Osteopathic therapy for chronic pain
More people are trying this alternate approach

by Michael Zitney, MD and Dan Palma, OP

Osteopathic therapy is a holistic, hands-on treatment that is currently gaining ground in Canada. It’s already quite commonly used in the U.S., and was favoured by the likes of John D. Rockefeller, Franklin D. Roosevelt and J.F.K. In this article, we feature a discussion between Dr. Michael Zitney, a chronic pain specialist, and Dan Palma, an osteopathic therapist. The two discuss how they can best combine forces to treat patients with common chronic pain conditions.

Michael Zitney: Dan, what makes osteopathic therapy unique?
Dan Palma: Osteopaths believe most of the pain and problems we suffer stem from abnormalities of body posture and mechanics. Osteopathy looks at the soft tissues, especially the fascia, as a major determinant of joint function, rather than the other way around. By correcting abnormal and dysfunctional movements, many of the imbalances that cause pain will recede, allowing the body to heal. Osteopathy is based on the tenet that given the opportunity, the body is very capable of self-healing, adjusting and self-repair.

Michael Zitney: What kinds of conditions benefit most from osteopathy?
Dan Palma: Any painful structural condition, particularly if chronic, may respond to osteopathy, especially when treatment starts in a relatively early phase. An osteopathic approach works best in cases where there’s no obvious lesion dictating a standard medical treatment.

Michael Zitney: Can you give me some examples?
Dan Palma: Obviously, we see a lot of back pain in the clinic, but there are many other conditions that can respond to osteopathy: carpal tunnel, tennis elbow, plantar fasciitis, patellofemoral syndrome and headaches — especially those associated with neck pain, such as whiplash injuries and workplace problems. Pretty much any repetitive strain or sports injury can be treated as well.

Michael Zitney: That sounds like a lot of the patients who get referred to our pain clinic. How do you diagnose what’s going on with a patient?
Dan Palma: Like medical doctors, we rely very much on the history. Asking the proper questions
can unmask about 80-90% of the root of the problem. I ask patients about their activities — both at home and at work — and I also want to know about their diet, sleep patterns, and how they handle stress. This is followed by a thorough physical, a look at any imaging studies or lab work, and then a presumptive diagnosis is made. I monitor the individual carefully while starting treatment to gauge whether there are any improvements, which would confirm the diagnosis.

**MZ:** What do you look for in the physical exam?

**DP:** Our approach is to step back and assess the entire patient. Symmetry, ease and efficiency of movement are noted. We do a neurologic and orthopedic examination — not just for the presenting area but also for all the areas that may influence or be affected by the painful part. We place special emphasis on the spine because of the role it plays in stabilizing the body. Every level is assessed for movement in all 3 dimensions. We test range of motion of the joints, both passive and active, and we make note of any restrictions. Most importantly, soft tissues are examined for dysfunctions such as muscle over- or under-activity, inflammation, scar tissue, poor local circulation, congestion, abnormal nerve function, etc.

**The art of palpation**

**MZ:** Palpation is where many doctors become skeptical. What do you actually feel?

**DP:** Thickening of the soft-tissue, localized edema, dragging or friction between tissue planes, muscle spasm, deep bands or trigger point nodules, even subtle temperature differences can be detected.

**MZ:** Isn’t this very subjective?

**DP:** Palpation is critical to osteopathy, and is both a skill and an art. It improves with experience and training.

**MZ:** What studies and tests do you look at?

**DP:** I examine any x-rays, CT scans, MRIs, electromyograms and other tests that have been done — just as a medical doctor would. The difference is that osteopathy doesn’t stop when pathology, like a prolapsed vertebral disc for example, is noted. We want to know how that prolapse developed, what imbalances in the patient’s movement produced the forces that caused the prolapse.

**MZ:** That’s interesting. There’s an emphasis in modern medicine towards greater technology, as if we all need are machines with greater and greater resolution, and nothing would go undiagnosed. We tend to focus inward, ever more closely on the painful area, looking for abnormalities, i.e. pathology. It sounds like the focus in osteopathy is much wider, on the interplay among the tissues.

**DP:** Exactly. Often, the “pathology” is actually in the interaction between the bones, joints, muscles, nerves and especially the fascia, acting in an uncoordinated manner — something we call somatic dysfunction.

**The crucial role of the fascia**

**MZ:** Isn’t it funny that medical doctors, when they can’t find any pathologic defect to explain pain, call it “functional”? But let’s get back to the fascia — this is the second time that you’ve stressed its importance. I think of fascia as the boring stuff the dissection left off in medical school to get to the good parts.

**DP:** Fascia plays many crucial roles in the human body. It provides a supportive framework for the muscles — muscles couldn’t function without it. Areas of specialized fascia like the plantar, iliotibial, lumbodorsal and cervical are crucial for maintaining our upright posture. They’re commonly affected by postural problems. Fascia defines the pathways for the neurovascular bundles and lymphatic drainage channels by its organization into planes and compartments. It can be metabolically active, providing areas for fat storage and a medium for fluid shifts. Fascia contains deep nerves that can cause terrible burning pain and it has a tremendous capacity for inflammation, another painful process.

**MZ:** Hence your emphasis on hands-on, soft-tissue therapy. Correct the fascial abnormalities, and the rest will follow.

**DP:** Well stated.

**MZ:** What are some of the techniques you use to relieve pain?

**DP:** What technique we use depends on the patient’s needs. The focus is on fascial release using techniques such as strain/counter strain, proprioceptive neuromuscular facilitation and muscle energy techniques. Proprioceptive neurofacilitation is a hands-on technique where the therapist matches and counters the muscle contraction effort of the patient to achieve an isometric type of exercise. The carefully ordered application of this therapy can correct the firing pattern of muscle groups providing balance to the soft tissues around a joint.

The idea behind all these approaches is to apply a tiny but precise amount of force to promote movement of tissue fluids and to release compression and other abnormal forces acting on the muscles and joints. We also do osteo-articular adjustments, using a low-velocity, low-amplitude movement. It’s a gently applied impulse aimed at allowing the strained articulation to return to its natural position and function. To clarify, we would look at the joints only after correcting the fascial abnormalities as much as possible.

**MZ:** Give me an example of how you would treat someone with a very common problem, low back pain for instance. My initial concern is to check for “red flags” which would signify dangerous pathology like cancer or infection. Also, urgent operative lesions like cauda equina syndrome must be ruled out. Once these possibilities are eliminated, most patients end up with a diagnosis of “mechanical back pain.” At this point, I would get you involved in their care. What would your approach be?

**DP:** Unfortunately, when it comes to back pain, patients often present very late in what is really a progressive problem. Many people work in a situation in which they maintain one position during most of the day. Working at a computer or on an assembly line isn’t what our backs were meant to do all day. Taking the history, I would ask about previous episodes of back pain, activities outside of work, as well as about general health. The physical exam is a search for underlying abnormal forces that cause structural malalignments. For example, many patients with back pain have abnormalities of their gait, including weakened plantar fascia (so-called fallen arches) and/or abnormal leg, knee and hip movements. Usually, we find several problems, all triggering other problems in a vicious cycle. Dysfunctional forces in the

**Women welcome**

- the American School of Osteopathy was founded in 1892 by Dr. Andrew Still
- the first class had 12 male and 3 female students
- allowing women to participate was revolutionary at the time

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**Soft-tissue problems — in this case, trigger points (labelled TrP 1-3) — can imitate disc disease or sciatica; pain pattern is shown in pink.**
tissue around the sacroiliac (SI) joints in particular can cause pain in the back, and start the chain reaction of compensatory movement — ultimately leading to degenerative disc disease, disc prolapse and/or facet joint osteoarthritis.

The osteopathic treatment would consist of manual therapy to free up restricted tissue around the low back and SI joints. Any other contributing factors, e.g. in the legs, need to be addressed as well. The patient would be given a series of home exercises to reinstate the correct muscle firing patterns and to prevent the problem from returning. These exercises may change as the patient’s muscles strengthen over time. Custom orthotics can help support abnormally lax plantar and ankle joint ligaments, which might be triggering compensation up the entire kinetic chain.

**Therapeutic alliance**

MZ: What role do you see for the family physician?

DP: In my opinion, the referring doctor needs to remain completely involved in the patient’s care throughout treatment. The family physician (FP) usually has known the person for a much longer time, following them through various health problems along the way. FPs can compare the individual’s progress in this particular pain flare-up with others in the past. Also, working together, we can really reinforce a healthy lifestyle, like a good diet and regular exercise. Last but not least, the family physician is best suited to watch for symptoms of stress, anxiety or depression that may need to be treated.

MZ: Where does prescription medication fit in?

DP: Although osteopaths are trained to encourage a natural, holistic approach, I believe that a short course of medication can help many patients recover faster. Severe pain may prevent a person from being able to relax enough to do the exercises I give them or sleep well enough to heal. Low-dose antidepressants can help with sleep. Muscle relaxants can complement my soft tissue treatments and anti-inflammatories can help reduce joint swelling or stiffness. I like to provide feedback so that the physician can prescribe whatever they feel is the appropriate medication when necessary.

MZ: Well, I’ve seen this approach aid a great many patients who couldn’t be helped otherwise. Thanks for talking with me today. 

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