Ear acupuncture for acute sore throat. A randomized controlled trial

MIKE O’CALLAGHAN FEDERAL MEDICAL CENTER CLINICAL INVESTIGATION PROGRAM, BLDG 1300, ROOM 1876 4700 LAS VEGAS BLVD NORTH NELLIS AFB, NV 89191

The original document contains color images.
INTRODUCTION

• Acute sore throat causes pain and missed work
• Auricular Acupuncture is a low risk option for acute pain control
• Battlefield acupuncture (BFA) is a specific auricular acupuncture technique
• BFA is easily learned by non-acupuncturists
• Does adding BFA to standard treatment reduce pain, medication usage and hours of missed work in pts with acute sore throat?

METHODS

• Unblinded randomized controlled trial
• Men and women >18yrs old with acute sore throat and pain score of ≥5/10 (0-10 scale)
• Group 1: Standard Treatment (NSAID +/- antibiotics)
• Group 2: Standard Treatment + BFA
• Outcome measures: Pain scores, missed hours of work, NSAID usage
  *All data gathered up to 48 hrs post encounter
• Statistical analysis: Independent t-test

RESULTS

<table>
<thead>
<tr>
<th></th>
<th>Standard Treatment</th>
<th>BFA + Standard Treatment</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pain Scores (0-10)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>0 min</td>
<td>5.83</td>
<td>6.42</td>
<td>0.134</td>
</tr>
<tr>
<td>15min</td>
<td>5.67</td>
<td>3.00</td>
<td>0.003</td>
</tr>
<tr>
<td>6hrs</td>
<td>4.17</td>
<td>2.92</td>
<td>0.190</td>
</tr>
<tr>
<td>24hrs</td>
<td>3.92</td>
<td>1.75</td>
<td>0.005</td>
</tr>
<tr>
<td>48hrs</td>
<td>2.67</td>
<td>0.67</td>
<td>0.001</td>
</tr>
<tr>
<td>NSAID doses</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(up to 48hrs)</td>
<td>4.00 doses</td>
<td>2.25 doses</td>
<td>0.115</td>
</tr>
<tr>
<td>Missed work hours</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(up to 48hrs)</td>
<td>6.75 hrs</td>
<td>0.83 hrs</td>
<td>0.010</td>
</tr>
</tbody>
</table>

• N=24
• Significant reduction in pain scores and missed hours of work up to 48hrs post procedure
• No significant reduction in pain medication usage
• 4 patients total received antibiotics- 2 in group 1 and 2 in group 2

DISCUSSION

• Strengths: Prospective RCT
• Weaknesses: Small sample size, no sham acupuncture performed, patients not blinded to treatment
• This study represents an effectiveness trial rather efficacy trial
• Conclusion: When added to standard therapy, BFA reduces pain scores and hours of missed work. Small amounts of medication used in both groups—would need large sample size to detect a difference
• Future Research: Add sham group (to control for placebo effect), test in other acute pain syndromes in outpatient setting, i.e. migraines, musculoskeletal injuries, perimenstrual pain

Acknowledgements: Special thanks to Tracy Bogdanovich, Jill Clark, Jennie Moss and Aaron Barnett