INTENSITY AND PATTERN OF DAILY PHYSICAL ACTIVITY OF CLAUDICATING PATIENTS

Cody Anderson1, Hafizur Rahman1,3, Hernan Hernandez2, Sara A. Myers1,3, Molly Schieber1, Duy M. Ha2, Sarah Baker1, Panagiotis Koutakis2,4, Kyung-Soo Kim2, Constance Mietus2, George P. Casale2 & Iraklis I. Pipinos2,3
1 Nebraska Biomechanics Core Facility, University of Nebraska at Omaha, Omaha, NE USA
2 Department of Surgery, University of Nebraska Medical Center, Omaha, NE USA
3 Department of Surgery and VA Research Service, VA Nebraska-Western Iowa Health Care System, Omaha, NE USA
4 Department of Health, Human Performance and Recreation, Baylor University, Waco, TX USA

PURPOSE

• To investigate the intensity level and daily pattern of physical activity among community-dwelling claudicating patients.

INTRODUCTION

• Peripheral artery disease (PAD) shows a prevalence of 3-10% in the general population and as high as 20% in populations older than 70 years1,2.
• PAD is caused by atherosclerotic plaques that limit blood flow to the lower extremities3.
• Claudication, pain in the legs during walking, is the most common manifestation of PAD1.
• Limited information exists on the free-living physical activity of claudicating patients2.

METHODS

• Patients were recruited from the Vascular Surgery Clinic at the Veterans Affairs Nebraska-Western Iowa Healthcare System in Omaha, Nebraska.
• Physical activity of patients was recorded with Actigraph GT1M activity monitors worn on the hip.
• The activity monitor measured changes in acceleration, measured as activity counts over one-minute time periods.
• Data was collected for seven consecutive days and processed using the ActiLife software program.

<p>| Table 1. Patients Demographics |
|---|---|---|</p>
<table>
<thead>
<tr>
<th>n</th>
<th>Age (years)</th>
<th>ABI</th>
<th>BMI (kg/m²)</th>
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</thead>
<tbody>
<tr>
<td>44</td>
<td>64.16 ± 6.55</td>
<td>0.46 ± 0.04</td>
<td>28.59 ± 4.725</td>
</tr>
</tbody>
</table>

RESULTS

Table 2. Physical activity measures in claudicating patients

<table>
<thead>
<tr>
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<th>Mean (+ SD)</th>
<th>Median</th>
<th>95% Confidence Interval</th>
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</thead>
<tbody>
<tr>
<td>Average Total Daily Steps</td>
<td>3586.44 (298.02)</td>
<td>3260.36</td>
<td>2985.44 - 4187.44</td>
</tr>
<tr>
<td>Average Daily METs per Minute</td>
<td>1.4549 (0.0011)</td>
<td>1.4537</td>
<td>1.4527 - 1.4570</td>
</tr>
<tr>
<td>Average Daily Peak MET per Minute</td>
<td>1.5783 (0.0068)</td>
<td>1.5644</td>
<td>1.5649 – 1.5917</td>
</tr>
</tbody>
</table>

CONCLUSION

• The intensity and peak intensity of the physical activity of the average claudicating patient fluctuate very little during the day and rarely exceed above a light intensity level.
• The average total steps per day of claudicating patients is much lower than the recommendation of 6500 steps per day for individuals living with disability/chronic disease4.

REFERENCES


ACKNOWLEDGEMENTS

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