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