



Cranial Therapy & Holistic Physical Therapy for Concussions and Sports Injuries

By Ayelet Connell, PhD, PT, IMT,C

Have you ever felt completely helpless after one of your children incurs a sports injury or after you have injured yourself? We have all heard the phrase, “time heals all wounds,” and sometimes this is actually true. But often, time is not enough. In the case of concussion head injuries, the most common recommendation is to stop all media and rest until symptoms disappear. But for so many people suffering from acute and chronic concussion injuries, this is not enough. Fortunately, there are gentle therapies that you can use to support the head and central nervous system that may speed up healing of these tissues and help the person feel better faster.

Cranial Therapy

Cranial Therapy, commonly practiced by Holistic Physical Therapists, is a gentle hands-on therapy that can augment the health and regeneration of the nervous system, specifically the brain and spinal cord. It corrects tension patterns in the head and strengthens the cranial rhythm, which can reduce many different symptoms, including headaches and learning challenges as well as behavioral disorders. It can be an important component of a treatment program for individuals suffering from concussion head injuries. It can be used for a variety of related issues, including headaches, hypersensitivity to light and sound, attention deficit, tinnitus, aggressive behaviors, and so much more.

The cranial system houses our brain. Within the cranium, there is cerebrospinal fluid (CSF), which nourishes the brain and provides immune support and layers of tissue, called meninges, that surround the brain and protect it from trauma and infection. For many years, the traditional medical community believed that the sutures (joints) of the cranium solidified at a young age and no longer moved. We’ve since learned that using very gentle Cranial Therapy techniques, movement can be felt on the head. This movement is called a motility. Motilities or biologic rhythms are movements that represent the physiologic health of specific tissues and systems. One example of a motility is our pulse, which reflects the health of our arterial system. Feeling the pulse on different parts of the body provides us with information about the circulatory health of that part of our body. There are many different motilities that can be felt on the body. Holistic Physical Therapists practicing Cranial Therapy will monitor a patient’s cranial rhythm as part of the therapy.

Cranial Therapy can be used to treat many issues related to a head injury. For example, one commonly found pattern is ringing in the ears. Within the inner ear, there are multiple important structures for hearing, including the cochlea, ear drum, vestibular nerve, and more. When combined into the vestibular mechanism, these structures are not much larger than a peanut. They reside inside the ear, bordering the temporal bone. When there is severe compression which is common with a head injury, this peanut sized vestibular mechanism within the inner ear pushes up against the temporal bone. This can contribute to significant hypersensitivity to sound as well. Using cranial therapy, a therapist can decompress the inner ear which can lead to reduced symptoms at the ear.

Dealing with severe cranial/head symptoms adds a lot of stress to the body. Cranial Therapy specifically addresses the central nervous system and can reduce overall stress. Cranial Therapy does not need to replace another part of the treatment program but can be a wonderful addition to promote brain health.

Integrative Manual Therapy (IMT) for Concussion-related Headaches

Headaches and migraines are common symptoms following concussion injuries. These types of injuries typically cause the spine to be out of alignment. Often, when someone experiences regular headaches, including severe migraine headaches, it is largely because of poor alignment of the spine following one or multiple injuries. One successful way of improving the health and posture of our body is with Integrative Manual Therapy or IMT. IMT is a type of gentle hands-on bodywork performed by some Physical Therapists, Massage Therapists, Occupational Therapists and Chiropractors that are specially trained in this type of therapy.

When the spine is out of alignment, one thought would be to mobilize it back into a normal neutral position by using traditional Chiropractic or Physical Therapy. But this does not always work. Sometimes there are underlying factors for why the spine is out of alignment; consider the concept of a protective mode. When there is something in the body that is injured or weak, the body will commonly limit movement or mobility around that area ‘on purpose’ so that we don’t make the injured area worse by moving. Following a concussion head injury, the body will often ‘lock-up’ and limit spinal

movement because the brain is in a weakened state and there is injury to the internal tissues of the head and neck. Though the low back will often go into a protective mode, this can cause considerable neck and head symptoms. Most of our body's movement stems from the low back. When the low back locks up, movement in our entire body is limited. This limitation of movement can contribute to headaches as well as neck and upper back stiffness and pain.

IMT can be very successful in identifying underlying reasons for why we are locked up in our spine. The IMT therapist is trained to find these areas and implement gentle, hands-on techniques to improve the health of these areas by promoting circulation to the area and drainage from the region, reducing tissue tension at the region and health of the injured tissues. By creating greater health in the protected area, the body requires less protection and the locked up area of the spine begins to loosen. At this point, as the spine is gently mobilized, there are more long-lasting results in movement and pain, including a reduction in headaches.

The idea of treating the low back to reduce headaches may seem odd. We can consider the old children's song, which has passed through the ages: "the neck bone's connected to the head bone..." The body is complex and remarkable in the way that it 'works'. In this case, the concept of a protective mode makes a lot of sense. Our bodies have a great capacity for healing. Equally, when our body is injured and we need to 'function', we have a great ability to compensate and protect ourselves. By improving the health of our body through body work we can feel better and return to a lifestyle that is unencumbered by headaches and other head injury related issues.

Dr. Ayelet Connell, PhD, PT, IMT,C is President and owner of Integrative Wellness & Physical Therapy in Bloomfield CT, a wellness center offering Physical Therapy, Integrative Manual Therapy, Chiropractic, Acupuncture, and nutritional wellness. Ayelet is a natural health expert and has written and published many articles on the subject. She is a Physical Therapist and Certified Integrative Manual Therapist and has taught courses all over the world in Holistic Physical Therapy. Ayelet is also a local of this community and has been living in the Greater Hartford area for many years, where she integrates a healthy lifestyle at home with her wonderful family.