Utilization of Kinesio Tex Tape® in Patients with Shoulder Pain or Dysfunction: A Case Series
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**Introduction**

Shoulder disorders are a common complaint and often associated with significant disability and reduced general health. Despite little research support, management of shoulder disorders have historically included taping techniques.

According to the manufacturers, Kinesio Tex Tape® is purported to be useful for pain reduction, muscle inhibition or facilitation, improved lymphatic flow, improved joint mechanics, and scar mobilization.

What is Kinesio Tex Tape®?
- Elastic tape that stretches up to 130-140% of resting length.
- Differs from other tapes:
  - greater elasticity,
  - requires no undertape,
  - allows for full mobility.

The purpose of this case series is to examine and document the clinical outcomes for patients with shoulder disorders who were treated with a comprehensive physical therapy program that included taping techniques with Kinesio Tex Tape®.

**Case Descriptions**

- N=5, age 41-55 years, (M=5, F=0)
- Diagnoses: 2 shoulder pain, 1 RCT, 1 impingement, 1 s/p acromioplasty
- Median Range of Motion:
  - Passive elevation: 124° (67°-170°)
  - Passive Ext Rotation: 40° (15°-100°)
- Active Int Rotation: Unable- full
- PSFS: Median 4.3 (1.5 – 5.0)
- DASH: Median 34.2 (33.3-75.8)
- NPRS: Median 6.0 (4 - 8)

**Interventions**

Patients were seen 2-3 X/wk (4-20 visits)

Interventions
- CH jt Gr I-IV mobilizations/manipulation
- Scapular stabilization exercises
- Rotator cuff strengthening exercises
- Thermal Modalities (Heat/Ice)
- Kinesio Taping® techniques

Goals for Kinesiotaping techniques:
- General pain relief
- Facilitation of targeted muscles
- Inhibition of targeted muscles
- Improved shoulder retraction
Results

- All patients demonstrated clinically important improvements in function (PSFS), and 4/5 patients achieved clinically important improvements in disability (DASH).
- Pain levels varied over time, although a general trend for reduced pain was observed.
- Patients reported a range of perceived improvement from +3 ("somewhat better") to +7 (a very great deal better").
- Subj 2 dropped from the study, seeking care for an unrelated medical condition. However, he completed self-report measures at 8-wks (through mail), and these data were used for final outcomes scores.

Discussion

This case series demonstrated a potential positive impact on outcomes with the use of Kinesio Tex Tape® in patients with shoulder pain or dysfunction. While the exact mechanisms of taping remain unknown, possible explanations for positive outcomes with taping techniques include potential mechanical and/or proprioceptive effects. However, scant evidence does exist supporting the use of taping techniques for patients with various musculoskeletal disorders. Subjects in this case series all reported decreased pain and less disability with this treatment approach. Four patients reported that they thought the tape helped their condition. One patient (subj. 3) felt that the tape had little effect on his condition. Based on this study design, it is possible that changes in patient status were due to factors other than the kinesiotaping techniques.

Conclusion

Kinesio Tex Tape® should be considered as an optional clinical adjunct in the treatment of shoulder pain as part of a comprehensive physical therapy regimen. Further studies are needed to determine the efficacy of this taping procedure, the economic value of utilizing Kinesio Tex Tape®, and subgroups of patients with shoulder pain who may benefit from its use.