Therapeutic Taping for the Shoulder

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• Griffin A, Bernhardt J. Strapping the hemiplegic shoulder prevents development of pain during rehabilitation: a randomized controlled trial. Clinical Rehabilitation 2006; 20: 287/295.

• Therapeutic strapping limited development of shoulder pain during rehabilitation in hemiplegic shoulders.
Kinesio® Taping Pediatric Neuro Insult
Improved UE Function


- 15 children (10 F, 5 M) ages 4-16 at Rehab Institute of Chicago following neurological insult (brain tumor, encephalitis, SCI, CVA, TBI) with UE involvement

- Had statistically significant improvement in function
Kinesio® Tape Shoulder Pain Improve Pain & Function

• Frazier S, Whitman J, Smith M “Utilization of Kinesio® Tex Tape in Patients with Shoulder Pain or Dysfunction: A Case Series” Regis University, Advance Healing, Summer 2006

• 5 male patients: 2 shoulder pain, 1 RTC, 1 impingement, 1 s/p acromioplasty

• All patients demonstrated improvements in function, pain & disability
Kinesio® Tape Costochondritis Decreased Pain


• 21 year-old female college volleyball player with 8 months of costochondral pain

• Results: Patient reported 70% reduction in pain after 4 treatments over two weeks
Deltoid

- Athletic & Kinesio® Technique
  - Split strip mod to max stretch along anterior and posterior borders of deltoid
  - Single strip over muscle belly mod to max stretch
Glenohumeral Laxity / Anterior Instability

- Acute Phase/Edema Kinesio® Technique
  - Two multiple split strips (cut one 2” piece into 4-6 strips leaving last square intact)
  - Place with minimal to no stretch in perpendicular fashion
Glenohumeral Laxity / Anterior Instability

Subacute / Chronic Phases

- **Kinesio® Deltoid Tape**
- **Mulligan & Kinesio® Technique**
  - 2-4 Single strips applied with maximal pull from anterior to posterior over superior and lateral aspects of shoulder
Multiaxial Instability

- **Kinesio® Technique similar to Athletic Training Shoulder stabilizing strip**
  - Single strip 3-4 inches proximal to ac joint to 3-4 inches below deltoid tuberosity mod to max stretch with arm at 90 degrees abduction
  - Bring arm into ADD and rub down
Subacromial Bursitis

- Mulligan, Athletic Training & Kinesio® Technique
- 2-4 Space Corrections over subacromial space
Acromioclavicular Joint Sprain

- Athletic Training, McConnell & Kinesio®
- 2-4 diamond cut outs over ac joint
  - Kinesio® uses donut strip
  - Athletic uses donut cut-out
  - McConnell approximates tissue
Acromioclavicular Separation

- Athletic Training & Mulligan
- Single strip posterior to anterior across ac joint maximal stretch approximating ac joint
- Can apply multiple strips depending on degree of separation
• Athletic Training Technique
• Non-displaced, stable fx
• Single strip distal to proximal clavicle max stretch across fracture site
• Can combine with space correction over site
Supraspinatus

- **Kinesio® Technique**
  - Shoulder in IR & horizontal ADD
  - Split strip from the greater tubercle of humerus with mod to max stretch tails along the borders of supraspinatus

- **Modified Tape Practical Application**
  - Over supraspinatus moderate stretch with single strip tape
**Infraspinatus**

- **Kinesio® Technique**
  - Shoulder in IR & horizontal ADD
  - Single strip from the greater tubercle of humerus with mod to max stretch tails along the borders of infraspinatus

- **Modified Tape Practical Application**
  - Over infraspinatus, single strip, mod to max stretch
Teres Minor

- **Kinesio® Technique**
  - Shoulder in IR and ABD
  - Split strip from greater tubercle of humerus with mod to max stretch tails along the lateral border of scapula

- **Modified Tape Practical Application**
  - Single strip mod to max stretch
Bicipital Tenosynovitis

- **Kinesio® Technique**
  - **Bicep Unload**
    - Split strip with mod to max stretch from the radial tuberocity with tails to the coracoid process and supraglenoid tubercle of scapula
  - **Space Correction**
    - Over long head of biceps
- **Modified Tape Practical Application**
  - single strip moderate stretch over bicep
Brachial Plexus Neuropraxia

- Single strip split proximally applied with min to mod stretch
- 1<sup>st</sup> tail along upper trapezius
- 2<sup>nd</sup> tail along inferior angle of scapula
- With shoulder in horizontal ADD apply along posterior brachium to forearm with diamond cut hole over olecranon
- Apply to point of most distal symptoms
Pectoralis Minor

- Kinesio® Technique
- Split strip from coracoid process of scapula to ribs 2-5, minimal stretch
- Generally for inhibition to improve postural alignment (decrease forward pull on scapula)
Rhomboid

- Kinesio® Technique
- Tape with scapula abducted / anteriorly rotated
- Double split strip sp T2-T5 to medial border of scapula between spine and inferior angle, maximal stretch middle of tape, no pull on tails
- Improve scapular stabilization / postural control
Kinesio® Tape for Rhomboid Decreased Pain/Increased ROM

- Murray H, Husk L, Garcia D, 2001
  - Awaiting publication, presented at 16th Annual Kinesio® Taping Symposium
  - “Effects of Kinesio® Taping on Posture and Upper Extremity Pain”
  - Unilateral rhomboid facilitation and pectoralis inhibition
  - 15 subjects
  - Pain complaints significantly decreased and GHJ AROM flexion increased by an average of 15 degrees
Scapular

- McConnell Technique
- Scapular Stabilization
- Two single strips along borders of scapula pulling into retraction and depression
Edema / Lymphedema

Kinesio® Techniques

Edema
- Reduction through active joint motion
  - Min to no stretch over edematous site
  - Fan shape most common, direction not important

Lymphatic Drainage
- Direction of lymphatic flow
- No stretch
Clinical Evidence-Based

- **Objective Assessment (* Sign)**
  - Special Tests: RTC, impingement, instability
  - Pain at rest, with AROM and previously aggravating motions
  - MMT – GH and scapulothoracic
  - AROM – range and painfree
  - GHS rhythm
Clinical Evidence-Based

- Objective Assessment (* Sign)
  - Functional Assessment
    - Lifting (weight, reps)
    - ADL – grooming, housework, dressing
    - Pushing / Pulling – lawnmower, vacuum, grocery cart
    - Overhead reaching