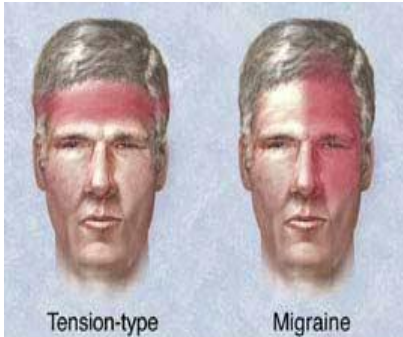


Headaches



Headaches can be a frequent affliction for many individuals.

While there are several categories of headache, two common diagnoses are the tension headache and the migraine.

The causes of tension and migraine headaches are not well established. It is theorized that the tension headache is caused by contraction or decreased flexibility in the muscles of the scalp, jaw and neck.

Conversely, a migraine headache is thought to be caused by sensitization of the trigeminal nerve, caused by a change in serotonin levels in the brain. This in turn results in dilation and inflammation of intracranial blood vessels.

Individuals experiencing tension headaches may describe:

- dull, aching head pain
- tightness or pressure across the forehead, sides or back of the head
- scalp, neck and/or shoulder tenderness

Migraine sufferers report:

- severe, pulsating pain on one or both sides of the head
- increased symptoms with activity
- nausea
- sensitivity to sound and light

Tension and migraine headaches can be managed pharmacologically. In addition, a registered physiotherapist specializing in the biomechanical assessment and treatment of spinal conditions can determine whether a headache is cervicogenic in origin – as is often the case with tension headaches. By evaluating the flexibility, strength and motion of the joints and muscles in the cervical spine, cervicothoracic junction and craniovertebral region, underlying causal factors for the tension headache may be addressed.

Physiotherapy treatment for tension headaches includes hands on treatment to stretch and loosen the muscles and joints of the neck and shoulders. As well, clients are taught how to manage their symptoms independently by performing **exercises** to keep their joints and muscles mobile. They also learn how to improve the strength of muscles that promote ideal posture – resulting in less stress and tension in the neck and shoulder girdle.

A study published in 2002 in the journal *Spine* examined the effectiveness of **manual therapy** – “hands on” treatment to loosen stiff joints - in combination with prescribed exercises to strengthen muscles supporting the head and neck. In this randomized controlled trial, individuals who received this form of physiotherapy had significantly decreased intensity and frequency of headaches, as compared to those receiving sham treatment for their pain.

Physiotherapists may also use **pain relieving modalities** in the treatment of both migraine and tension headaches. These are non-medicinal treatment approaches to help decrease pain such as ultrasound, electrotherapy and acupuncture.

Acupuncture in particular has been demonstrated to be effective in the management of headache pain. The Cochrane Database of Systematic Reviews published a report in January, 2009 evaluating the effectiveness of acupuncture in the treatment of both tension and migraine headaches. After pooling all available research, the researchers concluded that acupuncture was equally effective if not superior to the use of medication for prevention of migraines, especially in light of the fact that acupuncture gave rise to fewer adverse side effects than the prescribed medication. As well, sufferers of both migraine and tension type headaches reported a statistically significant improvement in pain intensity and frequency of headaches when treated with acupuncture.

References:

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 Linde K et al. *Acupuncture for migraine prophylaxis.* *Cochrane Database Syst Rev.* 2009 Jan 21;(1):CD001218.

For further information about physiotherapy or acupuncture treatment for headache pain, please contact:

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