Can Massage Therapy Help Relieve Headaches?

Written by Kiri Lowe RMT(MNZ)

Of all the symptoms we experience headaches are the most common¹. Most people will experience a headache sometime in their life. There are three main types of primary headaches. They are migraine, Tension Type Headache (TTH) and cluster headaches. "In developed countries, TTH affects almost 70% of adult males and over 80% of females." Massage therapy can effectively relieve TTH. It can also help reduce the frequency and severity of the pain, thereby preventing further headaches. Treatment massage targeting the neck and shoulders applied by a remedial massage therapist (RMT) has the potential to greatly reduce TTH with a flow on effect for several months after treatment.

According to an Australian Bureau of Statistics survey in 1995, 15% of the Australian population were taking medication for headaches.³ However the fact that worldwide, "half of people with headache are estimated to be primarily self-medicating"⁴ would suggest use of medication is much higher. Massage therapy has the potential to greatly reduce TTH and thereby reduce the need for headache medication.

The causes of TTH are not fully understood. A review by Boulder College of Massage Therapy stated that there is evidence that some forms of TTH may result from continued isometric contraction of muscles connected to the head and neck. Prolonged contraction of the muscle may cause nutrient deficiencies in the area through ischemia, which can lead to active trigger points in the muscles. The contracted area can remain tight for a prolonged time without sympathetic activation, these conditions may result in TTH.⁵ "The activation of myofascial trigger points has also been implicated as a cause of headache. Manual treatment of trigger points has also been suggested for reducing trigger-point pain. Massage therapy techniques, which act in part to increase blood flow to tissue, may also reduce the activity of a trigger point. Thus, it is possible that headaches originating from this etiology may be reduced with massage therapy."⁵

Most RMT's in New Zealand are trained in trigger point therapy and all are trained in muscle specific massage beneficial to TTH. Many trigger points (of the neck and shoulders) pain referral areas are on the head and can therefore be the cause of the headaches. A few common trigger points and their referral areas are

¹ http://headacheaustralia.org.au/what-is-headache, August 2012.

² World Health Organization, Fact sheet N°277, March 2004.

³ http://headache.com.au/faqs-stats.html, June 2012.

 $^{^4}$ Atlas of headache disorders and resources in the world 2011, A collaborative project by WHO and Lifting the burden.

⁵ Massage Therapy and Frequency of Chronic Tension Headaches Christopher Quinn, DC, Clint Chandler, BS, and Albert Moraska, PhD, Boulder College of Massage Therapy, 2002.

listed in *Table 1*. These are some examples of how active trigger points can refer into the head causing headaches. Muscle-specific massage therapy has the potential to be a functional, nonpharmacological intervention for reducing the incidence of chronic tension headache.⁵

Muscle	Trigger Point Referral Pattern Area
Trapezius	Upper Trapezius- can mimic tension headache,
	around jaw up behind ear and over head to eye on
	same side
Sternocleidomastoid	Behind ear, back of head, around and behind eye.
	Can mimic tension headaches and migraines
Temporalis	Temporal headache area
Semispinalis Capitis	Upper Semispinalis Capitis - back of head
	Middle Semispinalis Capitis - mimics temporal
	headache above eye and temple and around head

Table 1: Common muscles of the head and neck and their referral areas.⁶

A Taiwanese study showed acupressure or trigger point massage was more effective than muscle relaxant medication. It also had ongoing value with participants having continued reduction in headaches and the related pain for six months after the treatment was applied. They also had marked improvement in their quality of life.⁷

Work capacity and social activity are decreased in almost 60% sufferers of TTH,⁸ at great cost to the community. Not only has massage treatment been shown to reduce the number of headaches but is shown to continue to give these results for months after treatment. It is also a treatment that can help resolve the cause of the headaches, whereas headache medication is only dulling the symptoms temporarily. With improved neck and shoulder health through massage and some basic postural tips and stretching and strengthening the headaches could at least be greatly reduced at pronounced benefit to the community. "26 adults with headaches were randomly assigned to a wait-list control group or to a massage therapy group, who received two 30-minute massages per week for five consecutive weeks. The massage therapy subjects reported fewer distress symptoms, less pain, more headache free days, fewer sleep disturbances, and they showed an increase in serotonin levels."

⁶ http://www.triggerpoints.net/head-and-neck-pain.htm, August 2012.

⁷Effect of acupressure and trigger points in treating headache: a randomized controlled trial. Hsieh LL, Liou HH, Lee LH, Chen TH, Yen AM, Kaohsiung Medical University, Taiwan, Pubmed, 2010.

⁸World Health Organization, Fact sheet N°277, March 2004

⁹ Hernandez-Reif, M., Dieter J., Field, T., Swerdlow, B., & Diego, M. (1998). Migraine headaches are reduced by massage therapy. *International Journal of Neuroscience*, *96*, 1-11.

All of these results can greatly reduce the person's risk of depression or other stress related disorder. The long-term effect of dealing with chronic headaches may also predispose the sufferer to other illnesses. For example, "depression is three times more common in people with migraine or severe headaches than in healthy individuals." ¹⁰

TTH is of great cost to the community with loss of productivity and lowered quality of life. The results from neck and shoulder targeted treatment massage therapy show that not only is it more effective than pain relief medication but also has a longer flow on effect of less headaches and increased quality of life for several months after treatment.

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¹⁰ World Health Organization, Fact sheet N°277, March 2004.