The Effect of Peloid Application in Out-patient Setting on Knee Osteoarthritis

Results of a Pilot Study

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Purpose

- Provide a pilot for a randomised, double-blind, controlled study to evaluate the efficacy of mud pack treatment on knee osteoarthritis in outpatient setting
Patients

- 19 female patients with bilateral knee osteoarthritis
- None of them have hip or ankle osteoarthritis, peripheral vascular disease
Mud packs

- Classification: Moor
- Origin: Sarayköy, Denizli
- Initial temperature: 45°C
- Duration: 30 min.s/12 days
- Setting: In the hometown, out-patient settings
Primary Outcome Measures

- WOMAC
- Pain intensity (100 mm. VAS)
- Patient global assessment (5 grade scale)
- Physician global assessment (5 grade scale)
Response rate

- at least twenty-percent improvement in the primary outcome measurements

AND

- the persistence of the improvements during the follow-up
Statistical analyses

- Data distribution: Shapiro-Wilks
- Multiple comparisons: ANOVA
- Significant differences between the pairs: post-hoc tests (LSD and TamhaneT2)
- Alpha: 0.05
- Power: 0.78 (post-hoc, due to LTF cases)
## Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>Baseline</th>
<th>EOT</th>
<th>First mo.</th>
<th>Sixth mo.</th>
<th>Significance*</th>
</tr>
</thead>
<tbody>
<tr>
<td>WOMAC</td>
<td>61,11±10,87</td>
<td>31,74±13,29</td>
<td>30,68±14,55</td>
<td>30,74±15,31</td>
<td>23,18</td>
</tr>
<tr>
<td></td>
<td>(55,87 - 66,34)</td>
<td>(25,33 - 38,14)</td>
<td>(23,67 - 37,70)</td>
<td>(23,36 - 38,12)</td>
<td></td>
</tr>
<tr>
<td>Pain Intensity</td>
<td>7,25±1,67</td>
<td>4,37±1,70</td>
<td>4,31±1,54</td>
<td>4,26±1,80</td>
<td>14,49</td>
</tr>
<tr>
<td></td>
<td>(6,44 - 8,05)</td>
<td>(3,55 - 5,19)</td>
<td>(3,56 - 5,05)</td>
<td>(3,40 - 5,13)</td>
<td></td>
</tr>
<tr>
<td>GA (pts)</td>
<td>3,47±1,07</td>
<td>1,68±0,58</td>
<td>1,58±0,61</td>
<td>1,58±0,69</td>
<td>28,17</td>
</tr>
<tr>
<td></td>
<td>(2,96 - 3,99)</td>
<td>(1,40 - 1,96)</td>
<td>(1,29 - 1,87)</td>
<td>(1,25 - 1,91)</td>
<td></td>
</tr>
<tr>
<td>GA (phy)</td>
<td>3,47±0,77</td>
<td>1,79±0,63</td>
<td>1,68±0,67</td>
<td>1,68±0,67</td>
<td>30,96</td>
</tr>
<tr>
<td></td>
<td>(3,10 - 3,85)</td>
<td>(1,49 - 2,09)</td>
<td>(1,36 - 2,01)</td>
<td>(1,36 - 2,01)</td>
<td></td>
</tr>
</tbody>
</table>

All results are given as mean±SD. Numbers in paranthesis represents the CI (95%).
* one-way ANOVA test.
Response Rate

- WOMAC : 16 / 19
- Pain intensity : 13 / 19
- GA (pts): 17 / 19
- GA (phy) : 18 / 19