

Mitigation of head and face pain utilizing a specified approach to locate and treat trigger-points found in the cervical musculature

Abstract

INTRODUCTION: The purpose this manuscript is to share what has been found to be a recognizable and treatable precipitating anatomical factor in the development of chronic headaches or chronic head or face pain. This manuscript aims to provide a viable solution to those wishing to gain more control of their pain; thus exercising an active role in mitigating their head and face pain through the discovery and elimination of trigger-points found in specific cervical musculature representing a cause and effect mechanism during the treatment process.

OBJECTIVES: In this report, the author will clarify that which defines a trigger-point^[1] and the role in which understanding this mechanism plays a vital factor in the mitigation of head and face pain. Also, the process of identifying and treating the trigger-point will be explained. Lastly, the intended result will be discussed to demonstrate the efficacy of the method.

METHOD: This discussion is limited to locating trigger-points within the sternocleidomastoid muscles and the upper trapezius muscles in subjects with active chronic head or face pain. Initially, one must locate the presence of a trigger-point; causing referred pain to the head and/or face. During the trial, the practitioner continues stimulation to an identified trigger-point until the referred pain ceases. Upon complete reduction of referred pain, the trigger-point would be considered temporarily eliminated or inactivated.

RESULTS: Results were documented and tallied to determine the efficacy of the process. The percentage of total participants examined with trigger-points whose head or face pain was abated successfully during the procedure is considered a positive result.

CONCLUSION: It has been well demonstrated that the elimination of trigger-points within specific cervical musculature, when treated appropriately, has been shown to bring about contemporaneous head and face pain relief and/or may reduce the frequency, duration and intensity of a variety of chronic headache syndromes.

Keywords (5): headache treatments, advances in headache management, treatment for headaches without medication, DIY headache treatment, natural headache remedies

Participant Characteristics

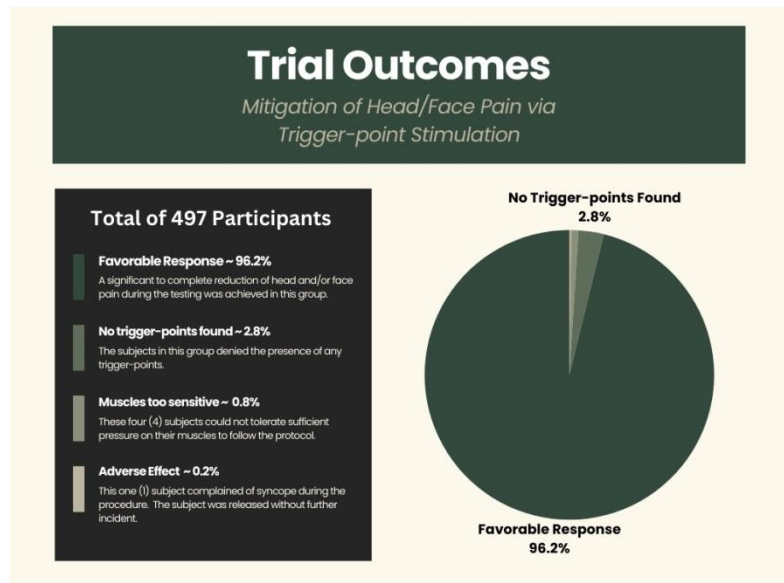
The subjects asked to participate required the presence of an active headache during the session that was chronic in nature and not as the result of any known injury; physical or chemical in nature. Each participant was required to be from 12 years to 79 years of age in otherwise healthy, ambulatory condition. Each participant was requested to participate in a post procedural questionnaire. The terms of the study allowed all participants to remain anonymous.

Trial Design and Outcome Measures

Each subject described their active headache in terms of the location of pain and its level of intensity; utilizing the 11-point scale ^[2] of 0-10 with 10 being the most intense.

Next, the subject/patient was asked to assume the supine position to be examined. A standard protocol referred to as the STEP Method was used to evaluate for the presence of trigger-points within two specific muscles; the sternocleidomastoid and the upper trapezius muscles on each side of the neck beginning with the right. This method stipulates to begin examining for the presence of trigger-points in the right sternocleidomastoid muscle at its attachment to the sternum and clavicle. The muscle is gently lifted, brought between two or more fingers and then a squeezing pressure is applied.

As such, one would digitally stimulate a section of the muscle to determine if this causes referred pain into the head or face. The examiner is required to wait 4-5 seconds with continuous pressure at each level before moving forward. If referred pain is elicited, then a trigger-point has been identified and noted. In accordance with the protocol, the practitioner continues stimulation to the trigger-point via digital pressure or squeezing the trigger-point in the muscle continuing to cause referred pain into the head or face until the pain subsides completely. This typically takes less than one minute. Additional manipulation of the muscle may produce additional pain; therefore continuous stimulation is required until no more referred pain is produced from squeezing the muscle at this location.



As a direct result, this trigger-point would be considered temporarily eliminated or inactivated when there is no more pain elicited. In the absence of a trigger-point, the examiner progresses approximately 1-2 centimeters along the length of the muscle in search of the next trigger-point. This process is repeated along the entire length of the each of the muscles mentioned above until no more trigger-points remain active or produce referred pain to the head or face.

A total of 512 subjects were examined and/or treated using this method from October 1979 through May 2023. Results were tallied over time using a spreadsheet and stored digitally.

Of the combined 512 participants, 497 completed the post-procedural questionnaire.

Of the 497 who successfully completed the questionnaire, 478 subjects reported a reduction in head and face pain via the utilization of sequential trigger-point stimulation to the sternocleidomastoid and upper trapezius muscles. Of those tallied, there were 14 subjects who denied the presence of any trigger-points.

Adverse Effects of Trial

Of those remaining, 4 subjects could not tolerate any pressure along the muscles tested and one (1) subject felt mild syncope during trigger-point stimulation, therefore the procedure was terminated immediately and the participant was examined and released in stable condition shortly thereafter.

Known Latent Effects of Trial

Of the 478 participants who reported favorable results, approximately 47% or 233 were surveyed 90 days post trial and reported no side effects from the trial. Of the 233, 32% (75) claimed never to have another significant headache after the study.

Discussion

Headaches are one of the most frequent reasons for patients seeking medical care. When it comes to pain, headaches rank number one among adults. That is more than any other pain including back aches, joint pain and muscle soreness. Approximately 47 million Americans suffer from migraine headaches alone. Unfortunately, the problem affects more than the headache sufferer. Spouses of chronic headache sufferers reportedly feel helpless during an event, children often feel neglected and studies show that on-the-job productivity declines thus affecting everybody.

Migraine exerts a high economic burden, and the cost isn't limited to those living with migraine. The disease commonly affects people between the ages of 18 and 55, disrupting what should be the most productive years of a person's life with bills and other expenses.^[3]

Independent studies suggest that nearly 27 million adults missed one or more days due to headache pain causing an annualized loss of productivity to be well over \$8 billion. The annual cost burden has been estimated to be over \$56 billion (inflated to 2013 US dollars), with over 60% attributable to direct costs.^[4] According to Euromonitor International, U.S. consumers spent \$23 billion on OTC medicines in 2010.^[5] Incidentally, an overuse of NSAIDs often results in more headaches. This is a well known phenomenon in medicine referred to as rebound headaches.^[6] As such; headaches continue to be a serious problem.

This study clearly demonstrates the causal relationship of trigger-points in the development and persistence of chronic headache pain. Of significant importance, based on the data obtained, it should be noted that any treatment method shown to be effective, that can be self-administered, requiring no tools or medication would be of great value to the global population.

In conclusion, 96.2% of those tested, presented favorable results without side effects or any other negative results. In other words, when trigger-points were eliminated, head and face pain was improved. The STEP Method is highly structured and well documented.^[7] As such, this method is easy to learn and will benefit headache sufferers. Therefore, one might consider this approach as a viable alternative to over-the-counter medications or non-steroidal anti-inflammatory drugs (NSAIDs) as the treatment of choice for chronic headaches.

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