Request for MRI

Due to the strong magnetic field, there are absolute contraindications to an MRI examination. MRI can cause fatalities and serious injury if the patient has a pacemaker, cochlear implant, neurostimulator, intracranial clips, programmable hydrocephalus shunt or proven intra-ocular metallic foreign bodies.

If you are confident that none of these is present please sign below.

Referrer's Signature ______________________ **Patient's Signature** ______________________

Referrer's Name (please print) ______________________ **Patient's Name (please print)** ______________________

Date ______________ **Date** ______________

There are many relative contraindications (e.g. stents, valve replacements etc) which will be assessed by the radiographic staff following consultation with the patient. Any history of intra orbital foreign body should have confirmatory x-ray arranged.

Patient Details:

Hospital No: ______________________

Full name: ______________________

Address: ______________________

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Postcode: ______________________

Daytime Telephone: ______________________

Evening Telephone: ______________________

Date of Birth: ______________ Male ☐ Female ☐

Referring Consultant:

Name: ______________________

Address for films and report: ______________________

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Postcode: ______________________

Telephone: ______________________

Fax: ______________________

Category: NHS ☐ Private ☐ Other ☐

Is there a possibility of Pregnancy? Yes ☐ No ☐

Inpatients: Ward: ______________________

Hospital: ______________________

Outpatients: Transport required? Yes ☐ No ☐

Mode of Transport: Walking ☐ Trolley ☐ Chair ☐ Bed ☐

Examination Requested:

Urgent ☐ Routine ☐

Area(s) to be examined/scanned: ______________________

Clinical Details:

Glomerular Filtration rate (GFR) ______________ on ______________ (date)
(absolute or estimate) (required if I.V. contrast administration is likely)

Previous Surgery (please specify): ______________________

Previous Imaging (please specify): ______________________

SIGNATURE: ______________________ **DATE:** ______________

PRINT NAME ______________________ **BLEEP/EXTENSION NO:** ______________

Complementary Information

Lumbar Spine

Disc Prolapse: Size, type (protrusion, extrusion or sequestration), compression of the cal sac and nerve roots.

Disc Degeneration: Degree of dehydration, loss of height, changes in vertebral body end plates (ie Modic type 1 oedema, type 2 fatty marrow, type 3 sclerosis).

Spinal Stenosis: To demonstrate degree and levels, due to disc prolapse, facet hypertrophy and ligament thickening.

To Exclude Tumour: Most commonly bone metastases especially if known tumour in past. Also highly sensitive for meningiomas, neurofibromas and other tumours.

Spondylolisthesis: To demonstrate displacement and stenosis of the canal and neural foramina. Associated spondylolysis well demonstrated in 70 % cases but if suspected clinically specially angled slices improve sensitivity.

Post Operative Spine: Often using intravenous contrast (Gadolinium) to differentiate post surgical fibrosis from recurrent disk protrusion.

Infective Discitis: Highly sensitive. May be suspected in patients with severe pain, fever, constitutional symptoms or previous surgery. MRI will demonstrate compression fractures and often differentiates between osteoporotic fractures and metastases. It does not measure bone density and if osteoporosis is suspected clinically or from x-rays a DEXA scan is more appropriate.

Scoliosis: Is usually assessed clinically and with plain x-rays. Most patients with low back pain and no sciatica, settle with conservative management within six weeks and do not require radiological assessment. Consider earlier referral if there is sciatica, intractable pain or constitutional symptoms suggesting tumour or infection. Urgent referral (within 24 hours) if signs and symptoms of cauda equina compression, e.g. disturbance of bowel or bladder control and altered perianal sensation.

'Red Flags': In patients with low back pain. Early referral for radiological imaging is advised in these cases and MRI is usually the most appropriate investigation:

- Onset under age 20 or over 55
- Constant or progressive pain
- Nocturnal pain
- Fever or night sweats
- Imunosuppression
- Morning stiffness
- Sphincter disturbance
- Neurological disturbance
- History of malignancy

Cervical Spine

Similar indications to Lumbar spine with emphasis mainly on assessment of degenerative disc disease. Indicated in patients with symptoms and signs of nerve root irritation and myelopathy. Will demonstrate disc protrusions, spinal canal stenosis and foraminal stenosis.

Knee

Menisci: Tears, degeneration, displaced fragments. 92% sensitive medial meniscus and 88% for lateral meniscus tears compared to arthroscopy. Most orthopaedic surgeons will arrange MRI first if meniscal tears suspected. Also demonstrates associated meniscal cysts.

Cruciate Ligaments: 95 % sensitive for ACL tears.

Collateral Ligaments: Grade I, II and III tears readily demonstrated. Often associated with meniscal and cruciate injury and bone contusion.

Bone Injury: Highly sensitive for fractures (appropriate if x-rays normal and fracture still suspected). Frequently demonstrates bone contusions associated with other internal injury.

Osteochondral Lesions: Highly accurate for identifying and staging OCD, spontaneous or traumatic.

Osteoarthritis: Usually assessed clinically and with x-rays but MRI does demonstrate thinning of articular cartilage, osteophytes and changes in the subarticular bone marrow as well as associated myxoid degeneration and tears of the menisci.

Tumours: Highly sensitive for intraosseous or extraosseous sarcomas, but not usually very specific for tissue type. Benign tumours more common e.g. simple bone cysts, giant cell tumour and x-rays will usually be more specific.
MRI highly informative in sports injury because of accuracy in internal derangement.

Shoulder

Rotator Cuff: Degeneration of the cuff and tears of the cuff tendons, specifically supraspinatus. Fluid in the subacromial bursa in cuff tears and in bursitis.

Recurrent Dislocation: The standard examination may demonstrate labral tears, but if suspected an MR arthrogram with injection of 1:100 diluted gadolinium is indicated.

Calcific Tendonitis: May be evident as low signal material in the cuff, but early cases not visible and better demonstrated on x-ray. Respond well to depomedrone injection under ultrasound guidance.

Impingement: MRI helpful showing subacromial spurs and AC joint osteophytes, but may be normal since impingement is a dynamic disorder and is essentially a clinical diagnosis. MRI does however accurately demonstrate the effects of impingement, i.e. degeneration of the cuff, tendonitis and full or partial thickness cuff tears.

Injury: MRI sensitive for fractures, tears of the cuff, muscle tears, rupture or subluxation of biceps tendon.

Wrist

Injury: After x-rays MRI may be indicated? e.g. fractures especially scaphoid, torn triangular fibrocartilage complex (TFCC), torn intercarpal ligaments.

Pain: TFCC tears, avascular necrosis and osteochondritis, tenosynovitis, tendon ruptures. Contrast enhanced MRI more sensitive than x-rays for erosive arthritis (although x-ray usually adequate to manage most patients.
Soft tissue masses. e.g. ganglion, tumour.

Ankle

Injury: Very sensitive in detecting osteochondral fractures and bone contusions, especially of the talar dome which are often not visible on x-rays.

Ligaments: Usually diagnosed clinically and treated after fracture excluded on x-ray. MRI may be helpful in cases of persistent pain or instability and well demonstrates tears of the medial and lateral ligaments.

Tendons: MRI appropriate for diagnosis of tenosynovitis, tendon tears and tendon rupture.

Miscellaneous: MRI excellent for swellings and tumours around the ankle e.g. ganglion, giant cell tumours of tendon sheath. Stress fractures well shown.

Hip / Groin

Particularly useful in sports injury to demonstrate stress fracture, athletic pubic osteiitis, adductor tears and avulsions. Sports hernia may be shown but ultrasound is more sensitive.
MRI is the best investigation to show avascular necrosis and Perthes disease.