INTENSITY AND PATTERN OF DAILY PHYSICAL ACTIVITY OF CLAUDICATING PATIENTS

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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.

Table 1. Patients Demographics

<table>
<thead>
<tr>
<th>n</th>
<th>Age (years)</th>
<th>ABI</th>
<th>BMI (kg/m²)</th>
</tr>
</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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<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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