Evaluating the NADA ear acupuncture protocol to manage breast cancer treatment related hot flushes & night sweats (HF&NS)

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Introduction

As part of a series of exploratory studies into using acupuncture to manage menopausal side effects of adjuvant hormonal treatments for breast cancer, we investigated the National Acupuncture Detoxification Association (NADA) ear acupuncture protocol. Anecdotal evidence suggested that NADA treatment reduced hot flushes and night sweats (HF&NS) in substance detoxification. This standardised protocol uses 5 acupuncture points on the surface of the ear. It is designed for use in a group setting. In the UK, it can be delivered by licensed acupuncturists and by non-acupuncturists who are trained and annually assessed by NADA UK.

Key Questions

- Can NADA be used to manage breast cancer treatment related HF&NS?
- Does the NADA protocol improve emotional and physical wellbeing?
- How do the results of NADA treatment compare with the results of our previous study using traditional acupuncture (TA)?

Methods

Participants

- Women aged ≥35 years diagnosed with early breast cancer
- Without relapse or metastatic disease
- ≥ 6 months post active treatment (surgery, chemotherapy, radiotherapy)
- Taking adjuvant hormonal therapy ≥6 months
- ≥ 6 months post active treatment (surgery, chemotherapy, radiotherapy)
- Without relapse or metastatic disease
- Women age ≥35 years diagnosed with early breast cancer

Acupuncture protocols

- Treatment once weekly, for 8 treatments
- Using the NADA protocol delivered in small groups of up to 5 women, or
- Semi-standardised traditional acupuncture treatment (see Publications)
- Administered by a licensed acupuncturist

Measurement

- Hot Flush Diaries – measured HF&NS frequency and severity over a 2-week period
- Women’s Health Questionnaire (WHQ) – measured 9 domains of physical and emotional wellbeing associated with the menopause transition
- Problem Rating Score (PRS) – measured how bothersome women found their HF&NS.

Results

Recruitment and compliance

50 out of 54 women recruited completed 8 acupuncture treatments in each study.

Comparing Hot Flush and Night Sweat Frequency

- The median numbers of HF&NS per day at baseline and EOT were:
  - NADA: 10.7 (sd dev=4.8) and 7.7 (sd dev=4.7), n=47
  - TA: 10.7 (sd dev=6.5) and 6.5 (sd dev=5.3), n=48

- The primary endpoint was the comparison at EOT.
- Reductions in frequency for both groups were significant at all time points.
- There were significant differences between groups at Mid-px (p=0.008) and EOT (p=0.038) in favour of TA, but no significant differences at follow-up.

At EOT, the WHQ domains displayed below showed significant improvement in both studies. Overall, both groups showed similar scores and levels of improvement at each time point. All changes were clinically significant (a difference of 0.10 to 0.20), apart from Depressed Mood in the TA group.

Comparing Emotional and Physical Wellbeing

At EOT, the WHQ domains displayed below showed significant improvement in both studies. Overall, both groups showed similar scores and levels of improvement at each time point. All changes were clinically significant (a difference of 0.10 to 0.20), apart from Depressed Mood in the TA group.

Comparison of Six WHQ Domains at Baseline and EOT

Comparison of Mean % Reduction in Hot Flush Frequency

<table>
<thead>
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<th>Change over baseline at</th>
<th>N =</th>
<th>Mean % Reduction</th>
<th>95% CI Lower</th>
<th>95% CI Upper</th>
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<tr>
<td>Mid-px</td>
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<td>23.6</td>
<td>15.3</td>
<td>31.5</td>
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<tr>
<td></td>
<td>TA 48</td>
<td>40.8</td>
<td>30.1</td>
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<td>EOT</td>
<td>NADA 47</td>
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<td>25.4</td>
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<tr>
<td></td>
<td>TA 47</td>
<td>41.8</td>
<td>29.1</td>
<td>49.5</td>
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</tbody>
</table>

Discussion

- NADA reduced frequency of HF&NS by 35.9% after 8 treatments
- Improvements in wellbeing and problem rating scores were comparable to TA.
- NADA was less effective in reducing HF&NS than TA at Mid-px and EOT.
- There were no significant differences in longer term outcomes.
- More frequent treatment may improve outcomes; however, the women in this study found committing to weekly treatment was sufficiently challenging.

Conclusion

This study suggests that NADA may provide a simple non-pharmacological option for managing HF&NS. Further research is warranted; NADA and TA should be compared concurrently.

Publications


Acknowledgements

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