

Incidental Extra Spinal Findings in Magnetic Resonance Imaging of Spine: Beyond the Focus

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Introduction

Magnetic resonance imaging (MRI) of the spine is a special imaging modality to evaluate various symptoms in spine including low back pain. However, extra spinal incidental findings (IF) which detect additionally during the MRI might influence the management of the patient.

Objective: To describe IF detected during MRI spine and to emphasize the importance of identification of those.

Methodology: Five patients who underwent MRI spine for back pain were selected and imaging appearances of various IFs were discussed. GE MR 360 advance 1.5-tesla MRI machine was used for the imaging.

Results: Case 1:

Thirty-seven year old female patient was evaluated for chronic neck pain. Sagittal T1W and T2W images show moderate size cystic lesion on posterior fossa of the brain. Follow-up MRI brain showed a moderate size arachnoid cyst causing indentation to the cerebellum.

Case 2: Sixty-seven year old female patient was assessed for low back pain (LBP). T2W sagittal and coronal images showed 3.7 cm size oval shape mass medial to the right kidney. The mass was identified as an accessory kidney in follow-up contrast computed tomography (CT).

Case 3: Thirty-eight year old female patient was assessed for LBP. Sagittal T1W, T2W and STIR images showed moderate size cystic mass with internal fat, fluid and low intensity nodules suggestive of calcium. MRI lumbar spine was uneventful. Subsequent surgery and histology revealed the mass as a dermoid cyst.

Case 4: Forty-five year old male patient was evaluated for LBP. Sagittal T2W and Coronal STIR images showed uncomplicated left side pelvic kidney. Follow-up ultrasound scan too confirmed the diagnosis.

Case 5: Eighty-three year old male patient presented with back pain and lower limb weakness. Sagittal and axial T2W images showed multiple spinal metastasis and coronal STIR images showed incidentally detected pleural based lung mass as a primary lesion.

Conclusion:

Systematic observation and report of extra spinal IFs are vital as some of the findings could have significant impact on patient management.

Keywords: Incidental findings, MRI-spine

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