



Introduction

Haringey and Islington CCG's have agreed to limit GP access to request Musculoskeletal MRI's. From **1st April 2020** GP practices are not able to request for:

- Lumbar spine unless red flags present and sinister pathology suspected (Neoplasia, Metastatic bone disease, Multiple myeloma, Cord tumours, Infections, suspected insufficiency fracture, CES – Cauda Equina Syndrome)
- Knees over the age of 50

The document will offer guidance on whether MRI is indicated or not.

Contents

Contents/ Body Part	Slide/ Page #
Managing MSK in Primary Care	2
When is imaging required?	3
Lumbar Spine	4
Thoracic Spine	5
Cervical Spine	6
Hip	7
Knee	8
Ankle and Foot	9
Shoulder	10
Elbow and Wrist	11
Brain	12



Many MSK complaints can be managed in primary care without need for an MRI or onward MSK referral

Strategies to manage MSK conditions:

- Adequate analgesia
- Activity modification
- Relative rest
- Reassurance

We have also created a patient information leaflet that you might find useful to read – including age related changes on MRI are normal and don't necessarily relate to symptoms – [add link](#)

Additional information can be found on the MSK website

<http://www.whittington.nhs.uk/msk>



When is imaging required?

NHS

Whittington Health

NHS Trust

- Imaging results do not always correlate with patient presentation and clinical diagnosis, therefore does not always guide appropriate patient management
- Imaging is indicated for the following:
 - **Red Flags** - imaging is required if red flags are present and sinister pathology suspected such as neoplasia, multiple myeloma, metastases, infection (TB, Discitis, osteomyelitis), avascular necrosis, fracture and cauda equina
 - **Changing patient management** - imaging is useful if it is likely to change the patient management, for example if patient presents with a nerve root impingement not improving with conservative management then imaging will guide further intervention
- This document gives further information for each body part to aid decision making



Lumbar Spine

NHS

Whittington Health
NHS Trust

Area of Symptoms/ possible diagnosis	MRI indicated or not
Acute Cauda Equina Symptoms –sudden impairment of bladder, bowel or sexual function and saddle anaesthesia, bilateral radicular pain	MRI indicated Urgent referral via A+E or Neurosurgery route
Sciatica Symptoms – referred pain from the lumbar spine Less than 6 weeks with no adverse features (no red flag symptoms or signs)	MRI not usually indicated RCGP guidelines indicate that conservative management is appropriate in sciatica with out adverse features, MRI reserved for sciatica which does not resolve within the 6 week period.
Sciatica Failed conservative management No improvement following the 6 to 8 weeks of physio and medication Worsening symptoms	MRI may be indicated please refer to MSK CATS for assessment Clinical radiological correlation is important, as a significant proportion of disc herniation's demonstrated on MRI are asymptomatic
Sciatica with progressive neurological weakness	MRI is indicated
Low back pain with adverse symptoms or signs This may be indicative of red flags – infection, cauda equina, insufficiency fractures Symptoms: Sphincter or gait disturbance (via A&E) Saddle anaesthesia (via A&E) Severe progressive motor loss Widespread neurological deficit Previous carcinoma Systemically unwell weight loss HIV, IV drug abuse, Steroids Structural deformity	MRI spine ordering indicated by GP ONLY IF PRESENT WITH THESE ADVERSE SYMPTOMS
Axial low back pain—without progression and no red flag features	Not to be ordered by GP In the absence of focal or neurological signs, asymptomatic chronic degenerative changes are a common finding. A trial of non interventional treatment (self management, exercise, physiotherapy treatment may be appropriate)



Thoracic Spine



Whittington Health
NHS Trust

Area of Symptoms	MRI indicated or not
Thoracic pain with radicular radiation In adults thoracic radicular pain may be an early sign of impending cord compression. Symptoms – long tract signs or persistent symptoms	MRI Thoracic Spine Indicated - Acute thoracic pain in elderly patients may require more urgent referral for imaging to assess for vertebral collapse. Plain radiographs are often adequate with MRI reserved for complex cases.
Axial chronic back pain Symptoms - without adverse features or radiation	MRI Not to be ordered by GP MRI very rarely identifies treatable lesions in the absence of focal features. Imaging is rarely useful in the absence of neurological signs or pointers of metastases or infection
Sudden onset of axial thoracic pain and /or upper lumbar pain In post menopausal women, elderly, known osteoporotic	MRI is not first recommendation Send for X-Ray to screen for fracture if confirmed refer Fracture clinic if not refer MSK CATS



Cervical Spine



Whittington Health
NHS Trust

Area of Symptoms	MRI indicated or not
<p>Neck pain with radicular pain Not responded to conservative management Symptoms: ongoing upper limb pain, paraesthesia and numbness.</p> <p>If progressive weakness</p>	<p>MRI may be indicated please refer to MSK CATS for assessment</p> <p>MRI is most useful where there are single root symptoms and signs, and least useful where symptoms and signs are referable to multiple dermatomes.</p> <p>MRI is indicated</p>
<p>Neck pain with long tract signs Bilateral paraesthesia hand and/or feet, loss of dexterity, loss of balance, heaviness and numbness in limbs Briskness of reflexes</p>	<p>MRI is indicated (urgent)</p>
<p>Acute neck pain</p>	<p>MRI not Usually Indicated</p> <p>Most neck pain resolves on conservative treatment. Degenerative changes are invariably seen on MRI beginning early middle age and are often unrelated to symptoms - imaging doesn't change management of this</p> <p>Trial conservative management and refer to physio if no response</p>
<p>Chronic neck pain</p>	<p>MRI Not Usually Indicated</p> <p>Degenerative changes are invariably seen on MRI beginning early middle age and are often unrelated to symptoms – imaging doesn't change management of this</p> <p>Trial conservative management and refer to physio if no response</p>



Hip

NHS

Whittington Health

NHS Trust

Area of Symptoms	MRI indicated or not
Hip pain gradual onset C-sign pain (buttock, thigh and groin) Pain on weight bearing, loss of IR	MRI Pelvis Not Usually Indicated X-ray pelvis if indicated (standing) MRI should be used selectively and normally only requested by a specialist MSK clinician. Trial conservative management then refer physio/MSK if not responding
Hip pain after a fall	X-ray pelvis / hip (Note fracture more visible after 1 to 2 weeks) MRI indicated in first 2 weeks after a fall if patient unable to weight bear and pain severe
Hip pain with suspected avascular necrosis Severe hip pain 30 to 50 years of age In the presence of history of steroid use, alcohol dependence, sickle cell	MRI Hip Indicated if X-ray clear Note 1st stage of AVN is sub radiological
Lateral hip pain Pain on pressure, lying on the affected side, weight-bearing	MRI not indicated Trial conservative management then Refer physio or MSK if not responding



Knee



Whittington Health
NHS Trust

Area of Symptoms	MRI indicated or not
Knee pain over age 50 with no red flags	Do not order MRI Weight bearing X-ray if indicated and likely to change patient management
Acute knee pain Following trauma or accident, in previously non-symptomatic joint.	Do not order MRI – X-ray if ?fracture and via fracture clinic If no fracture: Refer to MSK CATS as urgent for assessment regarding need for MRI



Ankle and Foot



Whittington Health
NHS Trust

Area of Symptoms

MRI indicated or not

Ankle and foot symptoms

Weight bearing X-ray if investigation indicated

MRI should be used selectively and normally only requested by a specialist MSK clinician.



Shoulder



Whittington Health
NHS Trust

Area of Symptoms	MRI indicated or not
Traumatic shoulder pain If suspecting structural damage	X-ray if suspected fracture MRI indicated if post trauma weakness (under age 65) to rule out acute rotator cuff tear requiring surgical intervention
Non localised shoulder pain	MRI Not Usually Indicated MRI should be used selectively and normally only requested by a specialist MSK clinician.
Shoulder impingement syndrome, or shoulder instability If have failed conservative management	X-ray and Ultrasound is the investigation of choice in the first instance if failed conservative management. MRI should be used selectively and normally only requested by a specialist MSK clinician.
Shoulder pain with suspected avascular necrosis Severe shoulder pain 30 to 50 years of age In the presence of history of steroid use, alcohol dependence, sickle cell	MRI Shoulder Indicated if X-ray clear Note 1st stage of AVN is sub radiological



Elbow and Wrist



Whittington Health
NHS Trust

Area of Symptoms	MRI indicated or not
Elbow symptoms	X-ray if suspected fracture or marked OA US for suspected tendon pathology Refer via MSK Pathway MRI usually reserved for when surgical intervention is being considered.
Wrist symptoms	X-ray if suspected fracture or marked OA US if suspected tendon issue/ ganglion/ synovitis Refer via MSK Pathway MRI usually reserved for when surgical intervention considered.



Brain



Whittington Health
NHS Trust

Area of Symptoms	MRI indicated or not
Headache	MRI Brain Indicated Although MRI should be used selectively and normally only requested by a specialist clinician Add neuro guidelines – DOR to share