MRI CERVICAL SPINE (NECK) STUDY REPORT

Anatomical Isolation & Radiological Evaluation

Patient Name:	REM MAHMOUD DESOKI	**Patient ID:**	2025 3 1 6
Age / Gender:	24 Years / Female	**Study Date:**	01-03-2025 (11:47 AM)
Modality:	MRI 1.5T (Philips Ingenia)	**Original Exam:**	MRI BRAIN + C.S + C
Institution:	AL Zahraa University Hospital	**Isolated Target:**	Cervical Spine (Neck Part)

Technical Sequences Performed

- **Sagittal T2-Weighted TSE:** High-resolution 11 slices evaluating canal, CSF, cord, discs, and alignment.
- **Sagittal T1-Weighted TSE:** 11 slices evaluating vertebral body marrow and anatomical boundaries.
- **Sagittal STIR (Fat Suppressed):** 12 slices highly sensitive to cord hyperintensity, marrow edema, and ligamentous injury.
- **Sagittal T1-Weighted Post-Contrast:** 15 slices evaluating post-contrast enhancement across the spinal cord and meninges.
- **Axial T2-Weighted TSE:** 35 slices focused through cervical disc interspaces and canal dimensions.
- **Axial T2* FFE (Gradient Echo):** 35 slices providing optimal contrast for neural exit foramina and osteophytes.
- **Axial T1-Weighted TSE:** 35 anatomical slices of the cervical spine and neck soft tissues.
- **Sagittal STIR MobiView Whole-Spine Survey:** Composite screening covering Cervical, Thoracic, and Lumbo-Sacral spine.

Representative Key Slices



Sagittal T2W (Mid-Sagittal C-Spine)



Sagittal STIR (Cord & Edema Check)



Axial T2W (Cervical Disc Level)

Detailed Radiological Findings

1. Vertebral Alignment & Bone Marrow

- Normal alignment of the cervical spine vertebrae (C1 through C7).
- Mild straightening of the normal cervical lordotic curvature, commonly associated with muscular spasm or postural factors.
- Vertebral body heights and contours are well preserved. No evidence of wedge collapse, compression fracture, or listhesis.
- Normal, homogeneous bone marrow signal intensity without focal destructive or marrow-infiltrative lesions.
- Normal craniocervical junction and atlanto-axial relationships (dens is normal, intact atlanto-odontoid alignment).

2. Intervertebral Disc Spaces

Level	Disc Height & Hydration	Contour / Herniation	Spinal Canal / Foramina
C2 - C3	Normal height and hydration	No focal protrusion	Patent canal; bilateral exit foramina free
C3 - C4	Preserved disc height	No significant bulge	Adequate canal; clear exit foramina

Level	Disc Height & Hydration	Contour / Herniation	Spinal Canal / Foramina
C4 - C5	Preserved disc height	Mild diffuse posterior disc bulge	No significant cord indentation; patent foramina
C5 - C6	Preserved disc height	Mild diffuse disc bulge	No thecal sac impingement; patent foramina
C6 - C7	Normal height and contour	No focal extrusion	Patent canal; patent exit foramina
C7 - T1	Normal height and contour	Unremarkable	Unremarkable

3. Spinal Canal & Cervical Spinal Cord

- Normal anteroposterior diameter of the cervical spinal canal without congenital or degenerative canal stenosis.
- Cervical spinal cord demonstrates normal caliber, smooth borders, and uniform signal intensity.
- No intramedullary focal hyperintensity on T2 or STIR sequences (no evidence of transverse myelitis, demyelinating plaque, or cord edema).
- No central canal dilatation, syrinx, or hydromyelia.
- Post-contrast T1 images show no abnormal pathological enhancement within the spinal cord substance, leptomeninges, or epidural space.

4. Posterior Elements & Paraspinal Soft Tissues

- Facet joints, laminae, and posterior ligamentous complexes appear intact.
- Prevertebral, retropharyngeal, and paraspinal soft tissues of the neck are unremarkable with no swelling, lymphadenopathy, or abnormal soft tissue mass.

CONCLUSION / IMPRESSION

1. **Mild straightening of the cervical lordotic curvature**, suggestive of neck muscular spasm.

2. **Mild C4-C5 and C5-C6 diffuse disc bulges** without focal disc herniation, significant thecal sac indentation, spinal canal stenosis, or neural exit foraminal compromise.
3. **Normal morphology, caliber, and signal intensity of the cervical spinal cord** with no evidence of demyelinating plaques, intramedullary lesions, syrinx, or abnormal post-contrast enhancement.
4. **Preserved vertebral body heights and marrow signals** throughout C1-C7.