Efficacy of Auricular Acupuncture in Reducing Pain after Third-Molar Extractions

ABSTRACT #1250

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INTRODUCTION

Acupuncture is based on ancient Chinese philosophy dating back nearly 4000 years. It is according to this ancient philosophy that medical symptoms such as pain and disease occur when the flow of energy "qi" is disturbed and that by inserting fine needles into specific acupuncture points it is thought to restore the flow of energy and reduce pain the symptoms of disease. By incorporating acupuncture with modern western medicine it is hoped that we can reduce the need to use opioids for pain control.

OBJECTIVE

The purpose of this randomized, double-blind, prospective clinical study was to determine if therapeutic auricular acupuncture (AA) based on the Battlefield Acupuncture (BFA) protocol would reduce postoperative pain and use of pain medications following third-molar extractions compared to placebo AA.

MATERIALS and METHODS

Twenty active-duty military members or DoD beneficiaries that required extraction of three or more third molars under IV sedation participated in the study. Following the extractions, the subjects were randomized to receive either placebo AA (n=12) with two gold-plated auricular semi-permanent needles (Fig 1) in therapeutically neutral points (bilaterally) or therapeutic AA (n=8) using five gold-plated auricular semi-permanent needles (bilaterally) in the therapeutic points (Fig 2) established by the BFA protocol. All needle placement was completed by an acupuncture-credentialed dentist. The subjects recorded VAS pain scores and the amount and type of pain medication used daily in a journal over a two-week period. Data were analyzed with a two-way repeated-measures ANOVA (α=0.05).

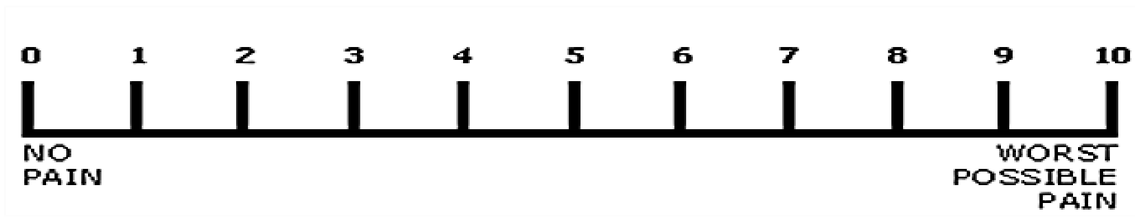


Figure 1: (Placebo)

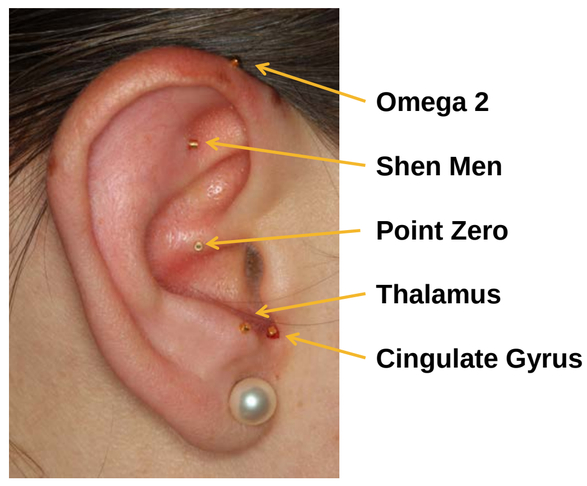
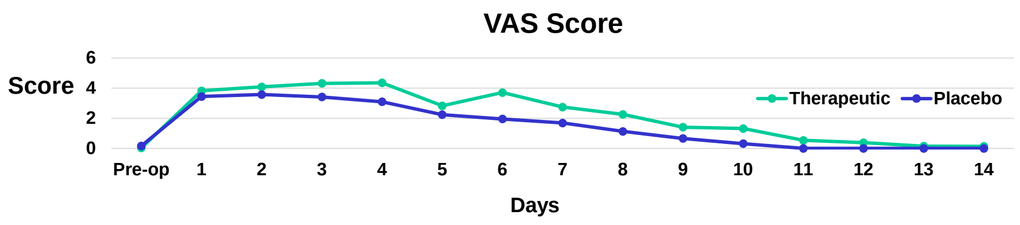
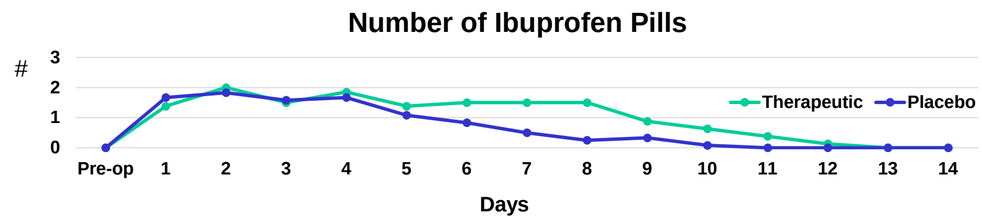


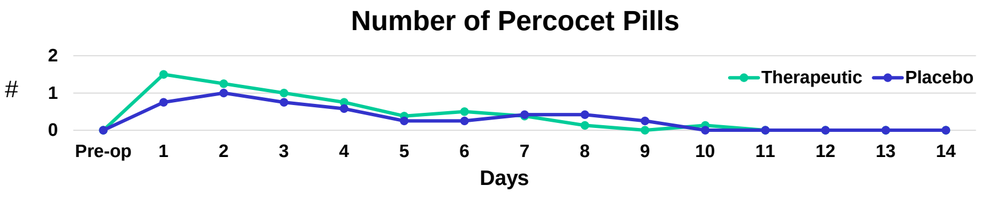
Figure 2: (Therapeutic)

RESULTS

VAS scores were not significantly different (p=0.11) between the placebo and the therapeutic AA treatment group at any point during the two-week post-surgical period. There was no significant difference in the consumption of Ibuprofen (p=0.10) between the two groups, however, there was a significant interaction (p=0.03). Ibuprofen use was greater for the therapeutic AA treatment group from day 5 to day 8. There was no significant difference in the consumption of Percocet (p=0.58) between the two groups over the two-week period. There was no significant difference in the difficulty of the extractions or length of the procedure between the two groups (p>0.05). See graphs below.







CONCLUSIONS

Compared to the placebo, therapeutic AA using the five BFA points did not reduce post-surgical pain or the use of pain medication over time. However, the relatively small sample size (n=20) may have limited the statistical power of this pilot study.