

Referral Support Service

Radiology

RA08

Radiology Investigations for Thoracic Spine Pain without trauma: degenerative disease (based on the Royal College of Radiologist (RCR) [iRefer Guidelines](#)).

Investigation	NHS Cost (2015-16)	Radiation Dose	Comment	RCR Recommendation (Grade)	GP Access
MRI	£150-£331	None	MRI may be indicated if local pain persists or is difficult to manage, or if there are long tract signs	Specialised investigation (C)	Refer to MSK services for assessment, diagnosis and management once red flags have been excluded.
X-Ray	£25.86	Equivalent to 30 CXR	<p>Degenerative changes are invariably present from middle age onwards. Imaging is rarely useful in the absence of neurological signs or pointers to metastases or infection.</p> <p>In the case of suspected osteoporotic collapse refer for an Intervertebral Assessment (IVA) and a DEXA</p> <p>Consider more urgent referral in elderly patients with sudden pain, to show osteoporotic collapse or other forms of bone destruction. Consider nuclear medicine for possible metastatic lesions</p>	Indicated only in specific circumstances (C)	<p>Given RCR say imaging is rarely useful in the absence of neurological signs or pointers to metastases or infection GPs should discuss the need for a plain film with the duty radiologist first to see if other imaging is recommended first line.</p> <p>Please ring 01904 726672</p>
DEXA / Intervertebral Assessment (IVA)	£75	DEXA is equivalent to 0.1-0.3 CXR. DEXA plus IVA is equivalent to 1 CXR	If a patient has suspected osteoporotic collapse please refer for a DEXA and an IVA at the same time. These are done at the Nuffield Hospital in York		Please think about treating patient under the Bone Protection Service pathway and code the fracture as a fragility fracture on your clinical system.

Anyone with BMI >25kg/m² would receive even higher doses. Anyone with a BMI <19kg/m² would receive a smaller dose.

Patient information leaflets/ PDAs

[MRI](#)

[X-Ray](#)

[Radionuclide Bone Scan](#)

[DEXA](#)

[Nuffield DEXA patient Information leaflet](#)

References

- Royal College of Radiologists – iRefer 7.0.2.

Recommendations and Grade information as below, from the [iRefer webpage](#):

The recommendations used are:

1. *Indicated*. Investigations most likely to contribute to the clinical diagnosis and management.
2. *Specialised investigation*. Specialised investigations are frequently complex, time-consuming and/or resource-intensive, and will usually only be undertaken after discussion with the radiologist or according to locally agreed protocols.
3. *Indicated only in specific circumstances*. Non-routine investigations, usually only undertaken if a clinician provides cogent reasons or if the radiologist believes the examination represents an appropriate means of furthering the diagnosis and management of the patient. With certain clinical problems which may resolve with time, it may be correct to defer investigation.
4. *Not indicated*. Investigations for which the proposed rationale is no longer appropriate.

[A] Any of the following

- High-quality diagnostic studies in which a new test is independently and blindly compared with a reference standard in an appropriate spectrum of patients
- Systematic review and meta-analyses of such high-quality studies

[B] Any of the following

- Studies with a blind and independent comparison of the new test with the reference standard in a set of non-consecutive patients or confined to a narrow spectrum of patients
- Studies in which the reference standard was not applied to all patients
- Systematic reviews of such studies

[C] Any of the following

- Studies in which the reference standard was not objective
- Studies in which the comparison of the new test with the reference standard was not blind or independent
- Studies in which positive and negative test results were verified using different reference standards
- Expert opinion.