COBB ANGLE REDUCTION AFTER AN INTENSIVE COURSE OF PHYSIOTHERAPY

SCOLIOSIS SPECIFIC THERAPY: A CASE SERIES

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Introduction

- Treatment for scoliosis in the United Kingdom (UK) is determined using the Cobb angle.
- Physiotherapy Scoliosis Specific Exercise (PSSE) is not recognised on the National Health Service (NHS) in the UK for treatment for scoliosis.

Aims:
1. To determine the significance of Cobb angle reduction in patients with scoliosis after completing an intensive course of PSSE.
2. To compare Cobb angle reductions between adults and children.
3. To compare Cobb angle reductions between size of curvatures.

Method

- 23 patients with scoliosis treated solely with PSSE’s were included in the case series.
- X-Rays of the patients’ full spines were taken independently before and after treatment.
- The X-Rays were measured by three blinded assessors.
- The averages were analysed by descriptive statistics.

Results

<table>
<thead>
<tr>
<th>Number</th>
<th>Thoracic Reduction</th>
<th>Lumbar Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sample</td>
<td>11.9° (SD=3.9)</td>
<td>10.8° (SD=4.9)</td>
</tr>
<tr>
<td>Children</td>
<td>10.4° (SD=3.9)</td>
<td>9.0° (SD=5.2)</td>
</tr>
<tr>
<td>Adults</td>
<td>14.4° (SD=1.3)</td>
<td>13.2° (SD=1.6)</td>
</tr>
<tr>
<td>Moderate</td>
<td>9.6° (SD=4.0)</td>
<td>14.8° (SD=8.7)</td>
</tr>
<tr>
<td>Severe</td>
<td>11.5° (SD=3.9)</td>
<td>9.1° (SD=3.4)</td>
</tr>
</tbody>
</table>

Conclusion

- A reduction of 5 degrees is clinically significant.
- This case series shows that PSSE’s can achieve clinically significant Cobb angle reductions of thoracic and lumbar curvatures in adults and children with mild to severe curvatures.
- Further research is recommended to determine the effects of PSSE’s on Cobb angle reduction.

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