Effects of Dry Cupping Therapy on a 56-year-old Female Patient Post Haglund’s Deformity Surgery: A Case Report

Jordan Gaillard, SPT and David Kempfert DPT, L/ATC, SCS, FAAOMPT

BACKGROUND & PURPOSE:
Haglund’s deformity is characterized by a symptomatic prominence on the posterior superior portion of the calcaneus near the insertion of the Achilles tendon.1, 2

Due to the benefits of dry cupping, this case was to investigate its effects because of the lack of research on dry cupping with Haglund’s deformity.

The purpose of this case report was to determine the effects of dry cupping therapy on a 56-year-old female patient who had Haglund’s deformity surgery.

CASE DESCRIPTION:
Haglund’s deformity surgery of left foot

INTERVENTION:
5 cups applied to patient tolerance
Static → dynamic → static application
7-10 minute sessions, 2 times a week for 3 weeks

RESULTS:

Table 1. Examination Outcome Measures

<table>
<thead>
<tr>
<th>Outcome Measure</th>
<th>Examination Session 1</th>
<th>Treatment Week 1</th>
<th>Treatment Week 2</th>
<th>Treatment Week 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Range of Motion (Degrees)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ankle Dorsiflexion</td>
<td>Not tested due to boot</td>
<td>1</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>Ankle Plantarflexion</td>
<td>Not tested due to boot</td>
<td>15</td>
<td>30</td>
<td>40</td>
</tr>
<tr>
<td>Inversion</td>
<td>Not tested due to boot</td>
<td>44</td>
<td>44</td>
<td>45</td>
</tr>
<tr>
<td>Eversion</td>
<td>Not tested due to boot</td>
<td>11</td>
<td>12</td>
<td>17</td>
</tr>
<tr>
<td>Lower Extremity Functional Scale</td>
<td>40/80</td>
<td>Not assessed</td>
<td>Not assessed</td>
<td>54/80</td>
</tr>
<tr>
<td>Numeric Pain Rating Scale</td>
<td>5/10</td>
<td>3/10</td>
<td>2/10</td>
<td>1/10</td>
</tr>
<tr>
<td>Timed Up and Go (Seconds)</td>
<td>Not tested due to boot</td>
<td>9.4s average</td>
<td>8.9s average</td>
<td>6.6s average</td>
</tr>
</tbody>
</table>

56-year-old female 8 weeks following Haglund’s deformity surgery of left foot

Figure 1: Pre-surgical radiograph
Figure 2: Post-surgical radiograph

BACKGROUND & PURPOSE:

Body Structure/Function
• Pain
• Decreased ROM
• Decreased length
• Decreased strength

Activity Limitations
• Unable to walk dogs 1 mile
• Balance
• TUG

Participation Restrictions
• Limited doing housework/yard work
• Difficulty working a full work day

Participation Restrictions
• Limited doing housework/yard work
• Difficulty working a full work day

Personal Factors
• Supportive family
• Anxiety

Environmental Factors
• Stairs at home
• Steep hill for driveway

CASE DESCRIPTION:

56-year-old female 8 weeks following Haglund’s deformity surgery of left foot

INTERVENTION:

5 cups applied to patient tolerance
Static → dynamic → static application
7-10 minute sessions, 2 times a week for 3 weeks

RESULTS:

Table 1. Examination Outcome Measures

<table>
<thead>
<tr>
<th>Outcome Measure</th>
<th>Examination Session 1</th>
<th>Treatment Week 1</th>
<th>Treatment Week 2</th>
<th>Treatment Week 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Active Range of Motion (Degrees)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ankle Dorsiflexion</td>
<td>Not tested due to boot</td>
<td>1</td>
<td>7</td>
<td>11</td>
</tr>
<tr>
<td>Ankle Plantarflexion</td>
<td>Not tested due to boot</td>
<td>15</td>
<td>30</td>
<td>40</td>
</tr>
<tr>
<td>Inversion</td>
<td>Not tested due to boot</td>
<td>44</td>
<td>44</td>
<td>45</td>
</tr>
<tr>
<td>Eversion</td>
<td>Not tested due to boot</td>
<td>11</td>
<td>12</td>
<td>17</td>
</tr>
<tr>
<td>Lower Extremity Functional Scale</td>
<td>40/80</td>
<td>Not assessed</td>
<td>Not assessed</td>
<td>54/80</td>
</tr>
<tr>
<td>Numeric Pain Rating Scale</td>
<td>5/10</td>
<td>3/10</td>
<td>2/10</td>
<td>1/10</td>
</tr>
<tr>
<td>Timed Up and Go (Seconds)</td>
<td>Not tested due to boot</td>
<td>9.4s average</td>
<td>8.9s average</td>
<td>6.6s average</td>
</tr>
</tbody>
</table>

CONCLUSION:
This case demonstrated positive outcomes using cupping therapy for a 56-year-old female following Haglund’s deformity surgery. Improvements were seen in AROM, TUG, LEFS, and pain. This allowed the patient to return to a full day of work, complete housework and yardwork, and walk her dogs a mile with no limitations and minimal pain. Due to the concurrent Achilles tendon rehabilitation program, it is difficult to say that cupping therapy alone resulted in these outcomes.

CLINICAL APPLICATION:
Haglund’s deformity accounts for a number of debilitating factors including pain and function. Patients with Haglund’s deformity are often treated conservatively before surgical intervention and then immobilized before beginning physical therapy.3

Currently, there is a lack of research on physical therapy following Haglund’s deformity surgery.

This study demonstrated an improvement in AROM, TUG, LEFS, and pain after the 3-week cupping therapy intervention. This study adds to the literature for the use of cupping therapy with musculoskeletal related conditions.

REFERENCES: