

When are scans useful?

Scans are useful when low back pain or sciatica is thought to have a 'serious' cause. People often worry about this. However, serious causes of back pain are rare and result in signs or symptoms other than pain, that tell your clinician a scan is needed.

Scans can also be helpful for people who have **severe** sciatica. This is a type of back-related leg pain. If symptoms are not getting better after 6-8 weeks, a scan can help a spinal specialist to understand if an injection or surgery might help.

Scans are not normally used in the first 6-8 weeks of severe sciatica as symptoms often improve in this time. Also, research suggests that people who have a scan may get better more slowly compared to people who don't.



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Scans for people with low back pain or sciatica



Solent Musculoskeletal Service



For most people, scans are not needed!

Scans for low back pain

Around 80% of people will have low back pain or sciatica (a type of back-related leg pain) at some point in their life. Tests such as x-rays, MRI scans and CT scans are used when the results are likely to change how back pain is treated.

For most people, scans are not needed.



Why do most people with back pain or sciatica not need a scan?

Scans are not usually helpful for people with back pain or sciatica. They rarely show which structure in the back is causing the pain or how best to treat it.

We now know that the scans of people **WITHOUT** back pain or sciatica often show findings such as wear and repair or disc protrusions. These changes are often age related and often don't cause any pain. They are similar to the grey hairs we develop with age.

The table below shows the percentage of people **WITHOUT** back pain who have these findings at certain ages.

Scan findings in people WITHOUT back pain :

Scan Finding	Age		
	30 years	60 years	80 years
Disc degeneration	52%	88%	96%
Disc protrusion	31%	38%	43%
Disc tear	20%	25%	29%
Facet joint degeneration	9%	50%	83%

Adapted from Brinjikji, W. et al (2015)

We also know that scans often do not show anything that **matches or explains** the low back pain. Treatment for low back pain and sciatica helps most when guided by the person's symptoms, their beliefs about back pain and their lifestyle.



Side effects of scans

Sometimes having scans can have side effects.

People sometimes worry about scan findings, even though these findings are unlikely to be the cause of pain. This can make them frightened to use their back to do normal, everyday things. They then get better more slowly.



Clinicians can also become focused on scan findings, even though they are unlikely to be the cause of pain. This can mean that people have treatment such as surgery, injections or strong drugs that are not likely to help.

Finally, when people have scans that do not show anything to explain their back pain, they can find this very frustrating, hard to understand and difficult to explain to others.

