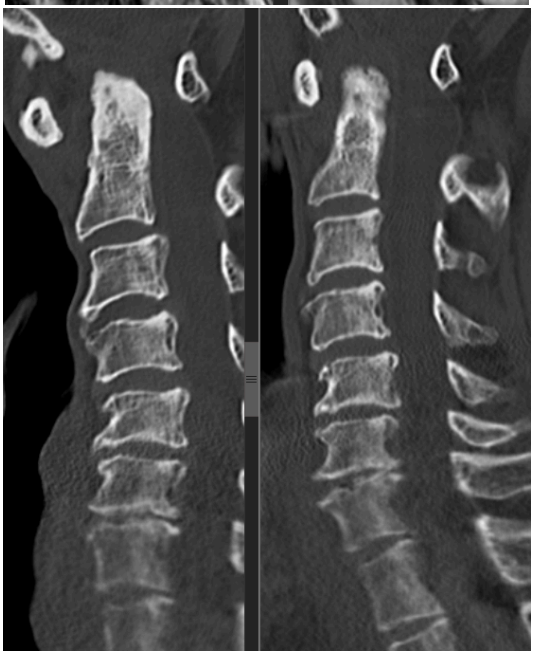
Multislice **CT scan with multiplanar and 3D reformation**
&
MRI of the cervical spine

MRI TECHNIQUE:

- **Sagittal 4 mm sections T1 and T2 WI (plates 1 & 2).**
- **Axial 4 mm sections T1 and FE/T2 WI (plates 3 & 4).**

FINDINGS:



- Ill-defined soft tissue sheets/hypertrophied synovium seen encasing the atlanto-dental articulation, eliciting low T1 and heterogeneous intermediate to dark T2/STIR signal with surrounding mild joint effusion.
    - The soft tissue sheets are seen displacing the posterior longitudinal ligament posteriorly causing significant narrowing of the foramen magnum with consequent marked compression of the cord at the level of the cranio-cervical junction causing focal intramedullary increased signal (post compressive myelopathy).
    - The anterior atlanto-dental interval seen measuring about 6 mm in the neutral view, 4 mm in the extension view and increases in the flexion view to measure about 13 mm, denoting atlanto-axial instability. Marked narrowing of the cervical spinal canal is seen in the flexion position.
    - Cortical irregularities and subcortical sclerosis of the dens.
    - No signs of basilar invagination.
- Cervical spondylodegenerative changes are seen evidenced by marginal osteophytic lipping of the vertebral endplates with loss of cervical discs bright T2 signal.

- C3/4 and C4/5 cn3etral posterior disc protrusions are seen effacing the ventral subarachnoid space and indenting the cord.
- C5/6 posterior disc protrusion is seen effacing the ventral subarachnoid space, indenting the cord and encroaching upon both neural exit foramina.
- C6/7 posterior and left posterolateral disc protrusion is seen effacing the ventral subarachnoid space, indenting the cord and encroaching upon the left neural pathway.
- Bilateral C5/6 and C6/7 neurocentral arthropathies are seen adding more to the foraminal compromise.
- Right C3/4, C4/5 and C6/7 facet arthropathy.
- No marrow infiltrative lesions.

OPINION:

- **Atlanto-dental pannus formation encroaching upon the foramen magnum and cervical spinal canal with subsequent cranio-cervical junction post-compressive myelopathy.**
- **Cervical spondylosis with multilevel disc lesions and degenerative foraminal compromise as described.**

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