MSK MRI Referral Criteria for First Contact Practitioners in the Community

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V1.0	01/2020	Consultant Radiologist	To originate document
V2.0	04/2024	Consultant Radiologist	Document reviewed in line with new procedural template

Previous Titles for this Document:

Previous Title/Amalgamated Titles	Date Revised
None	Not applicable

Distribution Control

Printed copies of this document should be considered out of date. The most up to date version is available from the Trust Intranet.

Consultation

The following were consulted during the development of this document:

MSK Consultant Radiologists
MRI Consultant Radiologists
Chief of Imaging
Imaging Service Lead

Monitoring and Review of Procedural Document

The document owner is responsible for monitoring and reviewing the effectiveness of this Procedural Document. This review is continuous however as a minimum will be achieved at the point this procedural document requires a review e.g. changes in legislation, findings from incidents or document expiry.

Relationship of this document to other procedural documents

This document is a clinical guideline applicable to the Norfolk and Norwich University Hospital .

Contents Page

1. Introduction

1.1. Rationale

This guidance is written to aid community and primary care radiology referrals, specifically ensure the correct investigation is requested to aid and not unduly delay a patient's pathway. This guidance is supported by NICE, RCR and further endorsed by specialist physicians.

1.2. Objective

To ensure the correct investigation is requested to aid and not unduly delay a patient's pathway.

1.3. Scope

This document is for primary care and community referrals from GP, and community requestors only.
This document does not pertain to referrals from secondary care.

1.4. Glossary

Term	Definition
GP	General Practitioner
MRI	Magnetic Resonance Imaging
MRCP	Magnetic resonance Cholangiopancreatography
2WW	2-week-wait
US	Ultrasound
RCR	Royal College of Radiologists

2. Responsibilities

Radiology Consultants in collating evidence and clinical opinion when writing this guidance.

3. Guidance

For all spinal MR requests, please include the following in the clinical request details

1. **Duration of symptoms**
2. **Specific level and side of radicular pain or radiculopathy (i.e. neurological deficit)**
3. **Any adverse features or red flags (see below)**

3.1. Spine

Imaging rarely useful in absence of neurological signs/red flags/adverse features. NICE guidance states: Requests for imaging by non-specialist clinicians, with no suspicion of serious underlying pathology, can cause unnecessary distress and lead to further referrals for findings that are not clinically relevant.

Radiographs of the lumbar spine have limited value when requested by general or other practitioners for back or radicular pain (consider only if focal refractory back pain and there is concern of an osteoporotic vertebral fracture).

3.2. Cervical Spine

MRI indicated in patients radiculopathy or adverse features.

- If there is radicular pain state side and suspected level(s)
- If there is loss of power, state side and muscle group.

If there is no radiculopathy, then the patient must have adverse features, which include:

- focal neurological deficit defined to a spinal nerve root or spinal cord level
- focal refractory pain
- recent trauma
- previous, current, or suspected malignancy
- known or suspected infection
- known or suspected inflammation and/or symptoms of myelopathy

Consider simultaneous patient referral to the orthopaedic spine team.

MRI is not indicated in patients with acute/chronic neck pain without neurology or adverse features; please note generalised arm pain, altered sensation, pins and needles and numbness is not an indication. Please specify dermatomal distribution for pain and weakness.

3.3. Thoracic Spine

MRI indicated in patients with neurology or adverse features (see above)

Not indicated in patients with acute/chronic back pain without adverse features.

3.4. Inflammatory Spine (Thoracic, Lumbar Spine and Sacroiliac Joints)

NICE guidance: Young people and adults with low back pain with or without sciatica do not have imaging requested by a non-specialist service (such as a GP practice) unless serious underlying disease is suspected.

Specialist referral only.

3.5. Lumbar Spine

Patients with acute back pain (≤6 weeks) with potentially serious features as below should be referred directly to specialist care as an emergency. In acute cauda equina – please refer to orthopaedics as this is a surgical emergency.

Neurological (cauda equina syndrome/suspected spinal cord neurology)

- **Sphincter and gait disturbance**
- **Saddle anaesthesia**
- **Severe or progressive motor loss**
- **Widespread neurological deficit**

Patients with acute back pain (≤6 weeks) with any of the below should have an urgent MRI.

- focal neurological deficit defined to a spinal nerve root or spinal cord level
- Focal refractory pain – concern for osteoporotic fracture
- Previous, current, or suspected malignancy
- Immunosuppression
- Steroid use
- Clinical suspicion of discitis

Patient's with back pain over 6 weeks with neurology could consider an MRI:

- Confirm patient has neurological signs
- Consider patient referral to the orthopaedic spine team

Not indicated in patients with acute/chronic back pain with no radicular symptoms, no red flag/ adverse features, sciatica for less than 6 weeks or chronic back pain for over 6 weeks.

3.6. Hip

Confirm patient has:

- Plain radiograph within last 3 months
  - If plain radiograph findings do not correlate with the patient's clinical findings i.e. plain radiograph is normal - MRI is then indicated.

- MRI also indicated in patients with suspected avascular necrosis or insufficiency fracture.

3.7. Knee

MRI indicated in patients with

Acute knee pain following significant trauma such as sporting injury, fall or road traffic accident.

- Plain radiograph first
- MRI indicated, consider simultaneous specialist referral.

Non-traumatic knee pain under 50 years

- MRI indicated.

Chronic knee pain in patients aged 50 years or above i.e. over 4 weeks

- Plain Radiograph within the last 6 months

MRI not indicated in patients over 50 years unless suspected insufficiency fracture, a locked knee or suspected avascular necrosis – in which case, specialist referral is recommended alongside the MRI request.

3.8. Ankle and Foot

Confirm patient has:

- Plain radiograph within last 3 months. If plain radiograph findings do not correlate with the patient's clinical findings with clinical suspicion of an insufficiency fracture only- MRI is indicated.

- Patients with a history of trauma (i.e. inversion injury) a plain radiograph first, which if normal and if clinical symptoms persist at 6 months after the injury, an MRI ankle could be considered.

In atraumatic ankle pain in patients with a normal radiograph – MRI would be indicated to assess for a radiographically occult/insufficiency fracture or if the patient has features of tibialis posterior dysfunction (e.g. pain and swelling behind or below the medial malleolus) only.

3.9. Shoulder

Ultrasound is the investigation of choice in the assessment of rotator cuff and surrounding soft tissues.

Features of shoulder instability or pre-op planning MRI should be by specialist referral only. Specialist referral only.

3.10. Brachial Plexus

Specialist referral only.

3.11. Elbow

Specialist referral only.

3.12. Wrist

Specialist referral only.

3.13. Soft Tissue Mass

Confirm patient has had an ultrasound. Specialist referral.

3.14. Suspected Osteomyelitis

Specialist referral only.

3.15. Suspected Bone Tumour

Specialist referral only.

Radiograph should be performed first. If radiographic appearances are suggestive of primary bone tumour, referral to a specialist centre should not be delayed.

3.16. Paediatric Guidance

3.16.1. Paediatric Spine

In patient's 0-12 years with focal or persistent neck/back pain, consider MRI with concurrent referral to the paediatric orthopaedics

In patient's above 12 years with focal or persistent pain, consider MRI and refer accordingly if appropriate.

3.16.2. Paediatric Hip

Radiographs of the pelvis (AP and frog lateral) are recommended first

If radiographs are normal and symptoms persist, consider MRI with concurrent referral to paediatric orthopaedics.

3.16.3. Paediatric Knee

If a patient has knee pain please examine the hip – if there are any hip symptoms, radiographs of the hip and knee are recommended.

In patients with a history of trauma, consider MRI and refer accordingly if appropriate.

4. References

1. Royal College of Radiologists, iRefer guidelines

2. NICE guidance: Low back pain and sciatica in over 16s: assessment and management (NG59)
    a. https://www.nice.org.uk/guidance/ng59

3. Trauma Programme of Care: NHS England, National low back pain and radicular pain pathway 2017.
    a. https://www.ukssb.com/improving-spinal-care-project

4.1.

5. Equality Impact Assessment (EIA)

Type of function or policy	Existing

Division	Clinical Support Services	**Department**	Radiology
Name of person completing form	Geeta Kapoor	**Date**	04/04/2024

Equality Area	Potential Negative Impact	Impact Positive Impact	Which groups are affected	Full Impact Assessment Required YES/NO
Race	None	None	N/a	No
Pregnancy & Maternity	None	None	N/a	No
Disability	None	None	N/a	No
Religion and beliefs	None	None	N/a	No
Sex	None	None	N/a	No
Gender reassignment	None	None	N/a	No
Sexual Orientation	None	None	N/a	No
Age	None	None	N/a	No
Marriage & Civil Partnership	None	None	N/a	No
EDS2 – How does this change impact the Equality and Diversity Strategic plan (contact HR or see EDS2 plan)?				

- **A full assessment will only be required if: The impact is potentially discriminatory under the general equality duty**
- **Any groups of patients/staff/visitors or communities could be potentially disadvantaged by the policy or function/service**
- **The policy or function/service is assessed to be of high significance**

IF IN DOUBT A FULL IMPACT ASSESSMENT FORM IS REQUIRED

The review of the existing policy re-affirms the rights of all groups and clarifies the individual, managerial and organisational responsibilities in line with statutory and best practice guidance.