Headachetherapy.org

Michael Pys LMT., NMT, Dipl.OMT
Hands-on Solutions to Headaches and Pain
2150 Pfingsten Rd, Suite 2200
Glenview Illinois 60026
847-770-3332
Headpain2000@aol.com
www.pureheadache.com
www.headachetherapy.org
TREATING HEADACHE PAIN

Our Mission
To educate headache sufferers about anatomy of headaches, provide effective Osteopathic manual therapy and neuromuscular therapy to relieve headache pain; and to instruct patients in self-management techniques that can help prevent headache pain.

Our Pledge
Our practice has specialized in the treatment of headache pain for more than a decade. The Osteopathic manual therapy and neuromuscular therapies we provide is distinguished from all other forms of therapy in its ability to identify, evaluate and treat the causes of the vast majority of headaches – somatic dysfunction - soft tissue disorders in the neck, shoulder or jaw. To every patient, we make this pledge...

• We will produce substantial improvements in your condition (usually within five treatments) or we will not continue therapy
• We will work with your physician to evaluate your headache pain and rule out any underlying condition that requires medical attention
• We will teach you how to help prevent recurrence of your headache pain in the future.
• We promise to do all we can to relieve the headache pain of every patient we see.

“We will make every effort to ensure the accuracy and balance of information on this site. The vast majority of headaches are caused by soft tissue contraction which can be treated with manual therapy but a small percentage may be due to an underlying disease that needs medical attention.”

Michael and Barbara Pys

WHAT IS A HEADACHE?
When people say that have a “headache,” they may be describing anything from mild discomfort to pain so severe it is incapacitating. The pain may be localized in one or more areas of the head, neck, face or jaw.

A headache is a symptom, not a disease – a signal that something has gone wrong somewhere in the body. To provide effective treatment for headaches and prevent them from recurring, the underlying cause of the headache must be identified and treated.
According to the National Institutes of Health, an estimated 90% of all headaches are classified as tension/muscle contraction headaches – originating in the contraction of soft tissue in the neck, shoulder, jaw and scalp.

A number of other studies support the finding that most headaches are biomechanical in nature – caused by disorders of the soft tissue and skeletal systems in the upper anatomy. These complex structures involve muscles, nerves, blood vessels and bone. Soft tissue contractions in these areas can set off a chain of events that produce headache pain.

Headache pain can also be caused by arthritic changes in the spine or neck, whiplash and other injuries, jaw joint disorders, poor posture, drug side effects, or even something as simple as caffeine withdrawal.

Some headaches may be a sign of more serious underlying conditions such as infection, cardiovascular disease, or tumor. That is why the first step in discovering the cause of your headache pain should always be an evaluation by your family physician or other medical professional.

If no underlying disease process is identified in this medical assessment and the cause of the headache remains unknown, a careful neuromuscular examination of the neck, shoulders and jaw by a qualified therapist is the logical next step in a thorough evaluation. This exam can reveal the nature and location of any soft tissue contraction, which is causing the headache pain. As a trained manual therapists, we also offer treatment options for soft tissue disorders that will correct the problem, relieve the headache pain, and prevent headaches from recurring. Manual therapy techniques have proven beneficial to millions of headache sufferers.

WHY DOES IT HURT?

What hurts when you have a headache? Although it sometimes feels like it, it isn’t the bones of the skull or the tissues of the brain, because these parts of the body have no
pain-sensitive nerves. But the muscles of the head, neck, and shoulders, and the blood vessels across the surface and base of the brain all have nerve fibers that are sensitive to pain. This network of nerves extends over the scalp, temples, face, throat and neck. **But most often, the place where we feel the pain is not the place where the pain actually originates.** This is due to a phenomenon known as “referred pain.” Referred pain occurs when a nerve is stimulated at one location in the body and the sensation of pain travels down the nerve fiber to be sensed in another location. For example, heart attack pain is often felt as pain in the left arm or the jaw; gall bladder pain is experienced as pain in the right shoulder.

The source of the pain may be near the origin of the nerve fiber but the sensation of pain is felt in the part of the body where the nerve fiber ends, where its nociceptor is located and is activated by the nerve impulse.

The pain we experience as a headache is often referred pain that is actually originating in the shoulder, back, neck or other parts of the body. Relieving the headache pain means finding the true source of the pain and then treating the cause it at its source.

**ANATOMY OF A HEADACHE**

Headache pain may originate almost anywhere within our complex system of nerves, blood vessels, muscles, soft tissue and bone. Neurological, vascular and skeletal disorders can cause headache pain in a variety of ways. Some pain originates in the face or head. Other pain may be felt there, but through the physiological phenomenon of referred pain, actually originates in another part of the body, where treatment must be focused.

Contraction of the muscles of the head from stress or tension may stimulate entrapped nerves and cause the localized sensation of headache pain to be sent to the brain.

A network of blood vessels surrounds the head and carries blood to the brain. Abnormal function of this vascular system, sometimes caused by compression of blood vessels by muscles or tissue in spasm, can lead to headache pain.
The jaw is the most complex joint in the body, able to open and close, move side to side, and slide forward and back. Muscles, ligaments and a small cartilage disk operate the jaw. Muscle spasms or dislocation of this disk can cause headache pain.

Disorders of the neck muscles or bones of the cervical spine (the vertebrae of the neck) may cause pain in the area where the disorder occurs, or transmit the pain to an area of the head where it is experienced as a headache.

Shoulder and back muscles can be affected by tension and stress. As these powerful muscles contract, they may constrict blood vessels or activate nerves, causing referred headache pain.

Occasionally, muscle contraction headaches may be accompanied by nausea, blurred vision, or sensitivity to light and sound. Chronic muscle-contraction headaches can last for weeks or months. The pain of these headaches is often described as a tight band around the head. Muscle-contraction headaches can even cause sore scalps – combing one’s hair can become painful.

**WHEN TO SEEK HELP**

All headaches require medical attention. Mild, severe, chronic, or recurring – headache pain should always be diagnosed by a physician. Headaches are never normal and they may signal a serious underlying condition. Warning signs calling for prompt medical evaluation include ...

- Loss of balance, Impaired speech, vision, movement or other neurological problems, especially if these symptoms were not present with previous headaches.
- Loss of consciousness
- Headaches that become worse when lying down
- Headaches that start very abruptly
- Sudden severe headaches associated with a stiff neck.
- Headaches following a blow to the head
• Unusually severe headaches, especially if associated with sneezing or coughing, exercise, or changes in head position
• Headaches during pregnancy, especially the third trimester
• Headaches associated with spinal pain
• Headaches associated with nausea, vomiting or fever
• Persistent and severe headaches
• Headache that is different from any previous type
• Recurring headaches in children
• Headache in patient with a history of cancer

For many headaches, evaluation and testing by an internist, neurologist or other physician(s) does not result in a clear diagnosis, and the cause of the headache pain remains unknown. In these cases, it is logical to seek a professional assessment by a qualified manual therapist who may locate and identify soft tissue disorders that are causing the headache pain.

Most manual therapists recommend that patients make an initial visit prior to taking medication for headache. Pain medications mask the headache symptoms, making it more difficult for the therapist to locate and assess the origin of headache pain in soft tissue or skeletal disorders of the neck, shoulders and jaw.

**Evaluation**

This evaluation may include the temporary reproduction and easing of headache pain through palpation techniques. By recreating the headache and then relieving it, the manual therapist can localize the exact source or sources of the headache pain (there may be more than one), which greatly increases the likelihood of a successful treatment outcome. This need to temporarily reproduce the headache is why patients are advised not to begin any pain medication prior to their initial visit with the manual therapist.

This also usually includes a detailed history of the headaches, including the nature, severity, frequency and duration of headache pain; the specific location of the pain, and
the circumstances surrounding the onset of headaches. Headaches often have clear-cut symptoms which fall into a recognizable pattern. This initial evaluation may also assess the patient’s posture, sleep and exercise habits, exercise routines and other factors.

We will also use **hands on palpation** techniques to complete their detailed evaluation and precisely locate the cause of the headaches and develop a treatment plan.

**The role of drugs**

Drugs have an important role to play in managing headache pain and there is a place for drug therapy in an overall treatment plan. But the drugs treat the symptom and not the cause of the headache. If the origin of the headache is a soft tissue disorder in the upper body, manual therapy can play an essential part in relieving headache pain by treating it at its source.

A wide range of drugs are used to treat headache pain, from prescription medications to over-the-counter remedies. Some are given in an attempt to prevent headaches and others are prescribed to relieve the symptoms once a headache begins. It is important to note, however, that many headache pain medications can have adverse side effects. Like most drugs, they are relatively safe when used carefully and under a physician’s supervision. The National Institutes of Health states: “To avoid long-term side effects of preventive medications, headache specialists advise patients to reduce the dosage of these drugs and then stop taking them as soon as possible.”

There are five basic categories of headache drugs:

- pain medications
- muscle relaxants
- anti-inflammatories
- anti-depressants
- anti-convulsants.
Generally, medications prescribed to reduce the frequency of headaches need to be taken daily to be effective. These medications are less helpful to patients with infrequent headaches, and may also be less tolerable. Patients need to be aware of potential side effects.

**THE ROLE OF OSTEOPATHIC MANUAL THERAPY**

Manual therapy includes a range of palpation techniques designed to treat stress-related disorders of soft tissue and skeletal systems. As manual therapists we can also offer an individual headache prevention plan to help avoid the onset of headaches. This might include counseling on home care, correct posture, sleep habits, exercise and diet.

We are also recognize that, while the overwhelming majority of headaches are caused by muscle and soft tissue disorders, there are other causes of headaches, which have underlying medical causes and require the attention of a physician. Some headaches may have more that one cause.

**But with 90% of headaches coming from muscle contraction and tension, manual therapy has the ability to treat the cause of most headaches, rather than simply controlling the symptoms.**

Osteopathic manual therapy may involve different techniques, including neuromuscular therapy, craniofacial therapy, myofascial therapy, joint mobilization and other forms of manual therapy.

This evaluation may include the temporary reproduction and easing of headache pain through palpation techniques. By recreating the headache and then relieving it, we can localize the exact sources of the headache pain (there may be more than one), which greatly increases the likelihood of a successful treatment outcome. This need to temporarily reproduce the headache is why patients are advised not to begin any pain medication prior to their initial visit.
Once a soft tissue cause of the headache is identified, the therapist can recommend a treatment plan and home program. Typically, two visits every week are sufficient to reduce or eliminate soft tissue headaches.

The longer one waits to seek evaluation and begin a treatment program, the more chronic the condition may become, and the more treatments may be required.

**WHY OSTEOPATHIC MANUAL THERAPY WORKS**

Osteopathic manual therapy is a scientific approach to restoring the body’s biomechanical balance, treating disorders such as chronic muscle and soft tissue contraction, nerve or blood vessel compression, joint dysfunction, and other potential sources of headache pain. Manual therapy addresses the root causes of most headaches and offers treatment protocols that can correct them – without side effects, and with the ability to prevent headaches from recurring.

Rather than a systemic approach – chemically blocking the brain’s ability to feel pain, for example – manual therapy is a targeted approach. **It identifies the problem and selectively treats it at its location to correct the disorder.** The manual therapy practitioner performs “hands-on” joint and muscle mobilization and stabilization techniques. Manual therapy restores balance between the musculoskeletal system and the nervous system. (It does not involve spinal manipulation or “cracking” the neck). It has proven effective in treating the types of disorders that can cause headache pain. The unique ability of manual therapy to temporarily reproduce headache pain and then decrease it is a major advantage in this treatment protocol. This ability allows the therapist and patient to work together in identifying the specific musculoskeletal systems contributing to the headache pain, and to determine the effectiveness of therapy techniques used to correct the dysfunction.
HEADACHES & PREGNANCY

Headaches are common during pregnancy, but they rarely signal a serious problem. While expectant mothers are concerned about taking any drugs that may harm the baby, there are several treatment options for dealing with pregnancy-related headaches.

Headaches are usually most frequent during the first and third trimesters. In the first trimester, hormonal changes and increases in blood volume may contribute to headache pain. Emotional and physical factors such as changes prompted by the pregnancy can cause headaches. As your body adjusts to these changes, the headaches tend to diminish. In the third trimester, carrying the additional weight of the baby can affect posture, leading to muscle contraction headaches. Increasing tension can also contribute to headache pain.

As the baby grows and gains weight, the mother’s center of gravity shifts. To compensate, the pelvis shifts forward and the pubic bone backward – increasing the curvature of the spine. The neck loses its normal curve and the head shifts forward. With all of these postural changes, muscles are stressed in new ways, leading to tension/contraction headaches.

Modern manual therapy techniques are especially valuable during pregnancy, because many pain-killing drugs should not be taken by expectant mothers. Manual therapy can directly treat the mechanical stresses on the spine, joints, and muscle systems that produce pregnancy-related headaches, with no threat to the health of the developing baby.

Hormonal headaches

Many women experience “menstrual headaches” that occur around the time of the menstrual period. Other women develop headaches for the first time when they are pregnant. But whatever this may be, it seems clear that the headaches are due to the effect of changing hormonal balances within the body – the headaches are due to some form of
chemical stress. **Generally, whatever the cause of stress, the body has the same reaction – contraction and tension in the muscles and soft tissue.**

The hormonal changes that appear to trigger these headaches may be a necessary part of a woman’s stage in life, but in most cases the headache pain may be successfully relieved with manual therapy techniques that can locate and treat the soft tissue problems hormonal changes cause.

**HEADACHES IN CHILDREN**

The most common cause of headaches in children is the same as for adults – soft tissue contraction in the neck, shoulders and head. Poor posture, stress at school or at home, anxiety, and depression can affect soft tissue which contracts and produces headaches in young people. Poor posture is a most common cause of muscle tension and resulting headaches.

Repetitive actions such as playing a video game for a long period of time or working on a computer with the head tilted down can bring tension/contraction headaches. As with any chronic headache pain, a medical evaluation should be the first step.

Headaches in young children are sometimes difficult to identify, because the child may not be able to explain what he or she is feeling. Children 10 and older are the most likely to experience headaches caused by stress and the resulting soft tissue contraction. These headaches are often described as a tight band around the head, or a soreness or tightness in the neck muscles.

Prevention may be as important as treatment in relieving a child’s headache pain.

Teaching a child to sleep on his or her back with only one pillow under the neck will keep the lower spine flat to the mattress for good support and less stress. A roll under the knees is also beneficial. While children generally move about in their sleep, a roll about 36 inches in length will help keep the child from turning onto his or her side or stomach.
Sitting posture is also important, especially with the long hours children spend at a desk in school or at home doing homework. Good posture habits learned in the early years can help prevent posture-related headaches through the adult years.

Contact Michael and Barbara Pys at:
Headpain2000@aol.com

Michael Pys
Hands-on Solution to Headaches and Pain
2150 Pfingston Road, Suite 2200
Glenview, IL 60026
847-770-3332

Barbara Pys LAT., LMT
1234 barbara str
Northbrook Il, 60026

Michael Pys is a Osteopathic manual therapist practicing in the Chicago area. Educated at the Osteopathic College of Ontario, Uppleger institute. St.John Neuromuscular Pain Relief Institute, he has continued his study of neuromuscular therapy with programs in North America. Michael has specialized in headache therapy since 1995, successfully treating thousands of patients with headache pain. His wife Barbara is also a practicing therapist.

Headachetherapy.org and Pureheadache.com was created by Michael Pys to help headache sufferers understand their condition and the treatment options available to them.