

# Headache

## Summary Sheet

### Evidence-Based Assessment of Acupuncture Series

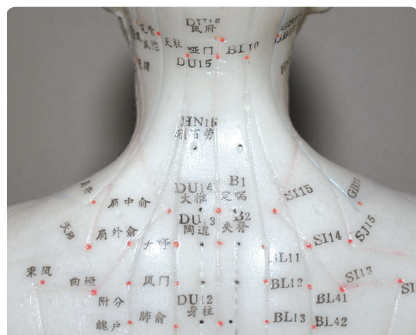
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#### Headache Overview

Primary headaches are primarily differentiated into two categories: migraine or tension type (TTH). Most headaches are diagnosed as non-specific (no 'diagnosis'), followed by TTH (42%), migraine (11%) and chronic headache (3%).<sup>1</sup> Unfortunately, the frequency of non-specific headaches leads to challenges in appropriate treatment.

The cause of headache is poorly understood. A genetic link is suspected and it does appear that the incidence peaks between age 30-39.<sup>1</sup> Interestingly, research suggests that migraine patients often experience TTH, yet TTH is unlikely to trigger migraines.<sup>2</sup>

Current treatment approaches consist of patient education and acute & preventative treatment options, most often multiple medications combined with stress reduction techniques. Yet, the financial burden of headache is large, with U.S. estimates of \$1 billion in direct costs (e.g. MD visits) and ~\$13 billion from indirect costs.<sup>3</sup> These findings led to a recent guideline suggesting new therapies, such as acupuncture, for the management of headache.<sup>4</sup>



#### Headache in Traditional Chinese Medicine (TCM)

TCM practitioners view the body in terms of Qi-dynamics and use unique and specific terminology. This is best summarized by the axiom *"one pattern many diseases, one disease many patterns;"* suggesting that identification of the correct pattern (e.g., Kidney qi deficiency) leads to improved patient care through the selection of pattern-specific acupuncture points.

In the case of chronic headache, patients are commonly categorized into 1 of 10 patterns.<sup>5</sup> TCM-theory suggests that internal 'organ-system' factors, external 'elemental' factors, and lifestyle imbalances (e.g. stress and diet) lead to qi blockage and the common symptoms of headache-related pain.

Generally speaking, patients can expect acupuncture performed both local to the area of pain and distally, with the goal of relaxing the muscles and opening the meridians.<sup>5</sup> In addition to acupuncture, treatments may also include local massage, herbal formula, moxibustion (heat therapy), and home therapies such as stress-reducing techniques.

*"Where there is free flow there is no pain, where there is pain there is no free flow."*

#### Findings from the Acupuncture Research

**Based on the evidence, acupuncture is beneficial and cost-effective for the treatment of tension-type and migraine headaches.**

- The most recent systematic reviews conclude that acupuncture is a beneficial treatment option.<sup>6,7</sup>
- Two large pragmatic trials suggest acupuncture adjunctive to other therapies is cost-effective.<sup>8,9</sup>
- A landmark meta-analysis of individual patient data (3,962 patients; 5 clinical trials) found acupuncture beneficial for chronic headache.<sup>10</sup>

#### Summary and Commentary

The World Health Organization lists headache disorders as one of the top 10 most disabling conditions; #5 for women.<sup>11</sup> The condition carries a substantial financial burden and occurs with frequency (46% incidence world-wide).<sup>1</sup> Despite the high prevalence, the specific 'cause' of headaches is poorly understood.

Frequent and repeated medication use is not recommended as it can lead to 'medication-overuse chronic daily headaches'.<sup>12</sup> Instead, a multi-treatment approach is recommended (which can include acupuncture) for the management of headaches.<sup>4</sup> Indeed, the most recent evidence from clinical research suggests that acupuncture is beneficial and cost-effective.<sup>6-10</sup> Although numerous & varying acupuncture treatment protocols have been studied, visit frequencies were similar in the clinical trials. To generalize, participants most often received 12 acupuncture treatments over 3 months.

## Scope and Purpose of Evidence-Based Assessment of Acupuncture Project

This project is supported by the Society for Acupuncture Research. It includes a growing library of condition specific assessments and summary sheets on topics such as dysmenorrhea, low back pain, neck pain, etc. Our aim is to evaluate the literature with a focus on systematic reviews and randomized controlled trials. When appropriate, other levels of evidence (e.g. case studies) are also referenced. The goal of the project is to inform policy-makers, clinicians, and the public of trends in the acupuncture literature and to provide expert commentary on the state of this evidence.

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Prepared December 2013:  
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