

Use of Kinesiology Tape as an Adjunct to Osteopathic Manipulative Treatment

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Today's Objectives

- To teach you a functional therapeutic approach to modulate pain and myofascial dysfunction through the use of specialized pre-cut kinesiology tape applications.
- To teach the theory and practical hands on tools necessary to incorporate the use of kinesiology tape into your patient management strategies.

Disclaimer

- SpiderTech has provided a grant to supply the materials to be used for this session

Today's Goals

- Basic Information on the Role of Kinesiology Taping
- Examples of Utilization in a Clinical Setting
- Practice
- By the end of this session have a working knowledge of when and how to apply this modality

Kinesiology Tape

- Neuromusculoskeletal Treatment Modality
- Clinical Relevance
- Ease of Application
- Component of Overall Treatment

Taping Basics

- Easy to use
- Improved clinical outcomes
 - The patient is able to achieve early engagement in pain-free ranges of motion and strengthening exercises.
 - The patient becomes an active participant in the treatment process.
 - The patient is able to take the therapy home with them maintaining treatment between treatments.

What is the Advantage?

- Reduce Pain
- Restore Mobility
- Faster Healing
- Improve Strength
- Ability to self-administer

Selected Research

- Kinesio Taping reduces disability and pain slightly in chronic non-specific low back pain: a randomised trial
- Journal of Physiotherapy. Volume 58, Issue 2, June 2012

The Study

- Sixty adults with chronic non-specific low back pain
- Outcomes measured at baseline and immediately after one week application of kinesiotape to lumbar region
- Outcomes repeated at four weeks

Outcome Measures

- Oswestry Disability Index
- Roland-Morris Low Back Pain and Disability Questionnaire
- Analog Pain Scale
- McQuade Test of Trunk Muscle Endurance

Results

- At one week significant improvement in both Oswestry and Roland-Morris scores
 - Not maintained at four weeks
- Greater decrease in pain (VAS) at one week
 - Maintained four weeks later
- Trunk muscle endurance significantly better at one week
 - Maintained four weeks later

When Do I Use Kinesiology Taping?

- Synergistic Approach
 - Pain
 - Prevention
 - Performance
- Reduce Pain
- Correct mechanical/structural dysfunction
- Reduce swelling and bruising

Four Possible Categories of Therapeutic Effect

- Neurosensory
- Structural
- Microcirculatory
- Psychological

Neurosensory Effects

- Enhanced sensory stimulation leading to a decrease in the neural perception of pain
- Activates sensory gating mechanisms for therapeutic effect
- Restoration of normal muscle activation and function

Structural Effects

- Prevent harmful ranges of motion without a hard end feel
- Dynamically supports better postural positions
- Enhance biomechanical postures during sports
- Reduce strain on affected muscles
- Dynamically treat hyper-mobility

Microcirculatory Effects

- Improve superficial fluid dynamics
- Improve lymphatic drainage
- Treat exercise induced lymphatic edema

Psychological Effects

- Increase conscious awareness
- Increase perception of stability
- Decrease fear of activity

Clinical Relevance

4 Categories of Effect

- Psychological
- Microcirculatory
- Structural
- Neurosensory

3 Application Techniques

- Neurosensory
- Structural
- Microcirculatory

Neurosensory Applications

- Stretch the Muscle
- Used for:
 - The modulation in pain to allow for the normalization of proper muscle activation
 - The reversal of chronic pain syndromes
- How?
 - Neural gating mechanisms and Neuroplasticity

Structural Applications

- Stretch the Tape
- Used For:
 - Preventing full ranges of motion from occurring which may be potentially harmful
 - Enhancing static and dynamic postures

Microcirculatory Applications

- Stretch both the tape and the muscle
- Used For:
 - for swelling, edema, lymphedema or bruising.

Key Application Guidelines

- Clean, dry, hair-free skin
- NO stretch to start and end of tape section
- Do not touch adhesive
- Rub tape firmly to activate adhesive
- Do not remove backing of tape until 90% of section has been applied

THE END RESULT

- Improved clinical skill sets
- Improved clinical outcomes
 - The patient is able to achieve early engagement in pain-free ranges of motion and strengthening exercises.
 - The patient becomes an active participant in the therapeutic process.
 - The patient is able to take the therapy home with them maintaining treatment between treatments.

Practice Session

- Neurosensory Application
 - Low Back
- Structural Application
 - Postural
- Selected Applications
 - Knee
 - Shoulder
 - Wrist
