THE EFFECT OF KINESIO® TAPE APPLICATION ON FUNCTIONAL PERFORMANCE IN SURGEONS HAVING MUSCULO-SKELETAL PAIN AFTER SURGERY

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Background: Surgeons are a unique group of healthcare professionals who are at risk for developing work-related musculoskeletal symptoms which affect their functional performance negatively.

Objective: The purpose of this study was to evaluate the effect of Kinesio® tape technique on pain and functional performance related to quality of life of surgeons having musculoskeletal system pain after surgery.

Design: Testing and re-testing design. Three trials (without taping, 1st day of Kinesio taping, 4th day of Kinesio taping, respectively.)

Setting: Physiotherapy department of university hospital

Participants: 32 surgeons between the ages of 27 and 44 yrs who are working in the General Surgery, Plastic surgery, Cardiovascular Surgery, Pediatric Cardiovascular Surgery, Orthopaedics, Neurosurgery and Urology departments in a public hospital.

Main outcome measures: Visual Analog Scale (VAS) for neck and low back pain, Oswestry Low Back Disability Index and Neck Disability Index for how neck and low back pain have affected the ability of surgeon to manage in everyday life. Firstly, surgeons were evaluated without Kinesio® taping, then on the first day and fourth day of Kinesio® taping application.

Results: The results showed that surgeons had significant improvement in neck and low back pain reduction (p<0.05). There was an improvement in both Oswestry Low Back Disability Index and Neck Disability Index scores when compared with their initial status (p<0.05). After Kinesiotape application, neck and low back range of motions' scores showed an increase. (p<0.05). No difference was observed in muscle strength when compared with measurements which surgeons have without taping (p>0.05).

Conclusion: Findings demonstrated that Kinesio® taping would be an effective method for reducing neck and low back pain and improving functional performance. This technique can be used for surgeons having work-related musculoskeletal symptoms after surgery.

Graph 1. Daily changes of neck pain (VAS scores)

Graph 2. Daily changes of low back pain (VAS scores)

Table 1. Changes in Oswestry Low Back Disability Index and Neck Disability index scores

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. dev</th>
<th>min-max</th>
<th>n</th>
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<td>Oswestry low back disability index</td>
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<tr>
<td>Before KT appl.</td>
<td>4.38</td>
<td>3.67</td>
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<td>32</td>
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<td>After</td>
<td>2.77</td>
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<tr>
<td>Neck disability index</td>
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Bibliography: