

Patient Name : MR.PRAMOD KUMAR	Gender : Male
Age : 33 Y	Date : Aug 17, 2024
Referring Doctor : SUSHEELA HOSPITAL	Patient ID :

## MRI LUMBO-SACRAL SPINE

### PROTOCOL

Multiplanar and multi-echo MRI of the lumbosacral spine was performed without administration of intravenous contrast.

### FINDINGS :

Sacralization of L5 vertebra noted.

**Lesions:** An expansile lesion in L5 vertebra with S1 vertebral extension noted causing osseous destruction [near complete collapse] with cortical buckling seen compressing the cauda equina nerve roots. Encroachment of bilateral lateral recess and neural foramina noted with severe narrowing of bilateral S1 exiting nerve roots at this levels. Anteriorly, it is extending into the anterior paravertebral region. No involvement of the posterior paravertebral space noted. Left laterally, extension of the left sacral ala with destruction also noted.

Multiple ill defined expansile altered signal intensity lesions noted in the superior aspect of bilateral ilium with soft tissue components, largest on the left side measuring 54 x 35 x 36mm. Few lesions also seen adjacent to the sacroiliac joints, laterally.

The lesions shows hyperintense signal on STIR, heterogeneously hypo to hyperintense on T2WI and hypointense on T1WI.

Mild patchy STIR/T2W hyperintensity noted at L5-S1 intervertebral disc space-? edema.

**Curvature:** Straightening of the curvature of the Lumbo-Sacral spine.

**Rest of the vertebrae appear:**

- normal in height
- End plate : normal
- Marrow Signal: normal
- Marginal osteophytes are noted at few levels
- Posterior osseous structures and soft tissue structures are normal

The visualized spinal cord shows normal MR morphology and signal characteristics. Conus medullaris shows normal signal characteristics

### Disc Spaces:

- **Disc hydration:** desiccation (partial) at L4-5 and L5-S1 levels.
- **L1-L2:** There is no evidence of disc disease or protrusion, central canal stenosis, or neural foraminal narrowing.
- **L2-L3:** There is no evidence of disc disease or protrusion, central canal stenosis, or neural foraminal narrowing.
- **L3-L4:** Diffuse disc bulge noted indenting the anterior thecal sac causing bilateral mild neural foraminal narrowing with impingement of both L3 exiting nerve roots.
- **L4-L5:** Diffuse disc bulge noted indenting the anterior thecal sac causing bilateral severe neural foraminal narrowing with impingement of both L4 exiting nerve roots.
- **L5-S1:** Diffuse disc bulge noted indenting the anterior thecal sac causing bilateral moderate to severe neural foraminal narrowing with impingement of both L5 exiting nerve roots.

DISC SPACES	AP CANAL DIAMETER (mm)
L1 - L2	14
L2 - L3	13.5
L3 - L4	12
L4 - L5	10.7
L5 - S1	11.4

## IMPRESSION

MR imaging of lumbosacral spine reveals early spondylo-disco-degenerative changes, with associated discal bulges and protrusions from L3-4 to L5-S1 levels with associated neural compressions as described above.

Multiple altered signal intensity expansile lesions involving L5, sacral and iliac bones with soft tissue components and neural impingement as described above-likely s/o metastases -advised PET CT correlation.

Please correlate with clinical and biochemical parameters. Compare with previous skiagrams/MR scans, if any.





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## MRI SCREENING OF THE WHOLE SPINE

### FINDINGS

#### CERVICAL SPINE:

- Straightening of the normal curvature of the cervical spine noted.
- Few patchy T2W hyperintense signal noted in few cervical vertebrae-? artefact/metastases
- Mild disc bulge noted at C3-4 and C4-5 levels.
- An ill defined T2W hyperintense area noted in the right posterior paraspinal space measuring 16 x 8mm-? collection-- Suggested dedicated study with axial cuts and contrast for further evaluation.
- The normal vertebral alignment is maintained.
- The cervical cord, CVJ and the cervico-medullary junctions are normal.

#### DORSAL SPINE:

- Normal curvature and vertebral alignment is maintained.
- The vertebrae show normal marrow signal with no gross focal lesions in visualized given sections
- The dorsal intervertebral discs are normal with no significant bulging or herniation noted.
- The dorsal cord appears normal.
- Pre and para vertebral soft tissues are normal.

### RECOMMENDATION

Suggested clinical correlation.

**Dr. Nithisha**

**MBBS, MD(Radiodiagnosis), Fellow MSK MRI, Fellow Fetal Imaging, Consultant Radiologist**