The effect of SNAGs at L4/5 on the range of flexion compared to Repeated Auto-Flexion, assessed via three independent measures.

Data Comprised of Three Combined BSc Physiotherapy (Hons) Dissertations; supervised by Richard Day Lecturer, Cardiff University.

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Background and Purpose

• SNAGS Manual therapy technique derived from Mulligans Mobilisations with Movements
• Thought to increase the range of movement of a motion segment at one spinal level
• It clinical effectiveness is still undecided within the literature base of this area
• Does a change happen because of the SNAG or because of the movement performed?
• The current combined study presented compares the effect of SNAGS at L4/5 on range of movement into flexion compared to Repeated Auto Flexions.
Methods

• Ethics approval by the HCARE Ethics Committee prior to data collection
• Within subject cross over design
• 26 healthy participants (Mean age 20.12 years Range 18-25) [Convenience sample]
• Randomly allocated to two groups [SNAGS first R-AF second] or [R-AF first SNAGS Second]
• 48 hour wash out period
• 3 outcome measures to assess range used after each intervention:
  • Finger Tips to Floor
  • Fixed Goniometer
  • Modified Schober’s Test

  Assessor was blinded to group allocation
  All measures taken three times and average calculated

• No adverse effect reported
• Significant value was set at p ≤ 0.05
Results

• Data was analysed separately for all three measures.
  • Means = different for all three measures
  • Overlapping of SD for all three measures
  • Statistical
  • Histograms generated for all three data sets:
    • Data was not normally distributed
    • Therefore Non Parametric test was chosen
    • Wilcoxon Signed Rank Test

<table>
<thead>
<tr>
<th>Test Description</th>
<th>Data Comparison</th>
<th>p-value</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Finger Tip To Floor</td>
<td>SNAGS and RA-F Wilcoxon Signed Rank Test</td>
<td>0.274</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Fixed Goniometer</td>
<td>SNAGS and RA-F Wilcoxon Signed Rank Test</td>
<td>0.722</td>
<td>Not Significant</td>
</tr>
<tr>
<td>Modified Schober’s Test</td>
<td>SNAGS and RA-F Wilcoxon Signed Rank Test</td>
<td>0.777</td>
<td>Not Significant</td>
</tr>
</tbody>
</table>
• There is no statistical difference between SNAGS and R-AF on Range of Movement into spinal flexion measured independently by three separate measures

• Limitations:
  • Healthy subject / not pathological / normal ROM / pain
  • Change scores of pre-post flexion

• Implications:
  • More research into Manual Therapy and movement based interventions is required

• Final point:
  • Its great to see UG research at this level and this presentation underlines the importance of keeping empirical research within UG programmes