

# Regeneration of severe ligament instability and improvement in symptoms of benign prostate hyperplasia in a 76-year-old male under concentrated chiropractic care: A Case Report

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**Background:** A 76-year-old male patient presented for chiropractic care at the behest of his wife. He was healthy and active, however, upon examination, an extraordinary level of ligament instability was discovered in his neck. This level of dysfunction would ordinarily require urgent or surgical intervention.

**Management:** The patient undertook an initial 5-day course of concentrated chiropractic care, and completed a total of four courses of care over fifteen months utilising a variety of chiropractic adjustments and complementary therapies.

**Outcomes:** Due to presentation at a chiropractic clinic even when he was feeling 'healthy', appropriate care and activity restrictions were put in place before a catastrophic injury took place. Over the course of care, regeneration of severe ligament instability and improvements in benign prostate hyperplasia were achieved.

**Indexing Terms:** Chiropractic; Subluxation; TIA; stroke; Cervical Artery Stenosis; concentrated care.

## Introduction

Taking a thorough case history and examination with every new presentation, or taking intermittent progress re-evaluations is an important part of Chiropractic management. Commonly, a patient will reveal their primary concerns to a Chiropractor upon presentation. Less commonly, a chiropractor may pick up on something that has eluded the patient, diagnosticians, or both.

The latter occurred in this case.

Pertinent to this report is a base understanding of ligament instability. We commonly see ligament instability in flexion/extension radiographs.

*... A strong index of suspicion revealed a dangerous level of laxity in the ligaments about this 76 yo male's spine which was able to be largely reversed, and stabilised, with periods of concentrated care ...'*



Ordinarily, a traumatic injury such as a whiplash injury, concussion or other head trauma is a causal factor in cervical spinal ligament instability. However, as this case report will show, this is not always the case.

The *American Medical Association* has issued guidelines whereby a 3.5mm level of ligament instability in the cervical spine often leads to a 25% impairment in the neurological functions at that level. (1) This is a mainstream medical understanding that could become a bridge between Chiropractic and mainstream medicine because there is a mutual understanding that damage in the cervical spine causes neurological dysfunction. Now, the challenge before Chiropractors is to show evidence that Chiropractic can help repair and reverse that damage.

This case report examines extreme, undiagnosed ligament instability whereby a patient claimed there was *'nothing wrong with him'*, only for objective findings to reveal that he was in a state of severe ligament instability and spinal degeneration. While other symptoms, such as benign prostatic hyperplasia resolved concomitant with chiropractic care, it is the discovery of a significant and dangerous level of spinal ligament instability and degenerative disc disease that marks this case as an important example of the value of thorough examination beyond patient self-reports alone.

### Case details

A 76-year-old retired male presented for a concentrated course of Chiropractic care. He was described as active, and with limited experience with Chiropractors. Upon initial presentation it was apparent that the patient's wife was the driving force behind the scheduling of the consultation. Thus, the initial consultation was very brief with the gentleman reluctantly admitting a primary complaint of chronic low back pain but also insisting that *'nothing is wrong with him'*.

The couple was referred by another group of patients who had attended the clinic. Both the man and his wife were several years into retirement and expressed that their primary goal was to run tests to see if the quality of their spine, central nervous system and tissues was good for retirement. They were hoping to spend a substantial amount of time internationally and therefore good health was a priority. After undertaking some brief case history, the clinical team moved forward with functional testing.

### History and Examination

What was immediately clear upon examination was an 'extraordinary' level of ligamentous breakdown in the patient's cervical spine. There were several joint levels that were well past the 3.5mm mark, usually considered a medical impairment requiring a surgical fusion intervention, in a zone that was classed as severe, and could potentially lead to an emergency event.

After radiographs were taken, a further discussion into the patient's medical history took place during which it was discovered that the patient was suffering from benign prostatic hyperplasia, chronic low back pain, increasing pain, and stiffness into the left hip. Testing also revealed he had blood in the urine and a history of shingles.

This patient denied a history of car accidents, concussion, Traumatic Brain Injury, sports injuries and reported no activities that might lead to a whiplash accident.

Further conversation found that the patient had a 14-year history of working in an aluminium smelter with no protective equipment, followed by a career as a teacher. The patient also reported that he previously had back and neck pain so severe that there was nothing he could do to relieve the pain. These episodes would often last several days.

After seeing the ligament damage in the radiograph, it was highly recommended by the clinical team that the patient refrain from any activities that might cause additional stress or strain to the

neck. This included avoidance of bumpy gravel roads, slowing down and being more careful while driving, not lifting anything over 9kg or 20 pounds, not placing bars or weights on the patient's shoulders, and no bouncing or jumping.

The significance and severity of the ligament instability on the radiographs meant it was necessary to give urgent cautionary advice to the patient. A significant enough physical stress could cause an emergency and even paralysis to the patient due to the level of ligament breakdown.

### Clinical findings

Once the patient agreed that he did need care, a thorough clinical examination commenced. During this it was found that he had high visceral fat, at a reading of 14 (visceral fat becomes a cardiovascular risk with it is over 10). This was a contrast to the patient's physically thin appearance. He had a body fat percentage of 22, and a Body Mass Index of 22.6 and yet still returned a high visceral fat result. Visceral fat is significantly more challenging than body fat, as it is compacted around organ tissue and increases the risk of a cardiovascular event. In this case, it may have been indicative of a serious inflammatory issue in that the body was making visceral fat to protect the organ from breakdown.

The patient was also found to be hypertensive, with low pulse oxygen rates, an abnormal spinal EMG, and abnormal spinal radiographs. The latter revealed severe disc degeneration and degenerative joint disease at C3-C4, C4-C5, C5-C6, C6-C7 with severe ligament instability noted at C3-4, C4-5, C5-6 and abnormal spinal alignment at C1-C7.

Height was measured with a digital wall-mount system. Blood pressure was measured with a digital blood pressure cuff. Radiographs were taken on a digital Bennet system with an orthopedic tube and analysed with software through the PostureRay system. Ligament instability was measured through a separate computer program. Subluxations were found from C1-C7.

Given the findings pertaining to instability in his cervical spine, the primary focus of care was to achieve non-surgical regeneration of the ligaments through gentle, low-force care, as well as achieving normal cervical alignment and regeneration of the abnormal degenerative disc disease and degenerative joint diseases in the patient's cervical spine.

### Management

The patient commenced a 5-day concentrated care plan using the *Averio Functional Neurological Technique* (A Chiropractic care protocol with a focus on regenerative care utilising low-force techniques). During this time, posterior mirror adjusting was utilised, as was micro-distraction using a 4 to 7 kg, 10-15 pound long axis distraction.

The foundation of the Averio concentrated care program is Chiropractic adjustments. Secondary treatments include photobiomodulation and brain wave training. Tertiary treatments, when applicable, include a plant-based, anti-inflammatory diet, neurological and ligamentous whole food supplementation support plan, herbal prostate inflammation support protocol, recommendations for specific neurological exercises as at-home self-care, recommendations for specific icing and topical anti-inflammatory support as at-home self-care, Cryotherapy, Contrast Therapy, Myofascial Release, Active Release Technique, Reflexology & Spinal Cupping, Nutritional Therapy, Active and Passive Motion Therapy, Neurological Exercises and Rehabilitation.

Of the latter, the patient received additional care recommendations for: cryotherapy, contrast therapy, myofascial release, active release technique, reflexology and spinal cupping in addition to nutritional recommendations, active and passive motion therapy and neurological exercises focused on rehabilitation.

The patient was seen for four weeks of Averio concentrated care over the period of fifteen months.

### Outcomes

The severity of this case warranted numerous rounds of care over the course of fifteen months. At the conclusion of care, there was notable regeneration of all unstable ligaments in the cervical spine, with measurements returning to within normal limits. This is significant, as ligamentous damage greater than 3.5mm, which has previously been thought to require surgical intervention, in this case, did not.

The patient's low back pain resolved, left hip resolved, and symptomatology around the benign prostatic hyperplasia had significantly improved.

Objective measurements included a height change from 5' 4" and 3/16<sup>th</sup> to 5' 5" and 11/16<sup>th</sup>. This is over an 1.5-inch (3.81cm) improvement in height, indicative of postural and spinal regeneration.

Visceral fat had not changed yet, and further testing was scheduled for 6 months after the final course of concentrated care. It is likely that visceral fat will begin to come down now that the ligamentous damage has stabilised, which will remove a large and abnormal inflammatory burden from the patient's central nervous system.

Radiological findings confirmed regeneration of ligaments in the cervical spine. The patient also experienced a substantial change in his lower back. He went from a reverse lordosis (4.0°, -40° is normal) to -30.6° which is a very significant change in structural alignment towards normal. There is also notable regeneration of the L5 disc from stage four degeneration to stage three degeneration.

The patient remarked that he was incredibly impressed with regenerative Chiropractic care and how his body has been able to anti-age, regenerate, improve and heal. Both he and his wife have received what they described as '*life-changing*' care.

### Discussion

This case opens a door for regenerative Chiropractic to be an alternative for ligament regeneration in spinal areas when the care is gentle, specific, and concentrated. This also opens a door within the chiropractic profession towards incentivising collaboration between the various Chiropractic techniques.

It is important to note that, at the report of findings session, the option to seek a neuro-surgical opinion was raised given the severity of the condition. The patient chose to attempt non-surgical regeneration of ligaments through specific concentrated Chiropractic care. After four weeks of concentrated care spread over the course of one year, this patient no longer requires surgery.

Reversal of symptoms of benign prostate hyperplasia is one outcome of this case report. However, this case is really about a bigger, quieter issue. On entry, this patient claimed to have nothing wrong with him, when he was likely on track to an emergency event. There was significant ligament instability in his lower cervical spine, in the area where nerves go to the heart. Combined with high visceral fat, a cardiovascular event was likely.

It is also highly likely that the patient would have been forced to seek surgical modification had his neck been allowed to continue to degenerate. Because of regenerative Chiropractic care, it is possible that both a cardiovascular event and a surgical event were avoided.

Healing was achieved through regenerative Chiropractic care, careful objective testing, and patient commitment to the care necessary for his body to respond.

## Conclusion

Typically, ligament instability radiographs (also known as flexion/extension films) are only requested for patients who have been in a physical and/or traumatic injury or stress. This case starts to address what we have seen a lot more recently which is that chemical stress and/or emotional stress can break down ligaments in the spinal systems.

This suggests that flexion and extension films should to be taken in the case where there is no physical trauma but there are excessive inflammation markers that might suggest that ligament damage is present (high visceral fat, high surface spinal EMG stress, organ swelling). In this case, the ligament damage was so far progressed that it was notable on the lateral cervical film.

This case report illustrates the vital importance of thorough history and examinations in clinical settings, even when the presenting complaint is as common as mild low back pain. Further research into chiropractic care for spinal regeneration and ligament instability, as well as greater understanding around the impact of concentrated subluxation-based care, is therefore warranted.

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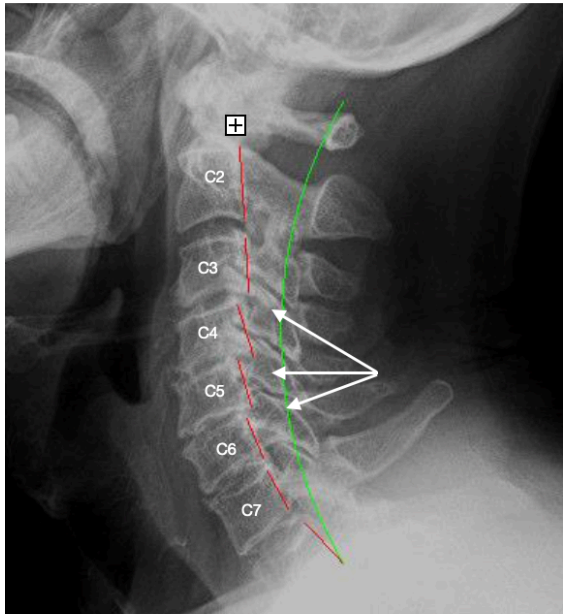




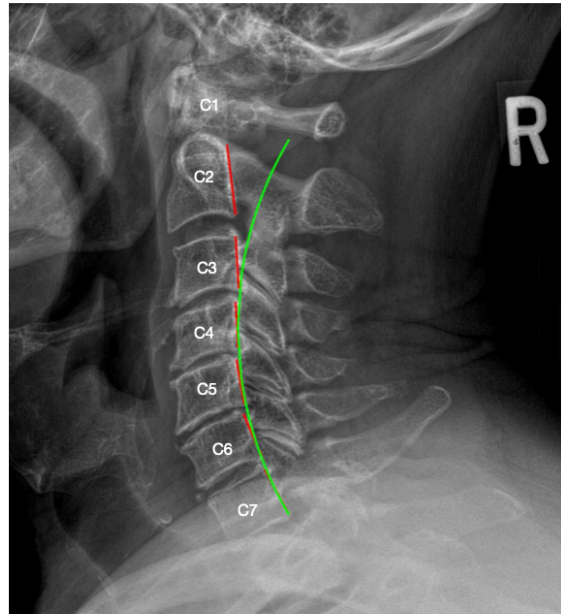
## Images

Fig 1: Pre- and post-concentrated care

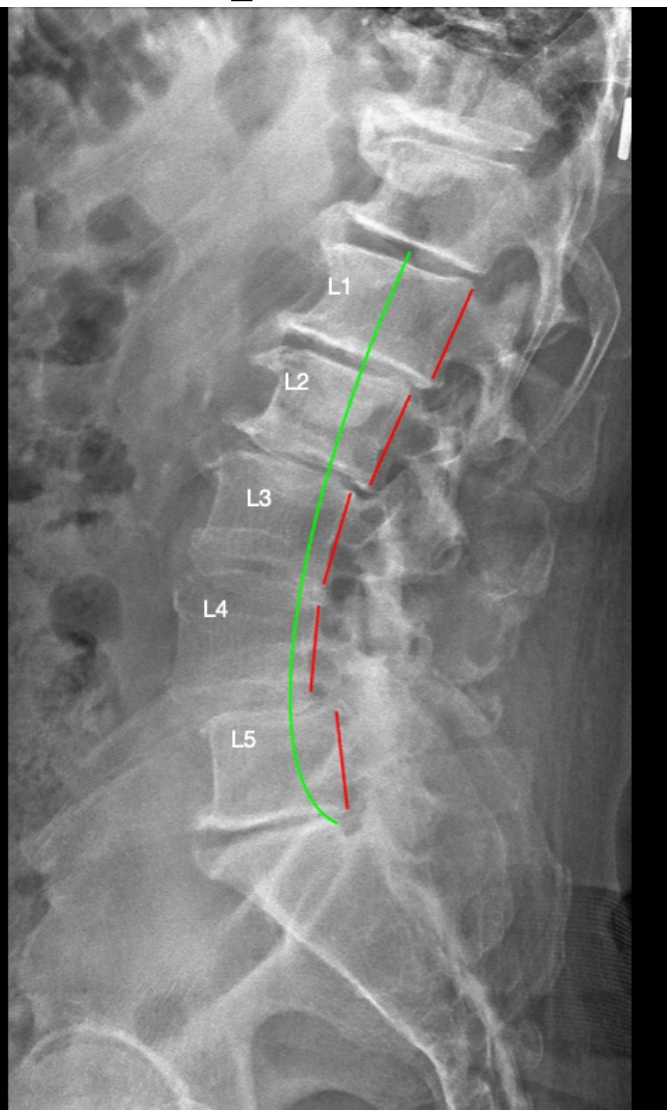
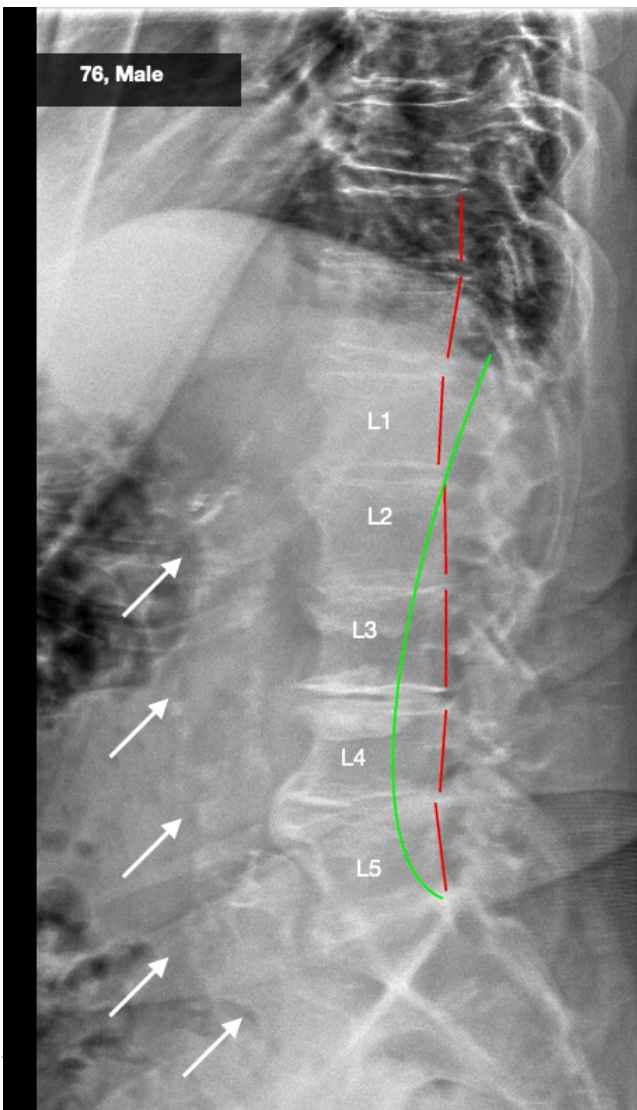
Male, 76



Prior to concentrated chiropractic care  
January 2021  
Ligament instability C3-C4, C4-C5, and C5-C6  
DJDD & DDD C3-C7



Post 4 Weeks Of Concentrated Chiropractic Care  
March 2022  
Reversal of ligament instability  
Reversal of DJDD & DDD C3-C7



## *Declarations*

This Case Report is a part of the [ASRF Case Report Project](#), a project designed to gather client studies from chiropractors and transform them into much-needed case reports, focused on the effects of chiropractic care on clinical presentations highly relevant to chiropractic, such as stress, immunity and adaptability.

This valuable project is made possible by the generous fundraising and contributions of ASRF supporters.

Patient consent was documented and is held by the lead Authors and the Journal.

All data with appropriate clinical commentary were provided by authors Kotlerman, Martin, and Carter.

## *ASRF definition of subluxation*

*'A vertebral subluxation is a diminished state of being, comprising a state of reduced coherence, altered biomechanical function, altered neurological function and altered adaptability.'*

## *About the Institute*

The [Averio Institute](#) is a neurologically focused, multimodal health care facility that offers regenerative therapies alongside chiropractic care, nutritional support, rest, exercise and other functional neurological interventions in a five day concentrated care program tailored to individual guests.

## *Also by these authors*

Kotlerman S, Martin A, Postlethwaite R, Mclvor C. Chiropractic Management of an 18-year old female with lupus: A Case Report. *Asia-Pac Chiropr J.* 2021;2.3. URL [apcj.net/paper-issue-2-5/#AverioLupus](https://apcj.net/paper-issue-2-5/#AverioLupus)

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Kotlerman S, Martin A, Carter M, Postlethwaite R, Mclvor C. Reversal of Cervical Artery Stenosis and improvement in physical functioning in a 78-year-old stroke survivor under concentrated Chiropractic care: A Case Report. *Asia-Pac Chiropr J.* 2024;4.3. [apcj.net/Papers-Issue-4-3/#AverioStenosisReversal](https://apcj.net/Papers-Issue-4-3/#AverioStenosisReversal)