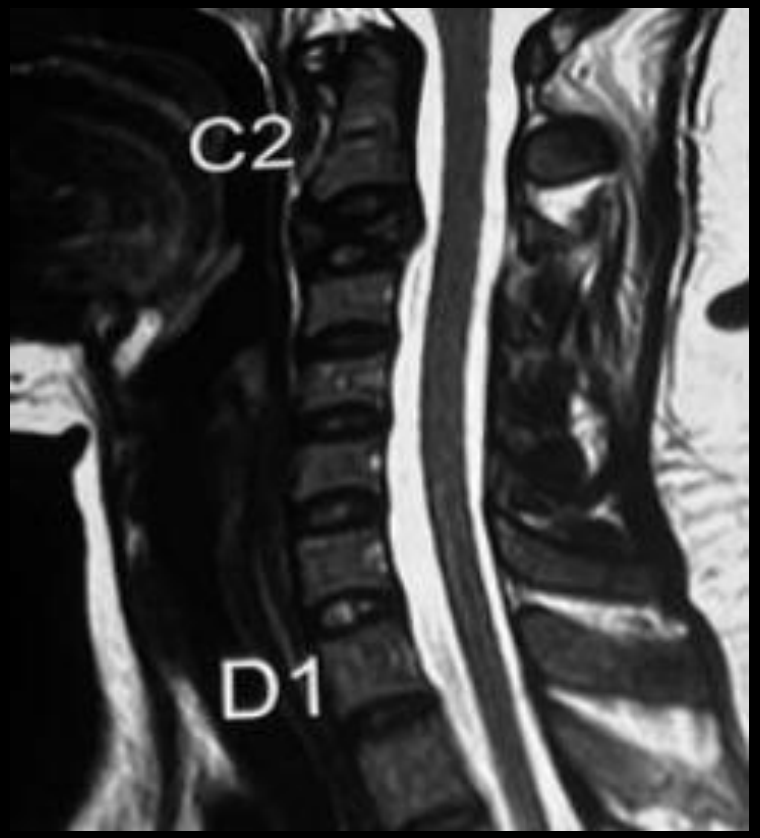
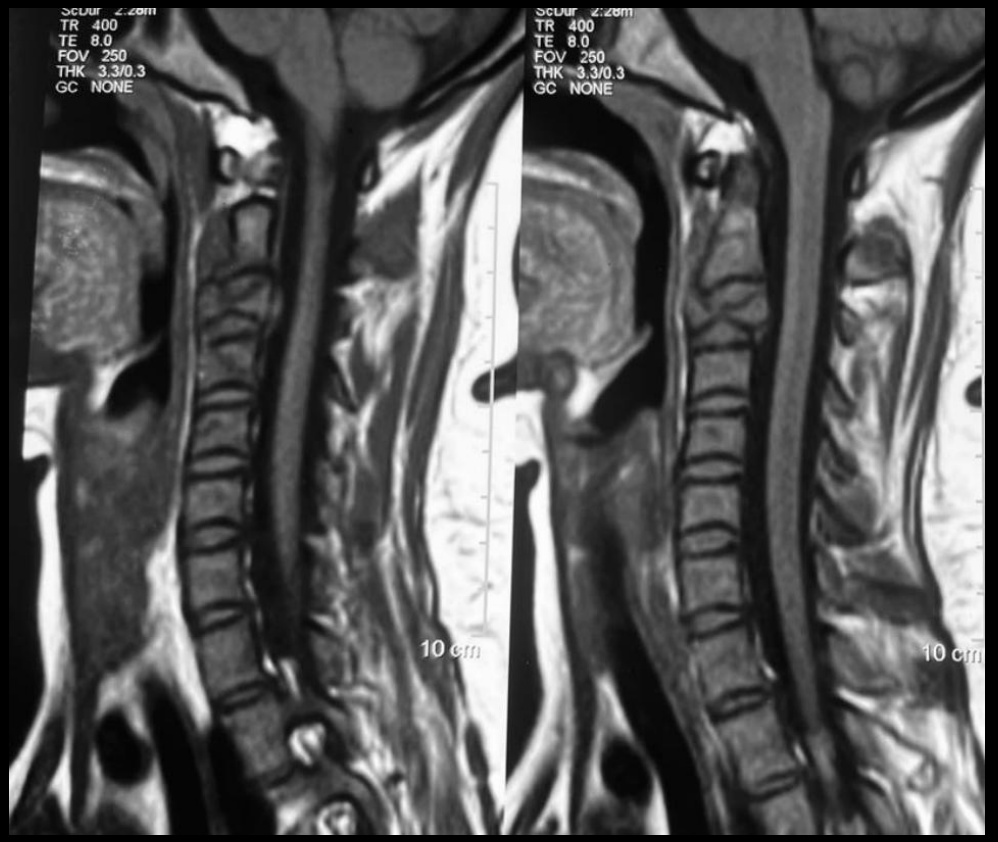
MICOD – 07/03/2024

Case contributor – Dr. Surendra Kumar Bugata

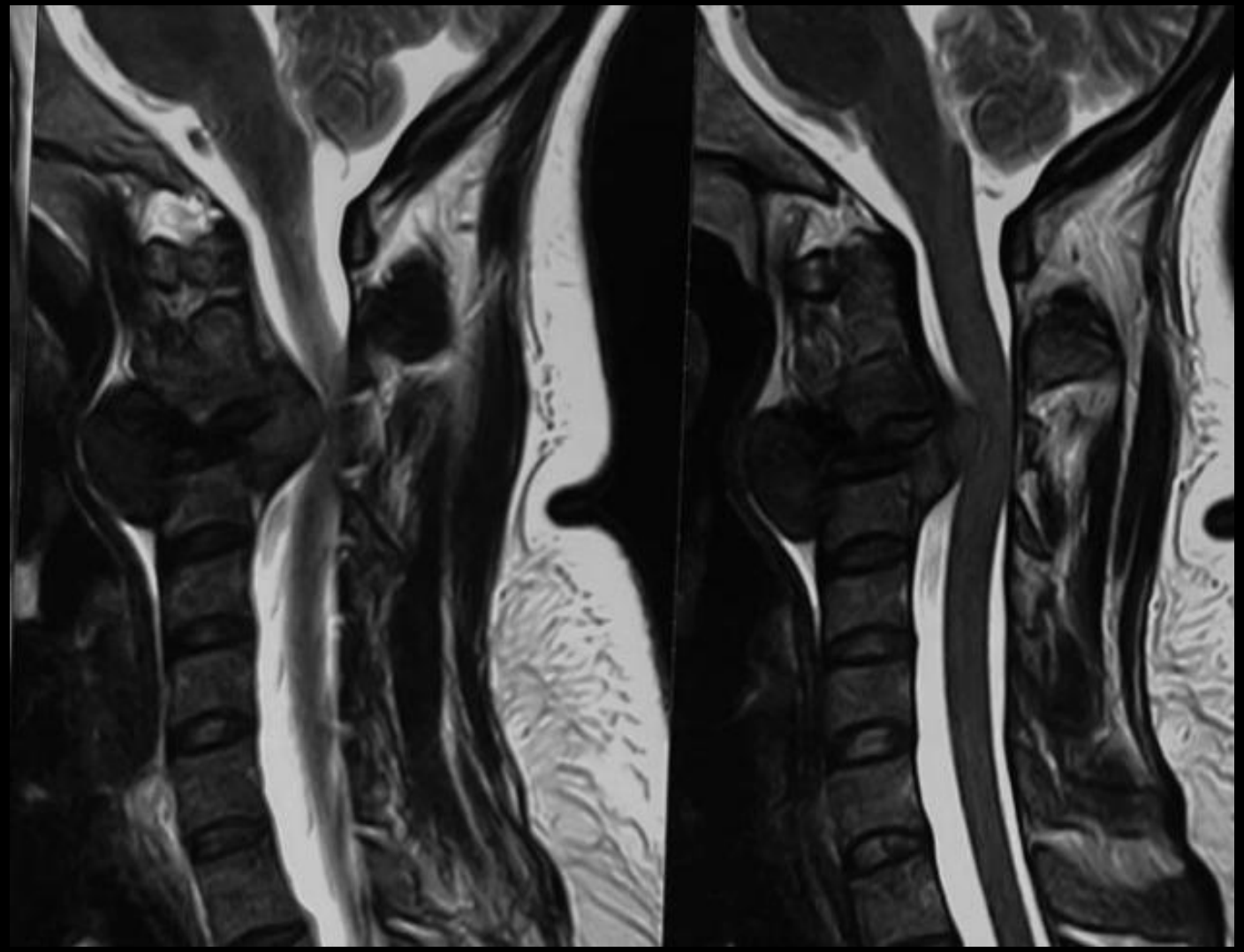
26-year-old lady with history of neck pain, since 6 months
Visited doctor after 3 months from the first symptom and investigated with plain radiograph followed by MRI of cervical spine.

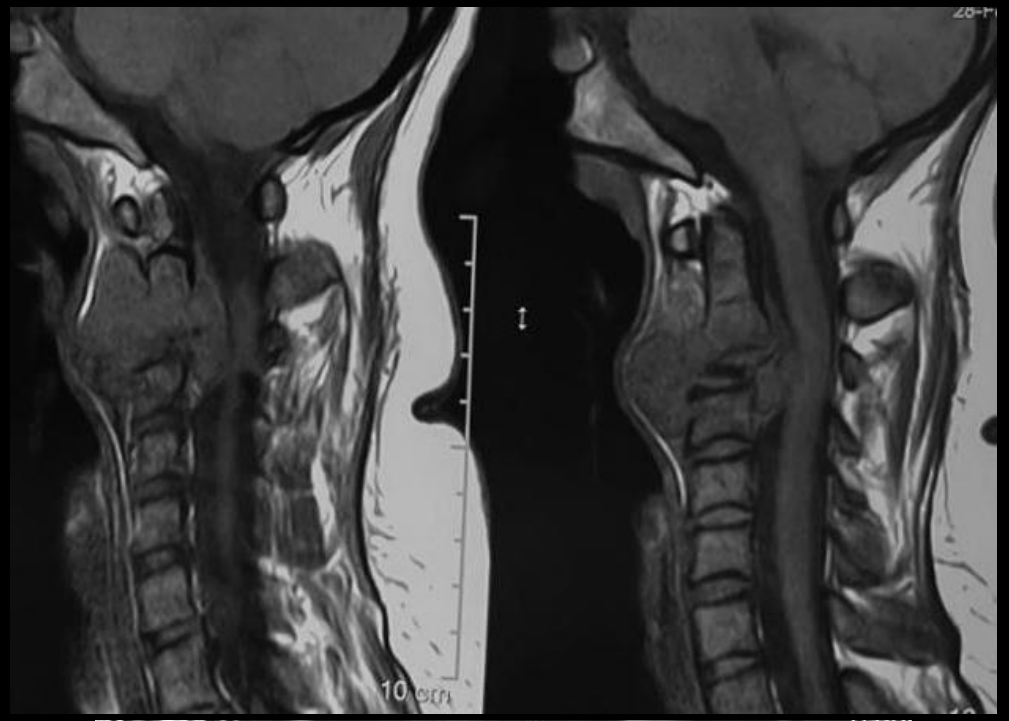
Nov 2023

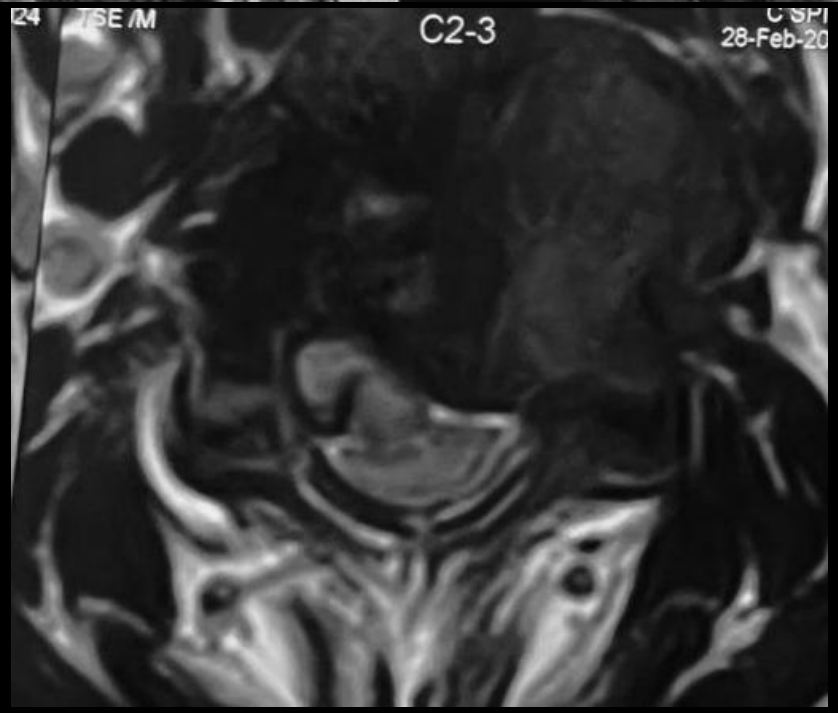




Patient was lost to follow up, came back with increased neck pain this month, no neurological deficits & repeat Radiograph and MRI were done
What is the diagnosis at this stage?






C2-3

Giant cell tumor of the vertebra

H 648/24

A 27 years old female, CT performed, revealed vertebra plane of C3 vertebral body with large exophytic soft tissue lesion. Under CT guidance and aseptic precautions 18 G needle was introduced into the mass and multiple (4) samples were obtained. Specimen submitted for HPE.

GROSS:

Received 4 tru cut biopsy bits each measuring 1-1.5 cm. All 2 blocks(Block A&B).

MICROSCOPY:

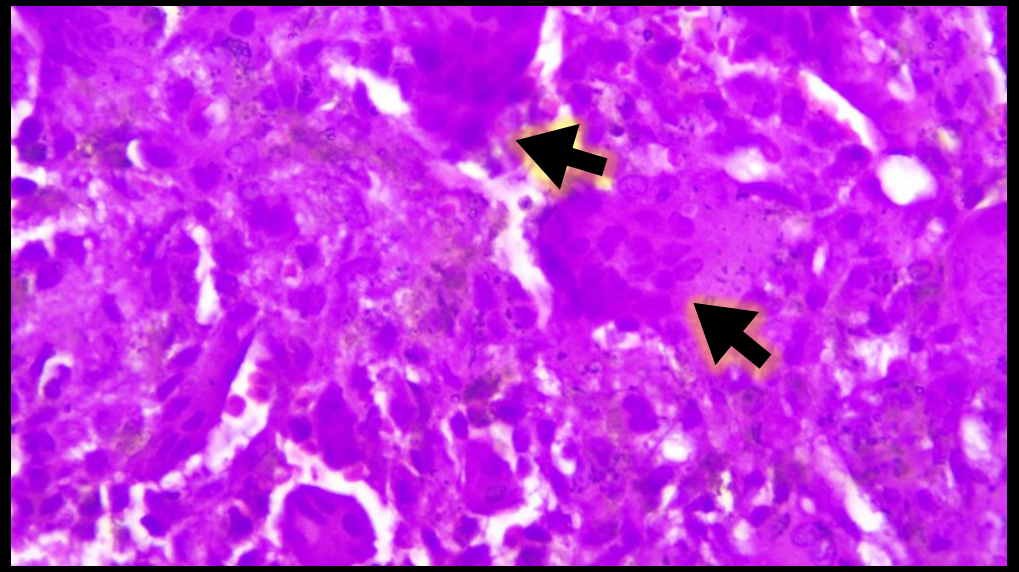
Multiple section show lesion mainly showing numerous gaint cells, which are uniformly distributes. Some of the gaint cells show more than 30-50 nuclei. The stroma shows oval to round cells, which are showing similar morphology of nuclei of gaint cells. There are areas of fibrosis seen.

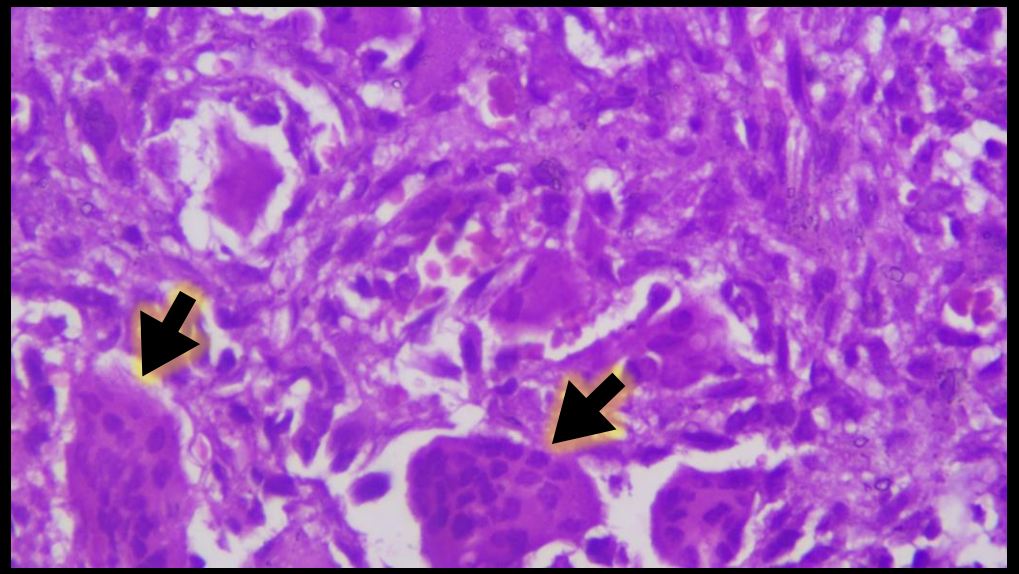
There is no pleomorphism or mitotic activity.

No evidence of malignancy.

DIAGNOSIS:

Left vertebral body- C2 lesion, biopsy: Gaint cell tumour (GCT). No evidence of malignancy





Black arrows pointing multi-nucleated giant cells

Giant cell tumor of the vertebra

- Vertebral body more common than the posterior elements
- Low to intermediate signal intensity on the T1-weighted MR images
- Low to similar signal intensity to the normal spinal cord on the T2-weighted MR images in 63–96% of cases
- This appears to be caused by the relative collagen content of fibrous components
- Helpful in making a differential diagnosis because most other spinal neoplasms (metastases, myeloma, lymphoma, and chordoma) show high signal intensity on the long-TR MR images