

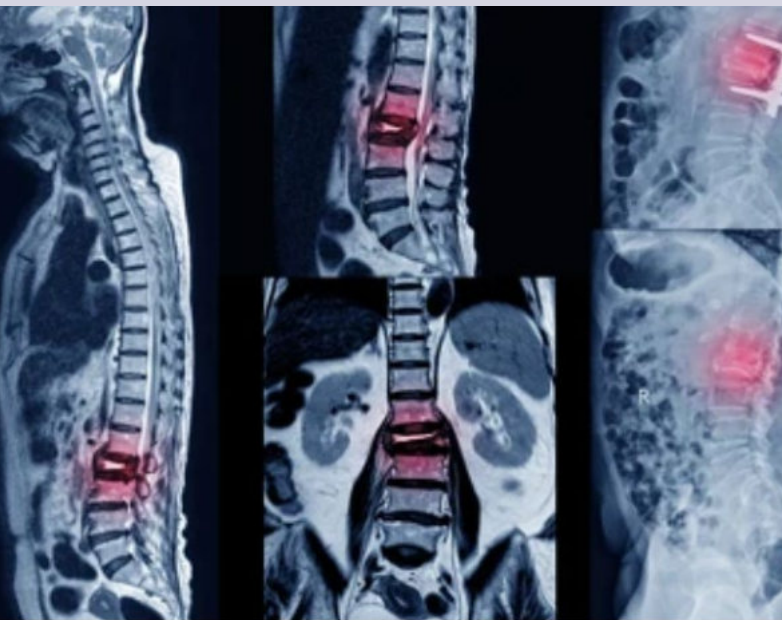
# The Spine & MRI Scans



**MRI (Magnetic Resonance Imaging) is an investigation that has been used since the beginning of the 1980s.**

**The MRI scan uses magnetic and radio waves, meaning that there is no exposure to x-rays or any other damaging forms of radiation.**

There are no known dangers or side effects connected to an MRI scan. The test is not painful; you cannot feel it. Since radiation is not used, the procedure can be repeated without problems. The machine tends to be loud and enclosing, which a lot of people find uncomfortable. As the MRI uses magnetic and radio waves, you need to remove any metal before doing in.



## THE DETAIL

MRI scans give a very clear picture of the structure of the spine, and an MRI scan can be used at various other points throughout the body. However, they do not always tell us why the spine is painful. In 85% of patients we are unable to say with certainty why back pain occurs. In such cases, it is often more useful to concentrate on getting back to normal activities through an exercise programme and appropriate use of medication. MRI scans themselves are not conclusive and their accuracy and reliability have come under question.

### The Cause of Most Back Pain is Not Determined by an MRI

Patients can sometimes be quite worried by 'dramatic' descriptions of what scans show and the medical language used. A loss of water content in a disc makes it look darker than others. It can be described as 'degenerative discs', a term that might cause concern, but if it was described as 'normal age-related changes' that would be less frightening. Normal discs will 'bulge', and this is not the same as a disc 'prolapse'. A disc prolapse can sometimes be entirely pain free, but will sometimes cause symptoms.

If the symptoms are not too bad or improving naturally then a scan may not alter the treatment, either now or in the future.

## THE GOOD NEWS

Scans are very helpful and sensitive for the detection of serious spinal disorders, such as cancer and infection (in a very small number of patients), or nerve compression when patients present with conditions such as sciatica. There are clear and useful guidelines about serious symptoms or 'red flags' that help determine if a scan is required. A previous history of cancer, weight loss, or severe night pain are some of the 'red flags'.

When the clinician examines you to find out about the character of your pain, they will be able to decide if you are one of the few patients who will benefit from a scan. It is important you trust them and their thinking process.



### The Bits You Might Not Have Heard About

Patients without back pain have been shown to have very similar scans to people who have back pain. The reason for this is that as we age our backs change and this shows up on MRI but does not necessarily mean it is the cause of our pain.

**MRI can tell us what your back looks like but can't usually tell us which bit is causing the pain.**

It is for these reasons that MRI scans for simple back pain are not usually done. The examination carried out by your clinician will decide if you are one of the few patients who will benefit from a scan.

MRI scans are very sensitive tests and often show things that are not relevant to the current problem. Our philosophy is to 'treat the person and not the scan'.

**Most back pain is not treated surgically.**

### What about an x-ray?

As with MRI, an x-ray does not determine whether a particular structure is the source of a patient's pain. It can be useful if a bony injury is suspected but should not be used routinely as the radiation dose of a spinal x-ray is 120 times that of a chest x-ray.



E: [physiosolutions@people-am.com](mailto:physiosolutions@people-am.com) T: 01925 989741  
Holly House, 73 Sankey Street, Warrington, WA1 1SL  
[www.physio-solutions.co.uk](http://www.physio-solutions.co.uk)

