

M. A. Foy

FRCS, Consultant Orthopaedic and Spinal Surgeon
foyfrcs5@gmail.com

MRI scans in personal injury claims: obfuscation or clarification?

In personal injury claims that are associated with persisting symptoms and functional disability, the question frequently arises whether the claimant should have an MRI scan to better define the nature of the 'injury'. The claimant may already have seen a GP or physiotherapy expert through the MedCo portal, or directly via a solicitor or insurer. If problems persist, an MRI is often recommended. This is most usually of the back or neck, but shoulders, hips, knees, and wrists may also be subject to such investigation. I often find that in personal injury practice, particularly as far as the spine is concerned, MRI scans often do not add a great deal to the overall assessment of the claimant, their condition, the causation of the underlying problem, or indeed the prognosis for the future. I often find myself asking the question, "Would I request an MRI if I was seeing the claimant as a patient?" MRI scans will often show abnormalities that are irrelevant as far as the accident in question is concerned and are probably not symptomatic. This may result in increasing anxiety and concern in someone going through a claims process. The legal team representing the claimant and the claimant themselves may have searching questions

why abnormalities discovered on MRI scan are not related to the injury in question when they have never experienced symptoms from or injury to that area previously. There are factors at play in the legal process that may, in any event, already be hampering their recovery in susceptible individuals, and this may be added to by the discovery of abnormalities on MRI.

Solicitors and insurers frequently see MRI as the 'gold standard' investigation, which it is, up to a point. The former group, in particular, are often enthusiastic advocates for scans for their clients. Solicitors tend to adopt the view that if their client has a soft-tissue, whiplash, or similar injury with persisting symptoms, then their compensation will be paid at a pre-determined level, taking into account all the items that one sees in a particulars of claim document, i.e. general damages, special damages, and various other costs. They believe that there is no downside with MRI, as if it demonstrates no injury the compensation payment will be unchanged, whereas if an MRI shows a disc, rotator cuff, or meniscus abnormality that their expert can (rightly or wrongly) relate to the index incident, this has the potential to increase the value of the claim. If liability is not in question and the MRI has been recommended by the expert(s), then

the costs will be recoverable from the insurers in any event. I have also heard solicitors argue that a normal MRI will give their client peace of mind. In clinical practice, we do from time to time use this tactic for the 'worried well' in the form of an MRI 'reassurogram'. I have also heard solicitors argue that an MRI provides a useful baseline in the unfortunate situation that their client should sustain a second injury to the same area.

From our perspective as orthopaedic surgeons, when MRI is used in personal injury claims, I believe we have a clear responsibility to explain to the Court, the claimant, and the legal representatives the significance of any abnormalities found: in the context of the personal injury claim; and in the context of the 'bigger picture', i.e. the claimant's general condition, particularly if abnormalities are found/reported on MRI that have no relevance to the claim.

It is quite surprising the number of times that one sees claimants in these circumstances who have undergone MRI scans through the medico-legal claims process who are unclear on the results and their significance, and whose general practitioners have no idea of the outcome of the investigation or why it has been commissioned.

Therefore, as experts and orthopaedic surgeons, we have to ensure that claimants, solicitors, and insurers are aware of the following:

- 1) MRIs define anatomical structures and in certain circumstances may be able to provide information about the source of the claimant's symptoms. They cannot reliably and predictably distinguish painful from painless abnormalities. An abnormality such as a moderately large L4/5 disc prolapse may cause severe pain with myotomal weakness in one person and may be entirely asymptomatic in another.
- 2) MRI scans also demonstrate a wide range of asymptomatic abnormality. There is an excellent review of the subject, as far as the spine is concerned, from the Mayo Clinic by Brinjikji et al¹ noting in particular that 37% of asymptomatic 20-year-olds showed evidence of disc degeneration and 19% had annular fissures. Spinal MRI scans in the medico-legal setting need to be interpreted cautiously in relation to the claimant's symptoms, the past medical history, the nature of the injuring force, the temporal relationship of the onset of symptoms to the injury, and a clear knowledge and understanding of the pathophysiology and epidemiology of the degenerating spine. Similar conclusions have been drawn regarding the shoulder and knee by Gill et al² and Liu et al,³ with the latter study reviewing a group of workers' compensation claimants older than 40 and noting that in the majority, the MRI changes were similar on the injured and non-injured sides.

- 3) Following a musculoskeletal injury, most serious pathology may be identified or ruled out by the classical and conventional means of taking a good history, carrying out a thorough and proper clinical examination, and use of basic imaging modalities. MRI is not a substitute for this process.
- 4) Over-investigation with advanced imaging like MRI without specific clinical signs and symptoms may cloud rather than clarify the situation both in terms of causation and prognosis. It may also cause confusion, stress, and anxiety for the claimant. I have seen many situations where non-specialist 'experts' have ordered MRI scans as part of the reporting process and have little or no idea how to interpret the significance of the abnormalities found in the context of the claim or in relation to the claimants' overall condition. They then run for cover, often recommending further expert opinion, not fully understanding the irrelevance of the findings on the MRI scan they have commissioned.
- 5) The presence of a normal MRI does not mean that structure or tissue is not painful. Musculoskeletal and neurological structures may cause pain and functional impairment in the absence of MRI abnormalities. In this situation, the orthopaedic expert may have to point out to the Court that there is no clear organic or structural cause for the pain and it may need to be rationalized in terms of central sensitization or intrinsic nerve problems by experts in other fields such as pain management, neurology, or psychiatry.

Therefore, in practical terms we need to be clear on the place of the MRI scan in the medico-legal reporting process. We need to remember that our primary role is to assist the Court. In very many personal injury claims, liability is not an issue. The main concerns are what damage/injury the defendant's negligence has caused, how this has affected the claimant's current condition, and how the situation is likely to evolve in the future. If the diagnosis is unclear after careful clinical evaluation and it is likely to be clarified by an MRI scan, then it is reasonable to recommend one. However, in the classical situations of a back injury in the work place or a neck injury after a rear end shunt with persisting symptoms, it is very rare, in my experience, for an MRI to add anything to the claim. It is more likely to confuse and obfuscate because it will almost invariably be 'abnormal'. The 'abnormalities' and their irrelevance to the claim will then have to be outlined in detail to the legal representatives and the claimant. On occasions, this may be the subject of argument and discussion between the medical experts.

I believe that it is fair to conclude that the use of MRI in medico-legal practice should not be guided by the occurrence of an injury, but rather by specific clinical signs and symptoms that may have been caused by that injury.

REFERENCES

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