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The benefit of Manual Osteopath treatment effect for lower back pain

1. What is the Manual Osteopath?

Osteopathy is a type of alternative medicine and is a form of drug-free non-invasive manual medicine that focuses on total body health by treating and strengthening the musculoskeletal framework that emphasizes the physical manipulation of the body's muscle tissue and bones, which includes the joints, muscles and spine.

Manual osteopath use a broad range of manual techniques such as stretching, deep tactile pressure, soft tissue therapy, muscle energy techniques, and mobilisations to treat and reduce physical stress and discomfort which treatment involves. Osteopath practitioner to gently and slowly manually mobilize and stimulate a joint and its surrounding tissues. Its aim is to positively affect the body's nervous, circulatory and lymphatic systems.

This therapy is a unique holistic (whole body) approach to health care. Osteopaths do not simply concentrate on treating the problem area, but use manual techniques to balance all the systems of the body, to provide overall good health and wellbeing.

2. What is the Techniques of Osteopathic Mobilisation?

Mobilization Technique is a treatment technique used at the joint to manage the muscular dysfunction. More specifically, it is passive movements of a skeletal joint with the aim of improving range of motion and achieving a therapeutic effect. Additionally, they strengthen and mobilize the musculoskeletal framework and as a result, correct improper biomechanics and enhance the nervous, circulatory, and lymphatic systems allowing the body to heal itself. Most manipulative and mobilization techniques are performed by manual osteopath, and fall under the category of manual therapy.

There is a five 'grades' of motion in osteopathic mobilisation, each of which describes the range of motion of the target joint during the procedure. They are generally called Grade I through Grade V. The different grades of mobilization are believed to produce selective activation of different mechanoreceptors in the joint.

- Grade I Activates Type I mechanoreceptors with a low threshold and which respond to very small increments of tension.
- Grade II Similar effect as Grade I.
- Grade III Similar to Grade II. Selectively activates more of the muscle and joint
 mechanoreceptors as it goes into resistance, and less of the cutaneous ones as the slack of
 the subcutaneous tissues is taken up.

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- Grade IV Similar to Grade III. With its more sustained movement at the end of range will activate the static, slow adapting, Type I mechanoreceptors, whose resting discharge rises in proportion to the degree of change in joint capsule tension.
- Grade V This is the same as joint manipulation. Use of the term 'Grade V' is only valid if the joint is positioned near to its end range of motion during mobilization. Evans and Breen recently contested this assumption, in fact arguing that an individual synovial joint should be positioned near to its resting, neutral position.

3. What is Lower Back pain?

Low back pain is a common disorder nowadays and about 80 percent of adults experience low back pain at some point in their lifetimes. It involves the muscles and bones of the lower back which can be caused by a variety of problems with any parts of the complex, interconnected network of spinal muscles, nerves, bones, discs or tendons in the lumbar spine which can range in intensity from a dull, constant ache to a sudden, sharp sensation that leaves the person incapacitated. Pain can begin abruptly as a result of an accident or by lifting something heavy, or it can develop over time due to age-related changes of the spine. The kind of back pain that follows heavy lifting or exercising too hard is often caused by muscle strain. But sometimes back pain can be related to a disc that bulges or ruptures. If a bulging or ruptured disc presses on the sciatic nerve, pain may run from the buttock down one leg. This is called sciatica. Typical sources of low back pain include:

Mechanical problems: A mechanical problem is due to the way your spine moves or the way you feel when you move your spine in certain ways. The most common mechanical cause of back pain is a condition called intervertebral disc degeneration and the wearing down of the facet joints. Other mechanical causes of back pain include spasms, muscle tension, and ruptured discs, which are also called herniated discs.

Injuries: Spine injuries such as sprains and fractures can cause either short-lived or chronic back pain. They can occur from twisting or lifting improperly. Fractured vertebrae are often caused by osteoporosis, Other injuries caused from accidents and falls.

Acquired conditions and diseases: Many medical problems can cause or contribute to back pain. They include scoliosis, spondylolisthesis, various forms of arthritis, including osteoarthritis, rheumatoid arthritis, and ankylosing spondylitis and spinal stenosis, a narrowing of the spinal column that puts pressure on the spinal cord and nerves. Other causes of back pain include pregnancy, kidney stones or infections; endometriosis, and fibromyalgia.

Infections and tumors: Although they are not common causes of back pain, infections can cause pain when they involve the vertebrae, a condition called osteomyelitis, or when they involve the discs that cushion the vertebrae, which is called discitis. Tumors, too, are relatively rare causes of back pain.

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Other: Although the causes of back pain are usually physical, it is important to know that emotional stress can play a role in how severe pain is and how long it lasts. Unfortunately, stress can affect the body in many ways, including causing back muscles to become tense and painful. The lack of sleep, can also contribute to back pain.

4. How does Osteopathy treat common back pain?

Osteopathic Practitioners use their hands, osteopaths examine the back and other parts of the body to identify sources of pain and restricted movement that may indicate injury or impaired function which Osteopaths correct and restore proper function to your Spine, joints, muscles, and blood circulation so your body can heal naturally. Tension in the body caused by tight muscles or joints can starve organs and tissues of blood.

Osteopathy aims to relieve back pain by:

- Stretching the muscles and supporting ligaments of the back
- Relaxing muscle spasms
- Restoring normal mechanics to the vertebrae of the back
- Promoting free movement of the musculo-skeletal system
- Improving blood flow and drainage

An osteopath may also advise a patient on techniques for avoiding and relieving back pain, including some home exercise.

5. What Osteopathic Manipulation Techniques (OMTs) are used for Back Pain?

Most back pain originates in the muscles, ligaments, or joints of the back. Direct osteopathic manipulation techniques (OMTs) move the tight or painful tissues toward the area of tightness or restricted movement. Indirect OMTs move the tissue away from the area of restricted movement. The tissue is held there until the muscle relaxes.

It is commonly performed to correct misalignment in the spine by decompressing the joints of the spinal vertebrae. After identifying the dysfunctional vertebrae, the osteopath locks the facet joints. These are the hinges that join the vertebrae together at the back of the spine and allow the spinal column to move.

Osteopathy treatment for back pain may include:

- Massage
- Gentle release techniques
- Soft tissue techniques that apply rhythmic stretching, deep pressure and traction to the muscles around the spine to promote elasticity and motion

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- Myofascial release techniques that apply sustained pressure to tight muscles and connective tissue to eliminate pain and restore motion
- Muscle energy techniques that involve the patient in actively stretching and relaxing muscles against a counterforce applied by the osteopath
- Articulation or repetitive oscillatory movements to stretch connective tissue around a restricted joint and improve range-of-motion
- Rhythmic, passive joint mobilization--slow movements within or at the limit of the joint's range-of-motion
- Joint manipulation high-velocity thrusts to a joint, moving it beyond its restricted range-of-motion
- Counterstrain techniques for acute injuries, in which the patient is moved away from the restricted position toward one of greater comfort

6. Is Osteopathy safe?

Serious complications from osteopathy for back pain are rare. Osteopathic manipulation techniques (OMTs) occasionally result in a temporary increase in pain or soreness that usually disappears within one day. Although direct techniques are usually more effective at eliminating pain than indirect manipulations, they do have a greater potential for complications.

Osteopathic manipulations should not be used on patients with:

- Broken or dislocated bones
- Damaged ligaments
- Bone or joint infection
- Spinal fusion
- Bone cancer
- Osteoporosis

Osteopathy is usually not recommended for patients who have undergone recent joint surgery or are taking blood-thinning medications such as aspirin or warfarin (Coumadin).

6. How Osteopathy can effective in back pain?

There are various reasons for back pain and for osteopathy treatment to be as successful as possible, it is important to have a clear understanding of what causes back pains. Back pains are extremely popular, and can become severe and incapacitating either in acute attacks, or as chronic pain experienced over a long duration of time, that is both painful and uncomfortable. Pain attacks may be caused by actions such as physical exertion, sicknesses and emotional stress.

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At times a minor straining may cause much pain and take long to heal than expected. This is where Osteopathy becomes helpful, which is a complete treatment for back pain problems. They also use manual methods to encourage balance in all the body systems. This works naturally and its main purpose is to improve the general health of a patient done without using drugs, that can damage several organs and parts in the body. In this method of spinal manipulation, through the manipulation of the backbones and spinal muscles are also usually manipulated by back massage, moderate manipulation of the joints, and other techniques to help improve spinal mobility and reduce back pain. However, they may perform other treatments, including stretching and body massage.

The clinical guidelines of the U.S. Agency for Healthcare Research and Quality indicate that spinal manipulation may be helpful for acute low back pain if used within the first month of symptoms. They recommend discontinuing the manipulation if symptoms and functioning do not improve after one month of treatment, although further treatment is not considered to be dangerous.

Three major studies of Osteopathic manipulation techniques (OMTs) for low back pain have reported some benefits and less use of medications and physical therapy. Other recent studies have found that OMTs are as effective as other medical treatments for relieving low back pain. However most studies on spinal manipulation have been performed by chiropractors or physical therapists and may not accurately reflect the results of manipulations performed by osteopaths.

7. Comparing Osteopathy and Acupuncture (TCM)

Acupuncture originates from China and has been practiced there for thousands of years. Although there are records of acupuncture being used hundreds of years ago in Europe, it was during the second half of the twentieth century it began to spread rapidly in Western Europe, the United States and Canada.

Acupuncture involves the insertion of very thin needles through the patient's skin at specific points on the body - the needles are inserted to various depths. We are not sure how acupuncture works scientifically. However, we do know that it does have some therapeutic benefits, including pain relief. According to traditional Chinese medical theory, acupuncture points are located on meridians through which gi vital energy runs. There is no histological, anatomical or scientific proof that these meridians or acupuncture points exist. Acupuncture remains controversial among Western medical doctors and scientists.

However, Manual osteopath use a broad range of manual techniques such as stretching, deep tactile pressure, soft tissue therapy, muscle energy techniques, and mobilisations to treat and reduce physical stress and discomfort which treatment involves Osteopath practitioner to gently and slowly manually mobilize and stimulate a joint and its surrounding tissues and strengthening the musculoskeletal framework that emphasizes the physical manipulation of the body's muscle tissue and bones, which includes the joints, muscles and spine.

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Both therapies are a type of alternative medicine and is a form of drug-free non-invasive manual medicine that focuses on total body health by treating.

8. Conclusion

A study published in *The New England Journal of Medicine* reported that patients receiving Osteopathic Manipulation Therapy (OMT) for low back pain required significantly less medication and less physical therapy than those who didn't receive Osteopathic Manipulation Therapy (OMT).

Regardless of the method of treatment, practicing healthy habits and taking preventive measures will reduce any chances of suffering from back pain, whether you are 5 years old or 75 years old.

As a result from above, Osteopathic Manipulation Therapy (OMT) significantly reduces low back pain for any people, acute or chronic. The level of pain reduction is also significant and persists longer periods of time. Thus, I could say that Osteopathic Manipulation Therapy (OMT) benefits are long lasting, and to assess the cost-effectiveness of Osteopathic Manipulation Therapy (OMT) as a complementary treatment for low back pain.

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