

Headaches



One of the most commonly treated complaints in our office is headache. While there are many types of headaches with varying causes, the most common type is the "Muscular Tension Headache."

Tension headaches generally result from prolonged contraction of the suboccipital muscles. These muscles bridge the junction between the posterior (back) of the skull and the vertebrae (bones) of the cervical spine (neck). Several mechanisms seem to be involved in the causation of the common headache:

- Fascial restrictions causing pressure on pain sensitive structures
- Muscle inflammation and "trigger points."
- Joint irritation and nerve compression.

Fascial restrictions

As the fascia tightens, it can compress muscles, nerves, blood vessels, joints, organs and cells. The restrictions shorten over time, as a result of poor postures, inflammatory processes, surgical scarring, trauma etc. These restrictions tighten around the neck and head and literally make the head feel like it is about to explode, the brain feels "weighed down". The dura-mater surrounds the brain, this is the toughest fascia of them all – it also surrounds the spinal cord, attaching all the way down at the 2nd sacral segment. As extra dural (outside the dura) restrictions pull on the dura, it can affect pressure inside the head and on the brain, resulting in a headache or migraine.

Muscle Inflammation and Trigger Points

Today more than ever people are inclined to sit for hours with contracted postural muscles but without substantial physical activity. When muscles contract they burn fuel and produce waste. Among the waste products of muscle contraction are lactic acid, histamine and bradykinins. These waste products are irritants. If they are not efficiently removed from the muscle they can cause muscular inflammation, pain and accumulate into localized tender areas known as "trigger points."

These waste products should normally be diluted and removed from the muscle tissue by the circulation. This process relies on the normal "contract - relax" cycle in the muscle. When the muscle contracts it creates a high pressure on the fluids inside the muscle and pushes the blood out carrying away muscular waste products. When the muscle relaxes the pressure falls and blood floods back in carrying vital nutrients and fuel.

When we sit or stand we are using the many back and neck muscles required to support our body. When these muscles are held contracted for a prolonged time (hours spent sitting or standing), they are producing irritative wastes, but not relaxing and draining themselves of these irritants. Over time these irritants can cause the muscles to lose their natural suppleness and resting length becoming stiffened and shortened. These stiffened and shortened muscles, often accompanied by trigger points can cause reflex pain into the neck and head.

Joint Irritation and Nerve Compression

The vertebrae of the spine fit together on moving joints that provide strength to the structure of the spine and maintain the vertebrae in proper working alignment with one another. The joints of the spine in the neck are richly innervated (supplied) with nerve fibers that can cause pain in the head and neck if the joints are physically strained or injured.

Once the above process has produced stiffness and shortening of the muscles in the neck the joints of the spine are no longer properly stabilized or supported. The affected joints of the spine often become subluxated (misaligned). This causes strain and injury to the joints and supporting ligament tissue. The result of the combined subluxation, tight fascia, ligament strain and joint injury is often neck pain with associated headache.

Treatment

Scott utilizes myofascial release to relieve the pressure on pain sensitive structures, which in turn improves circulation to muscles, range of motion of restricted joints and eases the whole system. This combined with physical therapy modalities such as electrical muscle stimulation, ice, and heat help to decrease the inflammation in the neck, which reduces your pain.

The next step is to keep your muscular-fascial stress and range of motion in your neck at a normal level. This is accomplished through proper stretches and exercises. Scott will guide you in your rehabilitation through the whole process. Call us today for an appointment at 845 940 1050 to get out of pain now.

