Staged Extended Thoracoscopic Sympathicotomy for Palmo-axillo-plantar Hyperhidrosis: Feasibility and Outcome (pilot study)

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Disclosure

Speaker name:
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I do not have any potential conflict of interest
Introduction

- HH: definition.
  - Types: 1ry
    (idiopathic, essential, or cryptogenic)
  - 2ry.
- 1ry: focal.
- (TS) is safe, effective, and minimally invasive.
- PP HH&PAP HH incidence (70-100%).
- Management option.
Study hypothesis generation & concept
-our experience.
-literature search.
-explanation. (anatomic variation concept).


Aim of the work

We aim to evaluate staged extended TS (from T3-T12) for treatment of PAP HH regarding:

its feasibility,
effect on each domain of HH esp. Plant HH peri-operative complication,
patient satisfaction, and quality of life.
Patients and methods

Exclusion criteria:

- Age < 16 years.
- Isolated palmo-axillary HH without plantar HH.
- Craniofacial HH or, facial blushing ± other forms of HH.
- Bradycardia (resting HR < 60) or cardiac conduction defects.
- Cardiac problems or EF < 60%.
- Concomitant lung pathology, frozen mediastinum, pleural effusion, empyema or history of intercostal tube insertion or thoracotomy.
- Uncorrected coagulopathy.
- Azygos lobe variant of the right hemi-thorax.
Technique
Results

The study included 42 patients [16 M and 26 F] with a mean age of 24.3 ± 5.3 (range, 18-35) years. There was no mortality in the study. FUP period (24-72 MO) with a mean of 47.5 ± 16 MO.

Mean operative time: 49.6 ± 7.2 (range, 40-65) minutes.

Complications:

- pneumothorax in 2
- rebound hyperhidrosis in 3
- intercostal neuralgia in 2
- surgical emphysema in 1
- temporary Horner’s syndrome in 1
- mild CS occurring mainly in the groin: 3
Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Palmar hyperhidrosis</th>
<th>Axillary hyperhidrosis</th>
<th>Plantar hyperhidrosis</th>
<th>P value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preoperative VAS</td>
<td>9 ± 0.66</td>
<td>9 ± 0.66</td>
<td>9 ± 0.66</td>
<td>-----</td>
</tr>
<tr>
<td>Postoperative VAS</td>
<td>0.74 ± 0.44</td>
<td>0.74 ± 0.44</td>
<td>1.26 ± 0.79</td>
<td>0.0004</td>
</tr>
<tr>
<td>P value</td>
<td>&lt; 0.0001</td>
<td>&lt; 0.0001</td>
<td>&lt; 0.0001</td>
<td></td>
</tr>
</tbody>
</table>

Patients' quality of life: marked improvement. (using hyperhidrosis scale of Keller and colleagues).
Conclusion:

We consider our study a unique research as for the 1st time extended sympathicotomy (from T3-T12) to be performed ever and especially for PAP HH. Our technique proved to be effective resulting in satisfactory and sustained improvement of palmar, axillary and plantar HH.
Thank you
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