

# Osteopathic Manual Therapy in Canada

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When a patient is in need of treatment for musculoskeletal problems, there is such a vast array of treatment options available. Medical doctors, chiropractors, physiotherapists and massage therapists are among the most sought after forms of treatment when someone is experiencing a common condition like lower back pain. There is one form of manual therapy that is usually not mentioned and has been kept quiet over the years primarily due to its gentle demeanor. Osteopathy is one of the safest forms of drugless, non-invasive manual therapies in the world. With just over 1000 Osteopaths in Canada, there has never been a push to regulate the profession. There has been very little done to market the profession on a large scale and is one of the main reasons why osteopathy is a term that is often unheard of in Canada. It is the duty of all manual osteopaths to begin to share the profession with the world and by taking small steps; Osteopathy will soon become one of the most sought after manual therapies in the world. To do so, one must understand where osteopathy came from, how it is similar and dissimilar to other forms of therapy and how it works on common conditions such as lower back pain. Therefore, lower back pain will be the condition focused on when describing osteopathic techniques, how they work and how they can benefit patients in conjunction with other forms of therapy. Lower back pain is a very common condition that is seen by health care providers all over the world on a daily basis. In the U.S, mechanical lower back pain is the second most common reason for visiting a health care provider. While 85% of people will experience some form of back pain throughout their life, most of the cases should resolve themselves within 2-4 weeks with proper care (Everett C Hills et.al).

To understand Osteopathy one must look at the different forms of therapy without a biased opinion. Therefore there will be no direct comparisons between the different types of therapy. However, each manual therapy will be described and discussed and will feature the pro's and con's according to literature and research. It should be understood that all forms of manual therapy play a large role in the overall health of a patient presenting signs and symptoms of musculoskeletal and joint problems. A push for more interdisciplinary clinics is a growing trend and can be very beneficial for patient centered care.

Osteopathy was first introduced by Andrew Taylor Still, MD, June 22, 1874. His original theory was based on the idea that the normal workings of the body could be disturbed by anatomical abnormalities or displacements (Parsons, et. al, 2005). The term osteopathy comes from the Greek word "osteon" which means bone and "pathos" meaning suffering or disease. As one can see, the term osteopathy can definitely create some confusion. The majority of people who hear the term osteopath, think that the therapist only deals with diseases of the bones, which is not the case at all. In fact, the original meaning attempted to convey the message that osteopathy involves the *musculoskeletal system*. Derangements from different systems within the body can lead to disease and other conditions which can be treated by osteopathic techniques through the musculoskeletal system. A.T Still conveyed his theory and his main principle that the osteopath views the body as a whole unit. When one structure in the body is affected it can cause numerous problems within the body unless the original dysfunction is found and treated. To treat the pain is not the sole purpose; it is finding and treating the cause of the pain that should be the focus. This is the basic philosophy of osteopathy.

The treatments and techniques set forth by osteopaths vary from country to country. In the U.S and the UK, osteopaths perform ‘adjustment’ techniques similar to that of a chiropractor. This involves a quick thrust type movement at the end range of a joint. In Canada, manual osteopaths perform similar techniques; however do not use the quick thrust movement (known as grade 5 manipulation). Manual osteopaths in Canada use what is know as osteo-articular joint mobilization. Mobilization is a gentler, more rhythmical technique which some patients may feel less apprehensive about. In regards to lower back pain in both an acute and chronic state, mobilizations will help to reduce muscle spasms in the surrounding area, open up restricted joint space, increase blood flow, increase joint range of motion, decrease pain, improve joint nutrition, reduce spinal joint disc herniation, and eliminate joint impingement (Edmond, S. 2006). A study was conducted on 2 groups of relatively healthy collegiate level athletes. Both groups were experiencing mechanical lower back pain. The first group received joint mobilization and were compared to the second group who were placed in a prone position for the amount of time it took the therapist to perform the joint mobilization. After a 24 hour period the first group who received the joint mobilization experienced less pain then group number 2 based on the Mcgill pain questionnaire (Hanrahan, Sean. Et al. 2005). A similar form of therapy is the chiropractic adjustment. This technique is performed using a high velocity low amplitude (HVLA) thrust which usually yields a “pop” or “crack” sound. Both techniques prove to be very effective for *acute* pain management. Studies have also shown that chronic lower back pain is reduced with both spinal adjustments and mobilizations in combination with other forms of therapy including non-steroidal anti-inflammatory drugs (NSAIDS), and physical therapy modalities (Bronfort G, 2004). For lower back pain joint mobilization is one of the best forms of manual treatment in terms of pain relief and restored range of motion. The second scientifically proven technique

most commonly associated with manual osteopaths is Muscle Energy Technique (MET). Muscle energy is a gentle contract/stretch technique used by the osteopath to relieve pain from muscles and decrease muscle spasms. It is especially good for muscular contractures, lower back pain and limited range of motion. Many manual therapists use a similar type of technique in their practice but it is a little bit different. Proprioceptive Neuromuscular Facilitation (PNF) is a similar technique employed by chiropractors and physical therapists which is slightly more aggressive. In this technique, the therapist tries to increase the range of motion by constantly applying more force to the stretch after each repetition. It is more uncomfortable for the patient, but delivers excellent results. MET can be a very beneficial technique for the patient. It requires patient participation and cooperation, but on a lesser scale. The first thing one might notice when visiting a manual osteopath is that the treatment session tends to be a more relaxing experience than some other forms of therapy. This is not to say that it is a *better* form of therapy. It should be noted however, that the osteopathic treatment is based on gentler, more relaxing techniques. Patients will find that an osteopathic treatment is a less aggressive form of therapy which combines different types of manual therapy. It can be said that chiropractic care is a more aggressive, forceful hands on therapy, while osteopathy is a less aggressive, more relaxing type of therapy which both provide excellent results backed by scientific research and clinical studies. The third technique utilized by most manual therapists including manual osteopaths is a form of soft tissue therapy (primarily used by massage therapists). These techniques are most often used to warm up the tissue in the area to be treated. In a study conducted by Andrea Furlan, MD, it was found that a group of individuals with sub-acute lower back pain who received comprehensive soft tissue therapy, stretching and postural education showed better results on measures of function, pain intensity, their quality of pain and anxiety levels compared to that of a

group receiving just laser therapy (Preyde, M. 2000). It was also found that functional benefits were maintained after one month. On the negative side, no interventions with just soft tissue therapy showed any benefit on measure of range of motion. This is one of the main reasons manual osteopaths are going to be so well received by patients when they are more publicly available. Not only are patients going to receive soft tissue therapy which is shown to decrease pain, and relieve anxiety but patients are going to be receiving many other manual techniques which provide numerous other physiological benefits. Increasing or maintaining range of motion for example is absolutely essential when a therapist creates a treatment plan. If range of motion is not able to improve with one technique, it is crucial to use a combination of techniques to aid in increasing or maintaining range of motion. Osteo-articular joint mobilization is a scientifically proven way to help increase range of motion in all joints of the body and works even better when utilized in combination with soft tissue therapy and muscle energy technique.

An essential component of therapy when it comes to acute or chronic musculoskeletal conditions is physiotherapy. In most cases, physiotherapy is best described as both passive and active care. Much of the treatment session is comprised of therapeutic modalities including but not limited to interferential current (IFC), TENS electrical therapy, ultrasound therapy, cold laser, heat and cryotherapy. The physiotherapist may also use soft tissue therapy and joint mobilization. However in Canada, joint mobilization is not often performed by physiotherapists. Prescriptive exercise programs are also implemented at the end of a treatment session for the patient. Physiotherapy modalities are very well received by patients of all ages and are extremely effective. IFC is one of the most widely used therapeutic modalities because of its proven effects on the body. It has many physiological benefits which are backed by scientific research including the reduction of pain, reduction of swelling and indirectly helping in

the healing process to help restore proper function. One of the wonderful things about manual osteopaths is that they are able to administer physiotherapy modalities to help facilitate the healing process. In very acute injuries such as a lower back strain from heavy lifting, the best course of action is usually to rest and ice the area. If the patient decides to seek treatment with a manual osteopath, it is great to be able to offer some form of treatment which is comfortable for the patient and won't cause any excessive discomfort. Mobilization and soft tissue therapy would not be the best option if it is in the very acute stages with signs of swelling and inflammation.

There are many options to choose from when seeking treatment for painful muscle or joint conditions. All forms of therapy have wonderful benefits; some forms of therapy just have different approaches to treatment. Many are aggressive in nature, while others are soft and gentle. Returning to the condition of lower back pain, if one takes a look at the way a manual osteopath approaches the treatment session, it can be seen that they do not just treat the problem area but they look for the cause of the problem and treat the body as a whole. Many common conditions of lower back pain are local problems as a result of twisting, lifting or pulling an object. Other back problems can be the result of a sporting injury, motor vehicle accident or an injury on the job. Many other lower back injuries are resulting from repetitive stress, postural or muscular imbalances. Many patients find it shocking when they are informed that the cause of their back pain may not have begun because of a direct trauma or from heavy lifting. For example, lower back pain is a common consequence from having over pronation or pes planus (flat feet) in the feet. When the feet are rolled inwards, the muscles now have to compensate for the biomechanical abnormality, which consequently puts pressure on the knee, the hip and the lower back. The muscles work too hard to keep the biomechanical movements of the body in

line. This is where the osteopath not only treats the lower back pain with osteopathic techniques such as osteo-articular mobilization, MET and soft tissue therapy, they may also use corrective devices such as orthotics to treat the over pronation of the foot. This works by correcting the biomechanics, relieving the stress on subsequent muscles, allowing the body to return to its normal state of function and proper biomechanical movements. Manual osteopathy is extremely beneficial in the treatment of lower back pain. As one of the number one conditions seen by therapists, lower back pain was discussed to provide an in depth look at how other forms of manual therapy utilize their techniques to treat lower back pain and to introduce how a manual osteopath approaches and treats such a common condition.

As manual osteopathy is still in its infancy stages in Canada, it should be the goal of the profession to educate patients about how the *osteopath* treats and approaches common conditions seen by most therapists. The common misconception that the osteopath is a “bone therapist” needs to be replaced with an accurate description. The manual osteopath is a musculoskeletal specialist, who approaches treatment by looking at the patient as a whole. This includes evaluating the person’s dietary habits, how active they are and what kind of job they have to analyze potential negative postural habits. When this information is obtained, the manual osteopath can help the patient make the right changes in their life to help them get back to normal functioning and prevent them from recurrent somatic dysfunction. The goal of the osteopathic profession should be to educate the world, to recognize that the interdisciplinary model of health care is incomplete without the addition of the manual osteopath.



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