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LOW BACK PAIN – ARE WE PART OF THE PROBLEM OR THE SOLUTION?

August 23, 2016 (/blog/2016/8/23/low-back-pain-are-we-part-of-the-problem-or-the-solution)

I recently assessed and treated a young professional woman with a three year history of low back pain. She was cheery, intelligent and health conscious and indicated that she had seen many clinicians with limited success and protracted treatment. This woman had stopped any kind of physical exercise as she was scared it would flare her symptoms. She pointed to her right low back region and indicated that her sacroiliac joint was the source of her pain and that she had a weak core. She went on to describe how her pelvis could go out and result in a week of unbearable pain and disability. When we started the clinical examination, I asked her to bend forward and she did so with minimal movement in her low back and she moved in a very slow and cautious manner. When I asked her if it hurt to bend forward, she said no, but noted that she was

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fearful that she could “Move the wrong way and further damage herself” and that “Everything is so tight in her back”. We’ve all seen this type of patient before. Once again it made me reflect on how she got to a point where a young, otherwise healthy individual moves with caution and lives in fear of their low back pain at all times.



Did her previous treatments help or hinder this person? What would have happened if there was no treatment available for her initial episode of pain?

Iatrogenic illness is defined as a disease that is caused by medical treatment. If we think about low back pain, there have theoretically been great advancements in the diagnosis and treatment of the condition over the last few decades, but has this improved patient outcomes? Could it be that we are actually causing iatrogenic low back pain and disability with some of our treatment approaches? A study that contacted approximately 5,000 households in 1992 and then again in 2006 found an increased prevalence of chronic, disabling low back from 3.9% in 1992 to 10.2% in 2006. Richard Deyo, a well known low back pain researcher, concluded that medical costs had increased significantly for the treatment of spinal pain with no discernable improvement in outcomes after analyzing reports from over 20,000 individuals over the course of a decade. And

over 20,000 individuals over the course of a decade. And this is no small amount; the bone and joint decade task force reported that we spend between 6 and 12 billion dollars a year in Canada on back pain alone.

In all likelihood, there are numerous factors contributing to increasing low back pain including things such as a progressively sedentary life style and obesity. Could it be that what we are doing, as a medical community, is also increasing disability and suffering with a condition that is generally benign? Could it be that simple exposure to well intentioned clinicians is also a factor in the increasing frequency, cost and disability associated with low back pain? What is it about interactions with health care providers that could potentially contribute to a patient's pain experience?

Now I'm a guy who loves numbers but qualitative studies can also provide us with an interesting perspective on people's thoughts and beliefs. A study conducted in the early nineties identified the



Australian aboriginals as a group that experienced little disability secondary to chronic low back pain. The researchers suggested that the cultural beliefs held by these people – low back pain is not a health issue and simply a part of everyday life – made these people resilient to disability and health care seeking. In essence, these individuals didn't conceptualize low back pain as a disease and as such, did not require any medical management. Fast forward to 2013, Lin and colleagues conducted a study where they interview 32 Australian Aboriginals (<http://bmjopen.bmj.com/content/3/4/e002654.full>) with chronic low back pain and find that things have changed since the study in the nineties. Many of the individuals in the study had beliefs that their pain was due to a structural

problem and they had negative perceptions for recovery. These beliefs were identified as being the result of interactions with health care providers and imaging studies! Here is just one of the quotes from the study participants, it sounds all too familiar:

And the physio and chiro were both saying that it could be a hint of arthritis so went and got xrays and I think it was a CAT scan or MRI I had done on my back and then they found out that it was arthritis in the L4, L5 vertebrae. And it hasn't been getting any better since. When I first found out they put me on prescription medicine.

Not surprisingly, disability rates have increased for Australian Aboriginals over the last 20 years with exposure to Western medicine appearing to be a contributor to these changes. Remember, those patients from the original study did not seek out health care because they believed that the low back pain was not a health related issue and may have been better off for it. I cringe when reflecting back on my own career and how many patients I may have inadvertently disabled with a pathoanatomical diagnosis that I haphazardly threw out in my early years as a physiotherapist.

How can we minimize the risk of iatrogenic low back pain and be part of the solution? First and foremost, providing patient education on the benign nature of low back pain and the importance of remaining active might considerably decrease the risk of prolonged disability. De-emphasizing medical diagnosis and focusing patient recovery on function and active recovery strategies could also make a

meaningful difference. This means getting away from “Minutia” based physiotherapy where a patient's pain experience is based on a specific structural fault that needs to be “Fixed”. We should know that not only are we likely wrong when we come to a specific pathoanatomic diagnosis but that we are also increasing the risk for disability. With the time saved by not going on a big 'issue with a tissue' hunt, we can devote some of our assessment to screening for yellow flags like fear, catastrophization and changes in mood and then address these issues in an empathetic manner.

In one of the few perspective cohort studies of low back patients (<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.656.4119&rep=rep1&type=pdf>) that included imaging, a group of veterans underwent an MRI and various screening questionnaires. At three year follow-up the only significant predictor of experiencing low back pain was depression. Even frank contact with a nerve root by the lumbar disk did not reach significance for predicting low back pain!

When it comes to a diagnosis, use nonspecific and nonthreatening phrases to describe patient's low back pain and what needs to be done to help improve their pain, because, hey, what they have really is nonspecific low back pain. Sure, they might respond preferentially to one treatment over another but in the grand scheme of things, we are a long way from being able to identify the specific tissue at fault. Remember, words really do matter and a paper called “Words that harm and words that heal (/s/Bedell_2004_Arch_of_Int_Med_Words_that_harm_and_heal.pdf)” should be required reading for all healthcare workers. We should also educate patients on the limited utility of our imaging studies (<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4464797/>) and the prevalence of findings in asymptomatic individuals. I tell my patients prior to imaging that things like disk bulges, degenerative disk disease and arthritis are common in

individuals without pain and can be considered anatomical wrinkles and grey hair that we acquire with age and often have little correlation with pain. Imaging's purpose is simply to rule out serious pathology and guide surgical intervention and for the vast majority of patients, neither of these is necessary.

What happened with my young female patient with a three year history of low back pain? We discussed why she was fearful and it turned out that she had recently had a baby and worried that she would not be able to care for her child if she had an episode of her back "Going out". I educated her on how feelings of fear and fragility can actually cause pain to become persistent and we discussed some simple ways to help self-manage her pain when she flared. I had her watch this video (<https://www.youtube.com/watch?v=gwd-wLdIHjs>) at home and start to read this book (<https://www.painbc.ca/resources/books/understand-pain-live-well-again-cd-rombook>). At the next visit, I asked her to bend forward and she did so fluidly and quickly without fear! I wish I could say it always works out this way, but it is good to be able to celebrate the occasional success.



(<https://ashley-reiter-hc2w.squarespace.com/steve>

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DPT ([HTTPS://ASHLEY-REITER-HC2W.SQUARESPACE.COM/S](https://ashley-reiter-hc2w.squarespace.com/s)

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2 weeks ago

Low back pain is one of the most common reasons for consulting a physician or Doctor. But they must try massage, yoga, exercise, acupuncture and other similar therapies before reaching for a pain killer. This will effect more on back pain than a pain killer. I have personally experienced this.



shoebridgecholes

A month ago

<http://whatcauseslowerbackpain.org/>
Causes of back pain are numerous and there are also many ways by which anyone can manage their back pain. I have found a website in which they have mentioned so many ways by which anyone can control his/her pain. If you too want to know <http://whatcauseslowerbackpain.org/> what causes back pain, this is the perfect site for you. I think you should visit this site at least for once.



Eric Purves 4 months ago

Steve,

I always enjoy reading your blogs and Facebook posts. I agree that in many cases, well meaning clinicians are actually making patients worse by creating feelings of fear and fragility resulting in more pain related disability.

Not sure if you've seen this one? But here is a SR and meta-analysis that shows reassurance and advice actually decreases the likelihood of acute back pain becoming chronic. <https://www.bodyinmind.org/wp>

becoming chronic. <https://www.bodyinmind.org/wp-content/uploads/Traeger-LBP.pdf>

It seems the more we try and 'fix' the problem, the worse we can make it. Less is more and simpler is better.

Eric



Steve Young 7 months ago

Hi Stu,

Thanks for the positive feedback and glad you enjoyed the blog post. With respect to the question about manipulation, there is no specific testing that needs to be done above and beyond our typical testing prior to manual therapy from a physiological perspective. Ruling out serious pathology such as cancer, fracture etc. and conducting a full examination just as you would for any other patient. Manipulation force is typically not significant - about 50 lbs and likely does not pose a serious physiological risk. Cauda equina syndrome is the worst possible physiological adverse outcome but is extremely rare - estimated to be one in 10 million. I'd also not manipulate a patient with neurological symptoms; although this is not due to a huge risk, just because other treatments are more efficacious.

This all stated, the biggest factors to consider likely are more related to patient/clinician expectation and other psychosocial factors. Those with high fear avoidance beliefs, situations where the patient is not agreeable to the treatment or where you as a clinician do not feel the treatment will be effective would be good reasons to avoid manipulation or any other hands on treatment. Conversely, the patient who believes manipulation would be beneficial likely will benefit from the treatment.

Finally, always, always tell the patient that the manipulation is a way to get them moving, not a magical fix for their pain. Manipulation (Or any type of manual therapy) should also not be accompanied by any type of complex biomechanical explanation as this creates fear and dependence. Finally, it should always be part of a comprehensive treatment that includes exercise, education and reassurance.

Hope that helps,
Steve



Stu 7 months ago

Thanks Steve!

Very educational. I read a recent article on the blog here discussing the positive effects of lumbar manipulation. Can you help guide a budding Physio in how to screen for those who should not be manipulated?

Looking forward to the next post!



Bradley Jawl

6 months ago

Hey Stu, great question buddy!
a few thoughts.

1) First go to your contraindications:

*Any pathology that leads to significant bone weakening

*Neurological: cord compression, cauda equina compression, nerve root compression with increasing neurological deficit

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multisegmental radic.

*Vascular: aortic aneurism, bleeding into joints

*Lack of diagnosis

*Patient positioning can not be achieved
because of pain or resistance.

2) Manips for chronic LBP have limited efficacy compared to manips for acute LBP (especially the acute LBP patients that fit the clinical prediction rule).

3) Patients who have low self efficacy and take a passive approach to coping require careful and positive messaging if you choose to use thrust manips. Use the MT to demonstrate that their pain is adaptable, call it out as a neurophysiological trick (vs putting something back into place), and transition to meaningful movement right away.

4) Don't enable any crack addictions. Ie don't just crack 'em twice a week and expect an improvement. Again, it is simply a trick to desensitize the nervous system so that they can move more and comfortably. The comfortable movement then challenges their beliefs about their ability and pain. Example, they all of a sudden bend down and touch their toes w/o pain. That is an expectancy violation. In the exposure world, this is what you're after. It is at this point that you confront them with their strength and offer them a new schema to conceptualize their low back health.

5) Also, don't do the thrust if you don't like to do the thrust. There are many other techniques/approaches that will get you to the same success. Clinical equipoise (your belief in your own treatment) has a significant effect on outcomes. So... if you don't like thrusting, don't

thrust. It's not be all end all, it's just one more quick neurophysiologic trick for your tool belt.

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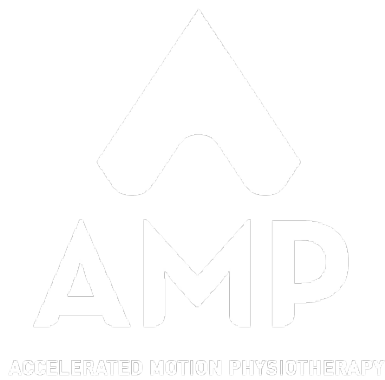
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