Use of Kinesiology Tape as an Adjunct to Osteopathic Manipulative Treatment

Guy A. DeFeo, DO
OMED
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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
Neurosensorory 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