

## Are X-Rays Appropriate for Low Back Pain?

October 2017 – Tricia Hayton, Registered Physiotherapist

Over the last five years, the usefulness of MRIs and X-rays for low back pain has been questioned. It is felt by many, including the Canadian College of Family Physicians and the Ontario Ministry of Health and Long-Term Care, that they are only useful in very specific cases and are not helpful most of the time. In fact, some believe that these tests may be harmful.

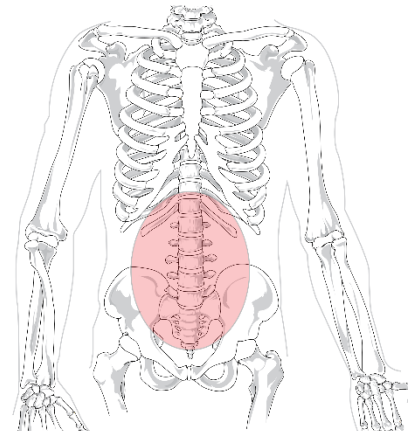
Such a strong statement would surprise many people who are suffering from low back pain. Logic tells us that diagnostic testing would lead us to the cause of the problem, helping to determine the best course for treatment. But this is not always true. First, let me start with the exceptions that prove the rule. If your symptoms lead your doctor to suspect a serious underlying cause, then an X-ray and/or MRI should be ordered. Your family doctor, sports medicine specialist, or other orthopedic expert is trained to know the red and yellow flags to look for and when a referral for imaging is appropriate. Otherwise, a referral to conservative treatment including therapy with or without medication is the most useful treatment. If you fail to respond to this treatment, then it may be time to continue with diagnostic imaging.

### How Can Testing be Harmful?

The first and most obvious reason is that with X-ray and CT scans, the body is exposed to radiation. It is in your best interest to limit the amount of radiation that the body is exposed to throughout your lifetime. MRIs do not have this risk.

The second is that it can cause a delay in treatment. Unfortunately, there is a waiting period for many tests in Canada. If we wait for results, which will likely not change the treatment plan, you are living in pain and missing your daily activities longer. Also, the earlier that active therapy starts, the more successful the programs.

The third, and perhaps more significant risk, is more complex. First, let's start with the fact that your test *will* show something. Degenerative Disc Disease (DDD) is a great example. After your mid 20s most X-rays will show evidence of DDD, a wearing and thinning of the discs between the vertebrae. However, DDD is seen on X-rays of all people after their mid 20s – not just those with symptoms. The same is true of disc bulges found on an MRI. They are found in people with and without symptoms, and the location and severity of the bulges do not indicate prognosis. After testing, there is a risk that medical professionals focus on these findings, and miss the actual cause of the problem. There are people who live with chronic low back pain because they have been told, "It's DDD, there is nothing you can do about it." These studies tell us that the DDD may not be the problem, and in fact, that person may be living in pain for no reason. Furthermore, living with chronic pain and the stress that brings, can increase symptoms.



## What Can be Done?

Being assessed by a physiotherapist, chiropractor, or MD that specializes in musculoskeletal injuries, such as a sports medicine specialist, will give you a more accurate diagnosis than an MRI or X-ray. These professionals will look at how you are moving, your core strength, and your muscle imbalances to determine where the problem lies and the best approach to fix it. If you are still in significant discomfort after 4 to 6 weeks of dedication to your therapy program, or if your symptoms start to increase, then it may be time for testing. Make sure that you are honest with your medical practitioner about what you are feeling so they can identify when something is not responding as planned. They will help guide you as to when it is an appropriate time to visit your family doctor again.