Taping Techniques for the Patellofemoral Joint

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PFJ Bracing


  - Pain relief thought to be the result of increased patellofemoral contact area

  - Perhaps d/t compression of the patella into the trochlea induced by the brace
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<td>PT intervention w/ or w/o PF taping</td>
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<td>Bockrath Med Sci Sport Exerc 1993</td>
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<td>Whittingham JOSPT 2004</td>
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<td>Squatting Aggravating Activities</td>
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<td>Ernst JOSPT 1999</td>
<td>Lateral to medial taping compared to</td>
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Patellofemoral Taping

  • Conflicting evidence

  – (+) patellar tilt, >5° tibial varus angulation
    – 83% likelihood of 50% reduction in pain w/step test, squatting
Taping Basics

• Apply tape to clean, dry skin (no lotion)

• 1st apply cover roll (white tape)
  – Protective barrier for the skin

• 2nd apply leukotape (brown tape)
  – This tape creates the “action” by pulling the joint/muscle

• Take tape OFF if:
  – Skin or joint becomes irritated
  – Pain increases
  – Tape is falling off

• Leave tape on x 3-4 hours (can be 1-2 days if helpful & tolerated - cautious and observant with this!!)
  – Wrap in saran wrap while bathing to extend life
In-Clinic Trial

• Reproduce symptoms with a measured, pain-generating activity
  • 8” step-down heel tap x 3

• Specify pain:
  » Location
  » Intensity (NPS)
  » Timing of onset

• Apply tape technique

• Re-test provocative activity and re-assess symptom response

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Medial Glide

- Improve tracking, reduce lateral overload, reduce lateral subluxation
  
  - Apply tape lateral to medial across proximal 2/3rd of patella

  • Anchor approx. 3-4 cm below lateral border

  - Translate the patella medial into the central aspect of the groove, keeping the tape taut

  - Gather posteromedial soft tissue and anchor tape w/o pulling more
Medial Tilt

• *Reduce lateral overload*
  – Anchor tape at lateral aspect of patella (at proximal 2/3)
  – Use thumb & pull of the tape to tilt the patella medially
  – Gather posteromedial soft tissue and anchor tape, without pulling more
Patellar Unloading Technique

- **Unload general PF joint compression (Add directional elements as appropriate)**

  - 2 strips of tape: 1 anchored at medial knee, 1 at lateral knee (aligned at the proximal 2/3 of patella)

  - Gather the tape over the patella and create an upward pull

  - Cinch the tape together all the way down to the patella while maintaining upward pull

  - Anchor tape to medial side w/ or w/o translational pull (per sx’s)
“Reverse” (lateral glide) Technique

• To relieve pain from increased medial contact forces

  – “Over-release” w/history of broad lateral retinacular release

  – “Medial facet overload” due suspicion of:
    • Over-constrained MPFL graft
    • Over-medialized w/osteotomy procedure

  – THIS WILL NOT BE A HIGH FREQUENCY TECHNIQUE!!
Lateral Glide: "Reverse Taping"

- Anchor just down from the medial border of patella & lay tape across the proximal 2/3 or patella

- Gently translate the patella in a lateral direction to center it in the groove with fingers, keeping tape taut

- Anchor tape around posterolateral aspect of knee without pulling more

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Infrapatellar Fat Pad Unloading

• “V” Technique:

• (2 strips of tape): knee slightly flexed

• Anchor the tape at tibial tubercle (outlined) & pull it diagonally up & around the back of the knee (tape line should be inferior to the margin of the fat pad)

• Pull the infrapatellar skin & fat pad upward & inward toward the patella as you firmly pull the tape toward the anchor sites around the back side of the knee (apply 1 strip at a time) – anchor above the popliteal crease
Business Details

• Billing for Taping Techniques
  • What was your purpose for taping?
    » Stabilization
    » Neuromuscular re-education
    » Pain control
Taping Lab

• Medial glide
• Medial tilt
• “Reverse” lateral glide
• Patellar unloading
• Infrapatellar “V” fat pad unloading