Approach to low back pain

Chiropractic

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This article forms part of our allied health series for 2014, which aims to provide information about the management approach of different allied health professionals, using the case example of uncomplicated, mechanical low back pain.

Keywords
chiropractic; low back pain

Case study

A man aged 42 years, who works as a police officer, presented with severe lower back pain, which he had experienced for 24 hours after spending the previous day helping his brother to move house. He had difficulty ambulating and most movements aggravated the pain. There were no lower limb symptoms and no red flags present on history or examination. He was otherwise well and was not taking any regular medications.

Approximately 15% of the Australian population consult one of 4500 university-trained, registered chiropractors at least once each year.[1,2] Chiropractors mostly use manual therapy to address primarily musculoskeletal-related conditions.[3] This is often combined with exercise, nutritional advice and lifestyle modification. The Chiropractic Board of Australia, a part of the Australian Health Practitioner Regulation Agency, regulates the profession.

Initial assessment

A common chiropractic approach to a case such as that described above would begin with a case history and physical examination to determine a working diagnosis. Important elements missing from the case scenario include the severity of the pain (out of 10) and any bowel or bladder disturbances.

Short-term management

The history suggests severe pain and limited function due to acute non-specific low back pain. The first aim of chiropractic care would be to provide reassurance to the patient that nothing serious is causing the pain and that it would be expected to resolve within a few weeks. This would be followed by attempts to provide pain relief. During the first visit, manual therapy may not be appropriate if the pain is too severe. Gradually increasing amounts of activity is an important means of ensuring recovery from low back pain.[4] Forms of pain relief that a chiropractor might recommend in the early stage of this severe pain may include over-the-counter medication[5] and heat or cold treatment[6] combined with gentle exercises suitable for the patient's level of pain tolerance. Self-management advice about activities of daily living, such as sitting, standing, lifting and sleep position would also be provided.

The patient would be asked to return for another consultation, usually within a few days, for reassessment and follow-up treatment. Working with the patient, the chiropractor would set expectations of recovery, including a time frame for likely discharge from treatment, and identify the goals of the treatment program, focusing on returning to normal function.
In the days to weeks after first presentation, the patient would receive spinal mobilisation and manipulation,[7] and soft tissue therapy (massage) to the surrounding musculature.[8] During this time the chiropractor would monitor psychosocial risk factors for prolonged disability, such as fear-avoidance beliefs, pain self-efficacy beliefs, negative attitudes and beliefs about pain and catastrophising.[9] The need for imaging would be assessed if the patient were not responding as expected or developed other symptoms.[10]

Medium-term management

During the medium-term, manual therapy would continue in conjunction with more structured exercise to improve functional capacity. The patient's progress would be monitored via validated, functional outcome measures, for example the Oswestry Disability Questionnaire or the Roland-Morris Disability Questionnaire.[11] If the patient's progress halts or deteriorates, the chiropractor would identify and monitor psychosocial factors, sometimes termed yellow flags, that may delay or inhibit recovery.[12] The patient may be referred to another healthcare practitioner for assessment and management. This may include a general practitioner for investigation of potential pathology or pain medication requirements, or to a psychologist for co-management of psychosocial risk factors.

Long-term management

The patient is likely to be discharged when pain free, typically within 3–6 weeks.[13] Some chiropractors may ask the patient to return on occasion to monitor their pain and function. The number of times this is performed, and the frequency, varies by patient and chiropractor. Commonly, exercises are prescribed in the medium-to-long term, as well as ergonomic advice to limit future episodes of pain. Recurrences of low back pain are common and up to 60–80% of people who present to primary care with low back pain will continue to have pain after one year.[13] Ongoing management of these recurrences may be necessary.

Evidence base for chiropractic treatment for acute low back pain

For acute, non-specific low back pain there is no single, optimally effective therapy. The current evidence supports reassurance in the absence of red flags and promotion of returning to normal functioning, while continuing to monitor psychosocial risk factors. Most interventions and therapies (eg. advice stay active and brief education, medications, spinal manipulative therapy and superficial heat application)examined in high-quality systematic reviews demonstrate only low-to-moderate effects and few therapies are better when compared with other therapies.[14] Chiropractors use a multi-modal approach to therapy but many of the therapies they use have not been subjected to rigorous scientific scrutiny. These include Activator (a hand-held spring-loaded device that delivers an impulse to the spine), drop piece (a chiropractic treatment table with a segmented drop system that quickly lowers the section of the patient's body corresponding with the spinal region being treated) and wedge-shaped blocks placed under the pelvis. High-quality systematic reviews support chiropractic care for symptomatic relief of the type of back pain described in this case.[7,15,16] However, the effects are typically small. Many, but not all, international, evidence-based clinical practice guidelines recommend spinal manipulative therapy for low back pain.[17]

Treatments commonly used by chiropractors are equally effective as other common therapies for the management of low back pain, and chiropractic treatment has a low risk of serious adverse events.[18,19] In Australia, there is a lack of coordinated care between general practitioners and chiropractors.[3] Chiropractors are well placed to provide high-quality care for patients with acute low back pain and inclusion of chiropractors as part of a healthcare team approach to care is likely to benefit patients with low back pain.

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