Evidence Table

Clinical area: Iontophoresis for hyperhidrosis

Study Type: Case Series
Study Aim: To evaluate the safety and efficacy of direct current (dc) administration in the treatment of idiopathic hyperhidrosis.

Outcomes
• Primary: Sweat intensity (g/h), response to treatment.

Design
• Number of subjects: N=112
• Method of subject selection (inclusion/exclusion criteria): Idiopathic palmoplantar hyperhydrosis
• Consecutive patients? Not specified.
• Description of study population: Mean age=20 ± 5 years; 55% female. The location of hyperhidrosis was palmar only in 7%, palmoplantar in 79% and palmoplantoaxillar in 14%.
• Intervention: 8 sessions of tap water iontophoresis in 28 days.
• Source of outcome data (e.g. patient self-report, doctor report, lab results): Assessment of sweat intensity (change in pad glove weight after an hour of wearing in a stress-free room).
• Length of follow-up: 20 days after final treatment.
• Completeness of follow-up: Appears to be 100%

Validity
• Is the study type appropriate for the question(s) being asked? Comparative study is appropriate.
• Was the intervention and other aspects of patient care similar for all patients (or for all patients in a defined subgroup)? Yes.
• Did an objective observer assess outcomes and were outcome measurements consistent? Yes.
• Were frequency of follow-up and follow-up duration appropriate? Yes.
• Was completeness of follow-up sufficient? Yes.
• Conclusions regarding validity of methods: Threats to validity due to lack of comparison group and only 80% follow-up.

Results

Initial sweat intensity of palms
Right hand: 2.98 ± 1.19 g/h
Left hand: 3.04 ± 1.32 g/h
Therapy controlled palmar hyperhidrosis in 81.2% of patients after the first 8 treatments (“response” was not clearly defined, it appears to be a subjective assessment by the patient).

**Post-treatment sweat intensity (g/h)**

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<tr>
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<th>Right hand</th>
<th>Left hand</th>
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<tbody>
<tr>
<td>Responders (n=91)</td>
<td>0.39 ± 0.12</td>
<td>0.52 ± 0.15</td>
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<tr>
<td>Nonresponders (n=21)</td>
<td>2.82 ± 0.98</td>
<td>2.91 ± 1.02</td>
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**Note:** Sweat intensity for the participants as a whole was not reported.

Average first remission period= 35 ± 6 days.

**Adverse effects, No. patients**

- Erytherma: 12
- Vesicular formation: 8
- Temporary discomfort from burning: 20

**Authors’ Conclusions**

“This technique appears to control hyperhidrosis on the palms and soles only if regular treatment is applied…”

**Reviewer’s Conclusions**

A majority of participants responded to treatment, although “response” was not clearly defined. That is, the investigators measured sweat intensity in g/h, but did not specify the degree of difference in g of sweat per hour that constituted a response to treatment. Moreover, there was only short-term follow-up and no comparison group.