

**UK Radiologist MRI axial SpA FOI**  
***FOI to assess access to; use of MRI and protocols in the diagnosis of axial Spondylarthritis***

1. Which hospital Trust do you work within?

University Hospitals Bristol and Weston NHS Trust – it should be noted that the 2 MRI services are not fully aligned and therefore some answers below indicate protocols undertaken at the two sites.

**Part 1 – Access to MRI**

2. How many MRI scanners suitable for scanning the spine and SIJ do you have access to?

- None
- 1
- 2
- 3
- 4 or more

3. What type of scanner do you have access to?

- 1.5T
- 3T
- Other (please state)

4. Roughly how long would an outpatient wait for an MRI in your Trust?

- Less than 2 weeks
- 2-4 weeks
- 1-2 months
- 2-3 months
- Greater than 3 months

5. Do you have regular meetings or discussions with your rheumatology colleagues?

- Weekly

- Fortnightly
- Monthly
- Quarterly
- As required
- Never

6. How is axial SpA MRI imaging reported in your Trust?

- Internally by a specialist MSK radiologists
- Internally by a non-specialist radiologist
- Outsourced to a specialist MSK radiologist service
- Outsourced to a non-specialist radiologist service
- Other (please state)

### ***Part 2 – Use of MRI in diagnosis of axial SpA***

7. Are you familiar with the rheumatological term axial Spondyloarthritis (axial SpA)?

- Yes
- No

8. Are you familiar with the BRITSpA consensus guidance on MRI for the diagnosis of axial Spondyloarthritis? ([BRITSpA guidance](#))

- Yes
- No

9. In what circumstances would you use MRI in the assessment/diagnosis of spondyloarthritis?

- We do not, or only rarely, use MRI for assessment/diagnosis of spondyloarthritis
- We only use MRI if the x-rays of the SIJ and spine are normal/not diagnostic
- We use MRI as a diagnostic test, irrespective of whether there is an abnormality on plain x-rays
- Other reasons.....

### **Part 3 – MRI protocols**

10. Please write in text below what your standard MRI protocol for the assessment of spondyloarthritis is (specifying (i) field strength, (ii) sequences, (iii) anatomical coverage and (iii) acquisition planes for each element of the protocol):

Spine- Sagittal t1,t2 and stir, axial t2 as required  
SI Joints- Coronal oblique t1 and stir, axial oblique t2

OR

T1 tse sag – whole spine  
T2 tse stir sg – whole spine  
T1 tse cor-obl – SIJs  
T2 stir cor-obl - SIJs

11. What is the approximate scan time for this protocol? If multiple scanners are used, please give an average or range.

20 or 45 minutes

12. When assessing patients for possible early spondyloarthritis with MRI would you routinely scan?

- Sacroiliac joints only
- Sacroiliac joints and lumbar spine
- Sacroiliac joints and thoracic spine
- Sacroiliac joints and thoracolumbar spine
- Sacroiliac joints and whole spine
- Sacroiliac joints and any other spinal segment, including whole spine, as requested by the rheumatologist

Other.....

13. If you do not scan any of the spine in the assessment of spondyloarthritis, why not?

Spinal features are not necessary in the diagnosis of axial-SpA

There are no specific lesions for spondyloarthritis in the spine

The scan time is too long

It costs too much money to scan

Other.....

14. If you do not MRI scan the whole spine in the assessment of spondyloarthritis, why not?

Imaging the lumbar / thoracolumbar spine is sufficient to assess spinal features of axial-SpA

Spinal features are not necessary in the diagnosis of axial-SpA

It takes too long to scan the spine

It costs too much money to scan the whole spine

Other.....

15. If you are MRI scanning part of, or the whole spine in the assessment of spondyloarthritis would you perform?

Sagittal, axial and coronal plane acquisitions

Sagittal and axial plane acquisitions only

Sagittal plane acquisitions only

Other.....

16. If you are MRI scanning the sacroiliac joints, would you perform?

Semi-coronal plane acquisitions only

Semi-coronal and semi-axial acquisitions

17. When MRI scanning for the assessment of spondyloarthritis which sequences do you use in your protocol? Please tick all that apply.

- Fat-suppressed, water sensitive sequence (e.g. STIR, T2w imaging with fat suppression or T2w Dixon imaging)
- Fat-sensitive sequence (T1w imaging)
- Gadolinium-enhanced imaging
- Conventional T2w imaging (without fat suppression)
- Gradient echo imaging (including VIBE or Dixon)
- Other.....

18. When MRI scanning for the assessment of spondyloarthritis do you perform gadolinium-enhanced imaging of the sacroiliac joints?

- Yes
- No

19. When MRI scanning for the assessment of spondyloarthritis do you perform gadolinium-enhanced imaging of the spine?

- Yes
- No

**Part 4 – MRI lesions and definitions**

20. Are you aware of formal recommendations regarding which imaging features should contribute to the identification of a positive MRI of the sacroiliac joints in spondyloarthritis?

- Yes, please detail below:
- No

Bone marrow odema Erosions Backfill ASAS criteria
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21. What MRI SIJ spondyloarthritis features do you use to make a diagnosis of Spondyloarthritis?

- Subchondral Bone marrow oedema / osteitis only

- Erosions
- Fat infiltration
- Sclerosis
- Joint space widening / effusion
- Enthesitis
- Capsulitis
- Fat deposition in the joint space ("backfill")
- Synovitis
- New bone formation (areas of ankylosis)
- All of the above
- Combination of the pathologies ticked above
- Other.....

22. Are you aware of formal recommendations regarding which imaging features should contribute to the identification of positive MRI of the spine in spondyloarthritis?

- Yes, please detail below:
- No

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23. What MRI spinal spondyloarthritis features do you use to make a diagnosis of Spondyloarthritis?

- Vertebral corner bone marrow oedema
- Endplate oedema
- Diffuse vertebral body oedema
- Posterior element bone marrow oedema
- Spinous process bone marrow oedema
- Vertebral corner fat infiltration
- Syndesmophyte formation

- All of the above
- Combination of the pathologies ticked above
- Other costo vertebral joint oedema