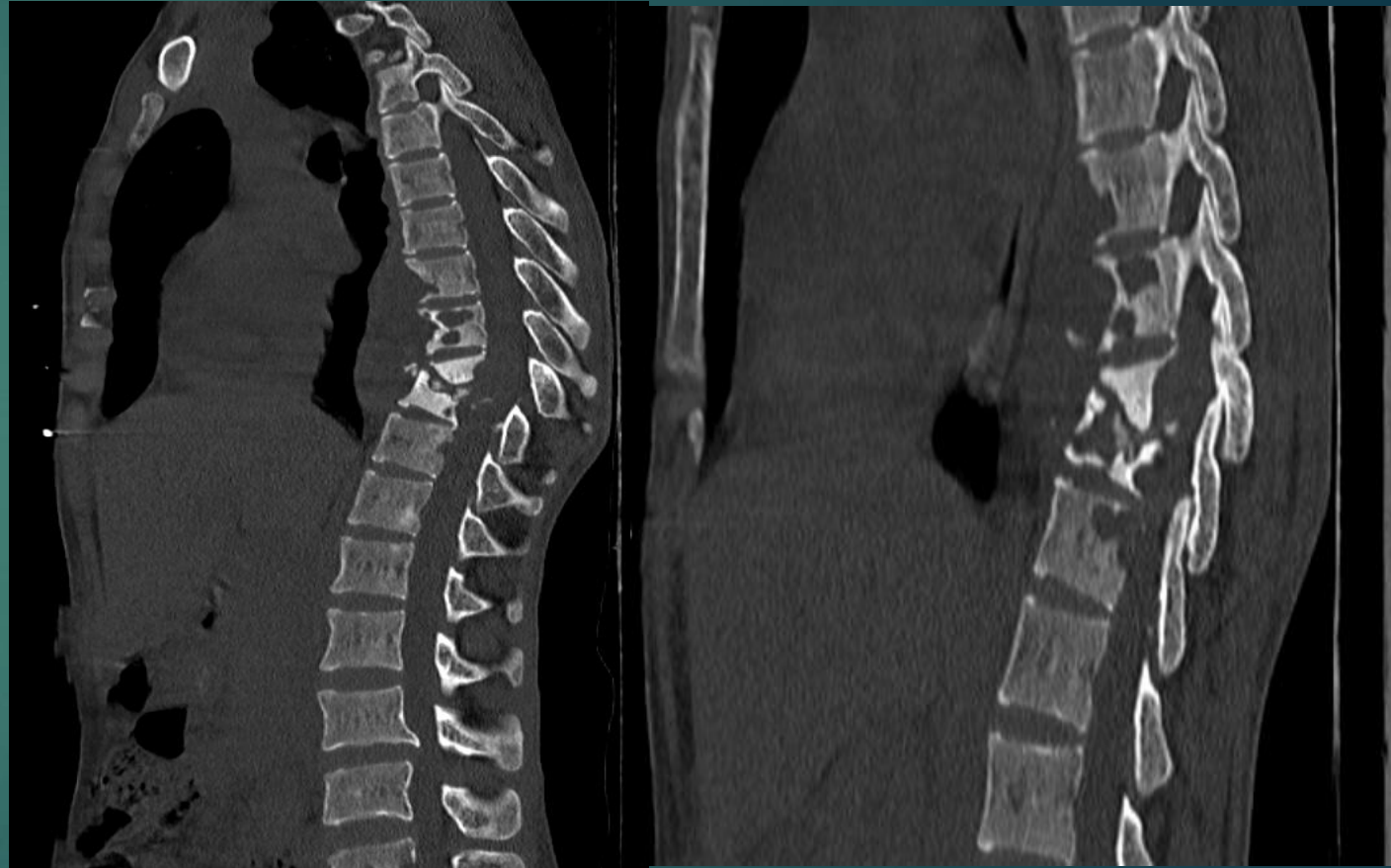
On unenhanced CT bone window:

- ▶ **Soft tissue density widening of bilateral paravertebral stripes from D7 –D10**
- ▶ **Increased density of D9 & D10 vertebra with decreased vertebral body height.**
- ▶ **Multiple lytic lesions noted in adjacent vertebrae**



**Sagittal Dorsal spine
bone window shows
Bulge in the pre vertebral region extending
from D7 –D10**

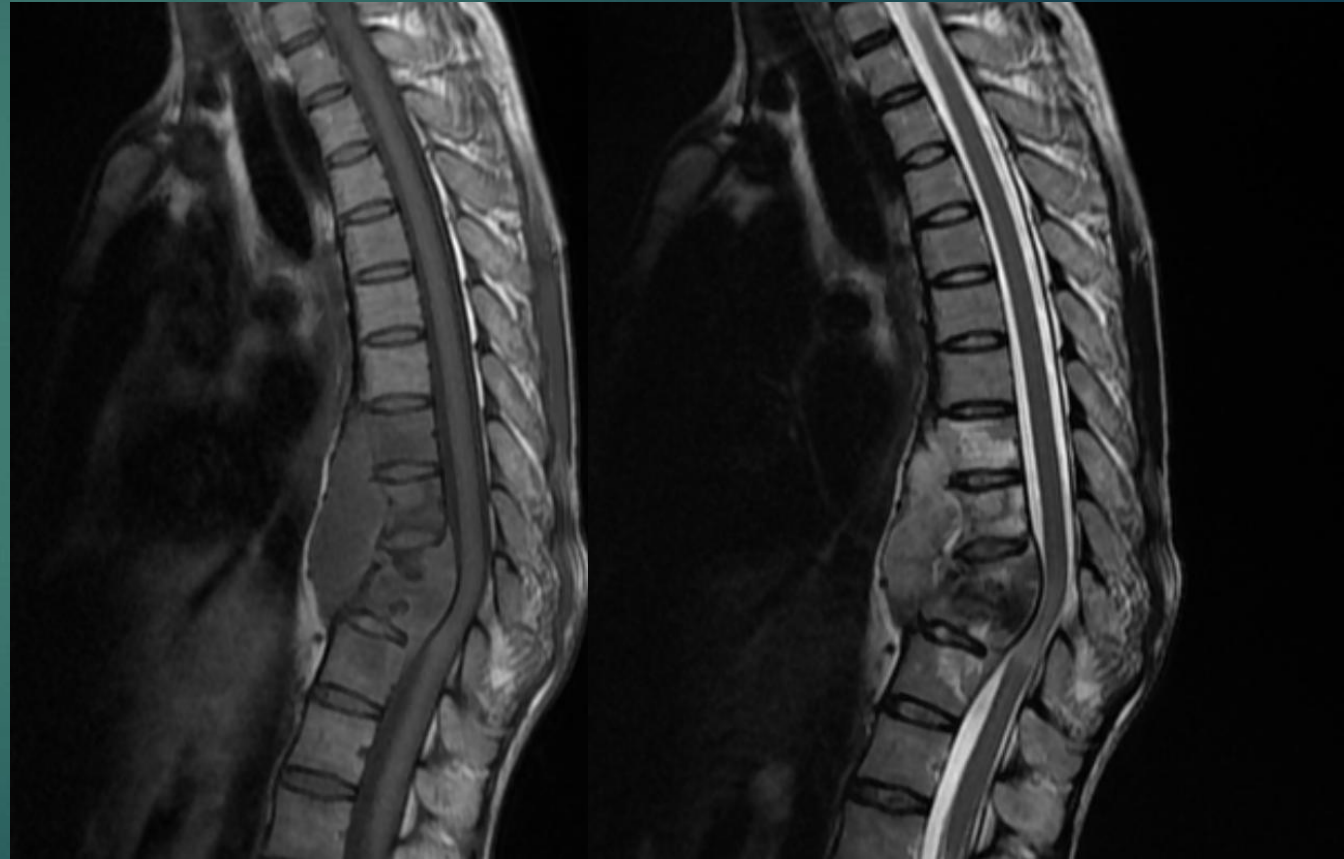
**Increased density of D9 & D10 vertebra
with decreased vertebral body height.
Multiple lytic lesion noted in adjacent
vertebral bodies
Gibbus deformity noted..**



► T1 & T2WI :

► Bulge in the anterior pre vertebral space and epidural space appearing hypointense on T1 and heterogeneously hyperintense on T2

Abnormal signal changes are seen involving D7 through D11 vertebrae with partial collapse of D9, D10 vertebrae and destruction of intervening intervertebral discs appearing hypointense on T1, heterogeneously hyperintense on T2 / STIR images
Anterior epidural extension at D9, D10 levels effacing ventral subarachnoid space - measuring 0.6cm seen indenting the thecal sac



- ▶ **Post contrast:**
Post contrast peripheral enhancement of the pre / bilateral paravertebral and epidural lesions with loculations noted suggestive of abscess formation.
Bird nest appearance noted.





▶ Diagnosis:

▶ Tuberculous spondylitis