A randomised crossover trial investigating actual & perceived changes in peak knee extensor torque following Kinesio Tap® application

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**Purpose and existing literature (KT = Kinesio tape)**

<table>
<thead>
<tr>
<th>Study</th>
<th>Results</th>
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<tbody>
<tr>
<td>Aktas and Baltaci (2011)</td>
<td>KT does improve peak knee extensor torque 100% (P = 0.031) (P &gt; 0.05)</td>
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<td>Wong <em>et al.</em> (2012)</td>
<td>KT does not improve peak knee extensor torque (P = 0.00) but does decrease time to reach (P = 0.03)</td>
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<td>Csapo and Alegre (2015)</td>
<td>Meta analysis Very small population effect (r = 0.05)</td>
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<td>Placebo response has been specifically identified as an area that requires further investigation (Vercelli et al., 2013)</td>
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**Conclusions:**
- KT improves perceived knee extensor torque
- KT does not improve actual peak knee extensor torque
- Changes in perceived and actual torque do not correlate

**Considerations and Implications**
Psychological benefits may play a greater role in affecting actual strength output when applying it to more functional movement within the context of real life competition.

Although it appears any such effect is small, the slimmest of margins can make a difference in elite, high performance sport.

It is also unclear whether changes in perception may benefit performance when combined with other treatments.

**Design and methods (GRCS = Global Rating of Change Scale)**

- **Information + consent form**
  - **Biodex** fitted + practice attempt
  - 3 contractions no tape (minute rest)
  - 3 contractions - taping condition one (sham or actual)
  - GRCS – taping condition one
  - Break
  - 3 contractions - taping condition two (sham or actual)
  - GRCS – taping condition two
  - Debrief

**Results**

- **Sham perception**
- **K tape perception**

**Table 1. Correlation of actual and perceived peak torque (N=36)**

<table>
<thead>
<tr>
<th>Output</th>
<th>Spearman’s correlation</th>
<th>Sig. (2-tailed)</th>
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<tr>
<td>Sham tape / GRCS</td>
<td>0.133</td>
<td>0.438</td>
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<tr>
<td>Kinesio Tape / GRCS</td>
<td>-0.142</td>
<td>0.408</td>
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</tbody>
</table>

**Conclusions:**

1. KT should not be used to enhance strength
2. Belief does not impact efficacy
3. High performance sport potential exception

**References:**