

Concord Sport & Spine Newsletter



Do I Need an X-Ray or Scan for my Low Back Pain?

Often when a person has an episode of low back pain (LBP), they are sent for diagnostic scans. However these are rarely useful. In the absence of serious pathology (which can generally be ruled out on clinical examination), imaging is not necessary ^{5,9,13}. It does not improve outcomes or enhance diagnosis (Alan et al 2012; Cochrane Review; AAFP; AHCPR; RCGP 2009; van Ravesteijn et al 2011). Even when there is a suspected 'pinched nerve', imaging is not helpful unless more invasive treatments are being considered (injection or surgery). Of greater concern is the evidence that radiological imaging for LBP actually results in:

- Poorer health outcomes
- Poorer perceived prognosis
- The patient being more likely to progress to surgery ^{1,13,15}.

So what do I tell my patients when they are eager to obtain an X-ray or scan of their troublesome low back? What is my reply when they ask, "what if my back is out of place?" Or what do I say to a patient who presents with their MRI and its page-and-a-half report of 'abnormal' findings and scary words like *dessication*, *degeneration*, and *spondylosis*?

I start by telling them about the high incidence of such findings in people with no history of LBP ^{2,9,12}. The following statistics provide very impressive information:

- The prevalence of MRI findings

(middle-aged) people with no LBP was:

- Disc degeneration / dessication 91%
- Disc height loss 56%
- Disc bulges 64%
- Disc protrusions 32%
- Annular tears 38%

(McCullough et al, 2012). Even in 20 year olds, the prevalence of disc degeneration was found to be around 37% ³.

What about the common description that the spine or pelvis is 'out of place'? There is simply no clinical or radiological evidence that spinal or pelvic joints *sublux* or go out of place ⁴. Occasionally, when there are structural changes present, this is not due to joints being 'out'. And such changes are usually not related to LBP symptoms ⁴.

Of particular concern to patients (and many practitioners) is the belief that back pain has a poor prognosis (i.e., that it won't fully recover). The good news is that the majority of people recover quickly from their LBP episode ^{6,10}. It is also thought that 'bulging discs' don't recover. However there is good evidence for healing over time ^{7,11}. A surprising finding from one study was that subjects who had MRI evidence of disc protrusions actually had a lower risk of future LBP on 3 year follow-up ⁷. The same authors found that imaging findings can improve over time, and may revert to 'normal'. Subjects with bulging or even 'extruded' (severely bulging) discs showed good signs of recovery over time ^{7,11}.

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