



Paperwork



Apps to take notes. Public Link for PDF Notes:





Evernote

Slides: http://rocktape.com/wp-content/uploads/course_pdf/basic/basic/slides.pdf

Manual: http://rocktape.com/wp-content/uploads/course_pdf/basic/basic-materials.pdf

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66

We are a movement company that dabbles in tape.

- Someone important

How well are you MOVING?

Does it really matter?

- 7



Brazilian researchers discovered an interesting link between a person's ability to sit and rise from the floor and the risk of being 6.5 times more likely to die in the next six years.

Brito LBB, Ricardo DR, Araujo DSMS, et al. Ability to sit and rise from the floor as a predictor of all-cause

.



Sit down on the floor and get back up, using as little support as possible.

A point will be subtracted every time you use a hand, knee or other body part for support.

Study Methods

Six year study 2,000 subjects Ages 51-80 Scored out of 10

Subtract one point every time a hand, knee or other body part is used for support

10



Mostly those with **lower test scores**.

Each point increase was linked to <u>21% reduction</u> in risk of death



More Than Just Taping

Movement Matters Science of Touch













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Movement Pyramid



FMT Basic Outline





- Pain
- ${\color{red}\bullet}\, {\color{blue}\mathsf{Decompression}}$
- Neurosensory



Applications

• Pain Mitigation

The act of examining people to decide if they are suitable for a particular movement or exercise

- Fluid Dynamics
- Posture
- Nerve Entrapment
- Scar



Rigid Tape





Elastic Therapeutic Tape





"

Kinesiology Taping can assist our bodies' own healing mechanisms.

Kenzo Kase, 1980 founded Kinesio Taping Method

19

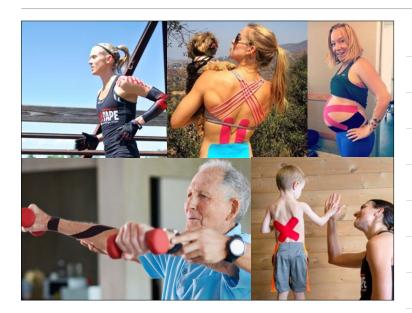


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and grow

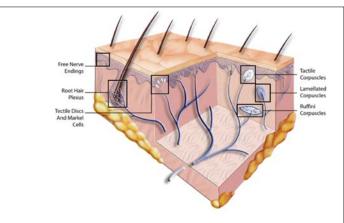






Does it really work?





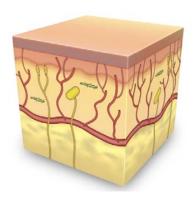
Largest organ of your body

2



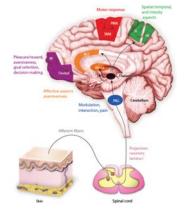
Our skin is a megaphone to get our brain's attention.

Biomechanical Lifting Effect



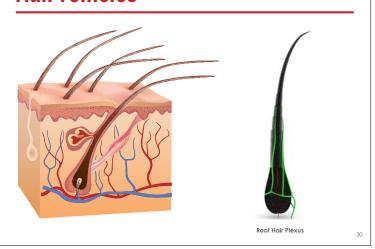
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Skin Brain Connection



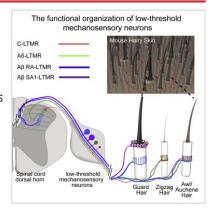
Paus, Ralf., Schmelz, Martin., Biro, Tamas., Steinhoff, Martin. Frontiers in pruritus research: scratching the brain for

Hair Follicles



Hair Follicles

- Perception of Myriad Touch Sensations
- LTMR's functionally distinct mechanosensory end organs



The Functional Organization of Cutaneous Low-Threshold Mechanosensory Neurons. Cell, 2011; 147 (7)



The Sense of Touch

- 1.Tactile
- 2.Pain
- 3.Temperature
- 4.Pressure
- 5. Vibration
- 6.Proprioception
- 7.Interoreception

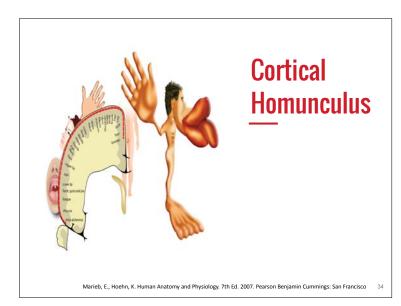
3

45 Miles

45 miles of peripheral nerve in a human body

Every cubic centimeter of skin organ has a nerve or portion thereof, supplying it, embedded into it.

Diane Jacobs

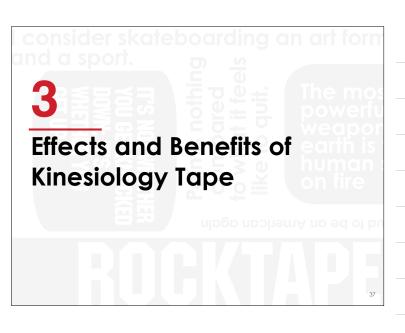


What are we dealing with?



Sensory Input for Motor Output





3 Main Effects



Pain Mitigation

If there's a story behind the image, icon or photo above, then this is the best place to put it. Be concise though!



Decompression

If there's a story behind the image, icon or photo above, then this is the best place to put it. Be concise though!



Neuro-Sensory

If there's a story behind the image, icon or photo above, then this is the best

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Pain Mitigation
Decompression
Neurosensory Input



Pain is a request for change.

Perry Nickelston, Stop Chasing Pain.

Our relationship with pain...

Relationship Status:

Interested in:

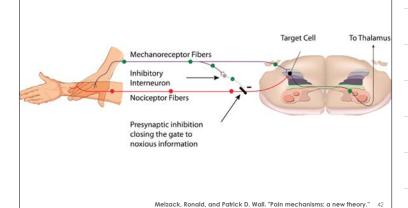
Looking for:

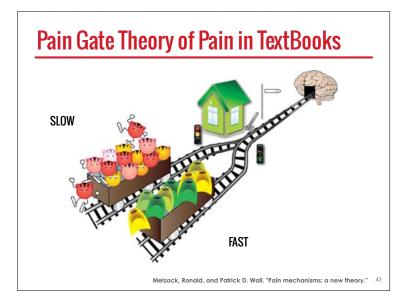
Single In a Relationship Engaged Married

It's Complicated

In an Open Relationship Widowed

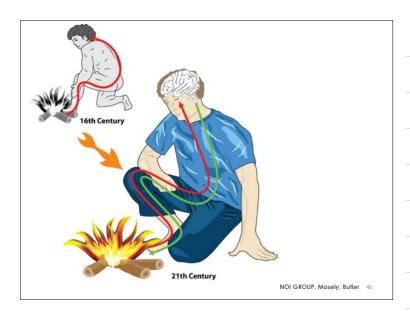
Pain Gate Theory of Pain in TextBooks



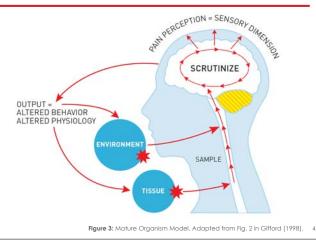


Pain Gate Theory in Real Life





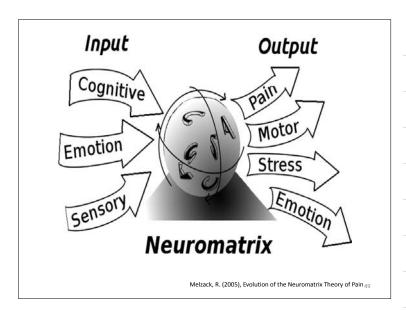
Pain is the opinion of the brain



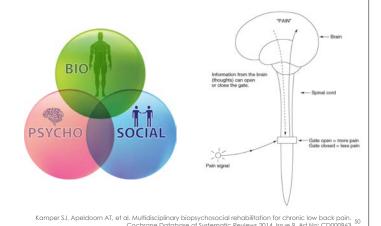
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To reduce pain, we need to reduce credible evidence of danger and increase credible evidence of safety.

Lorimer Moseley

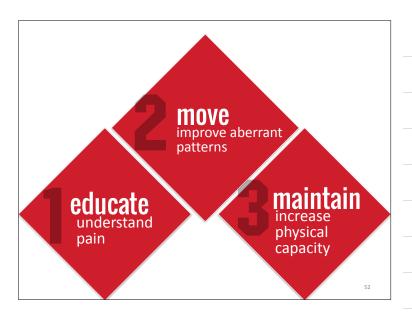


Biopsychosocial (BPS) Model





Can Tape Help?



Words Matter

What you say is just as important as what you do.



We Move Around Pain

Nociception Affects Motor Output A Review on Sensory-motor Interaction With Focus on Clinical Implications

Conclusion:

Chronic nociception alters motor output, making proper central movement impossible.

The shift in thinking is to stop trying to restore normal motor control in case of chronic nociception in patients with musculoskeletal disorders.

Meta-analysis Focused on Pain

BJSM Online First, published on January 16, 2015 as 10.1136/bjsports-2014-094151

Kinesio taping in musculoskeletal pain and disability that lasts for more than 4 weeks: is it time to peel off the tape and throw it out with the sweat? A systematic review with meta-analysis focused on pain and also methods of tape application

Edwin Choon Wyn Lim, Mathew Guo Xiang Tay

Department of Physiotheraps Department Emerical Department Emerical Conditional Commissional Services, Selected Physiotheraps South Royclinics, Singapore Correspondence to ABSTRACT Introduction in recent years. Enesto tape has been used to support injured muscle and prints, and relieve pain. We compared the pure and disability in individual with chronic muscalististicals pain who were treated all. Knesso suppose with those suring minimal or other

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METHODS

Conclusion:

- 1. KT is superior to minimal intervention for pain relief.
- 2. KT as an adjunct is beneficial in pain relief

Choo Wyn Lim et al, BJSM, 2015 55

Superior Pain Relief

Methods Searches of eight major electronic databases were conducted. Data for pain and disability scores were extracted. Meta-analyses (wherever possible) with either a fixed or random effect(s) model, standardised mean differences (SMDs) and tests of heterogeneity were performed.

Results Seventeen clinical-controlled trials were identified and included in the meta-analyses. When compared to minimal intervention. Kinesio taping provided superior pain relief (pooled SMD=-0.36, 95% Cl -0.64 to -0.09, p=0.009) but the pooled disability scores were not significantly different (pooled SMD=-0.41, 95% Cl -0.83 to 0.01, p=0.05). No significant differences were found when comparing Kinesio taping to other treatment approaches for pain (pooled SMD=-0.44, 95% Cl -0.69 to 0.82, p=0.49) and disability (pooled SMD=0.08, 95% Cl -0.27 to 0.43, p=0.65).

Discussion Kinesio taping is superior to minimal intervention for pain relief. Existing evidence does not establish the superiority of Kinesio taping to other treatment approaches to reduce pain and disability for individuals with chronic musculoskeletal pain.

Conclusion:

- Research is telling us that when used without other interventions, outcomes are good!
- 2. KT should be used as an adjunct for treatment

Choo Wyn Lim et al, BJSM, 2015

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Treat it, tape it, train it

KT as an adjunct to exercise therapy

In contrast, the two trials which used KT as an adjunct to exercise reported a significant difference in pain and disability between groups, favouring the experimental group.^{3 42} This is not surprising as exercise has been reported to garner good evidence of effectiveness as a standalone or adjunctive treatment for chronic musculoskeletal pain.⁴⁵ Taken together, our review suggests that KT, when used in combination with conventional therapy, may be effective in reducing pain. Our clinical impression is that many clinicians use KT in this way—as an adjunct to

Conclusion: significant improvement when combining tape with corrective exercise interventions.

Choo Wyn Lim et al, BJSM, 2015



Kinesio taping compared to physical therapy modalities for the treatment of shoulder impingement syndrome

Conclusion:

- 1.Immediately reduce the threat of pain
- 2. The therapeutic KT group showed immediate improvement in pain-free shoulder abduction
- 3. These studies are small, but important to the consumer

58



JAMER GONZÁLEZ-KILESIAS, FT - CÉSAR FERNÁNDEZ-DE-LAS-PEÑAS, FT PIO" - JOSKUA CLELANO, FT PIO" PETER HILLIBRICEL PT WIS, DPT COL JALCANY I CAUT - MARIA DEL ROSARIO GUTTÉRRIZ-WEGA, PT

Short-Term Effects of Cervical Kinesio Taping on Pain and Cervical Range of Motion in Patients With Acute Whiplash Injury: A Randomized Clinical Trial

Conclusion:

Patients with acute WAD receiving KT exhibited statistically significant improvements immediately following application and at 24hour follow-up.



Initial effects of kinesio® taping in patients with patellofemoral pain syndrome: A randomized, double-blind study

Nihan Ozunluⁿ, Ozgur Surenkok^b, Gul Baltacı^c, Pınar Oztop^d and Metin Kara Physical Therapy and Rehabilitation, Faculty of Health Sciences. Backett Habitation

Conclusion:

The results showed there was significant difference between no tape and KT for PFP group during descending stairs.

And there was significant difference between no tape and K taping conditions for PFP group

Compromised Population

PHYSIOTHERAPY THEORY and PRACTICE of the second of the sec

OSCEDATENTES: A GOUDIE DINGEO FANOOMIZEO CONTROLLED SEUDY

Sudarshan Anandkumar, Mr. PF, BPT, PCOSTT, COMPT, MAP, MATEI, Shobhalakshmi Sudarshan, MPT, MAP, and
PRITIM NADOBÁ, MS. PF, MAP

Constitute of Manistrania International School of Manistrania, County University, Cabrilla State of St

Abstract Keywords

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Application of KT is effective in improving isokinetic quadriceps torque and reducing pain in knee osteoarthritis

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Conclusion:

VAS and WOMAC scores showed statistical change in pain mitigation.

Another option for daily pain control.

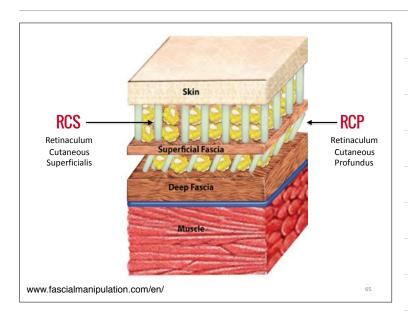
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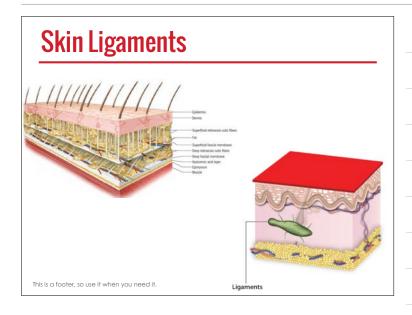
63

Consider skateboarding an art form and a sport.

The mospowerful we aport we approve aport we approve aport we aport we

Under the Skin With Kinesiology Tape With Kinesi







ITB Case Study



Fascial Compression

Fascial Decompression





Conclusion:

After soft-tissue trauma, it was histologically shown that KT increases epidermal-dermal distance, and may reduce the sensation of pain, edema and inflammation

Nihan Kafa et al. Effects of kinesiologic taping on epidermal–dermal distance, pain, edema and inflammation after experimentally induced soft tissue trauma





Conclusion:

KT increases AHD in healthy individuals immediately following application, compared with sham tape.

A. Luque-Suarez et al. Short term effects of kinesiotaping on acromiohumeral distance in asymptomatic subjects: A randomised controlled trial

70



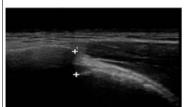
1 (left), applied with 100% ter

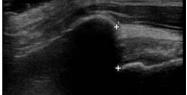


Fig. 3. Participant's position for AHD assessment with ultrasonography.



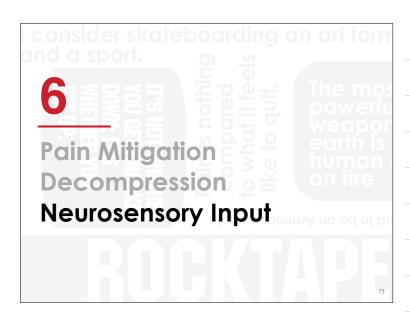
and in neutral rotation





Pre Tape

Post Tape



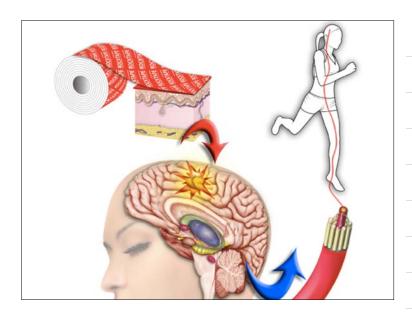
#BrainGames

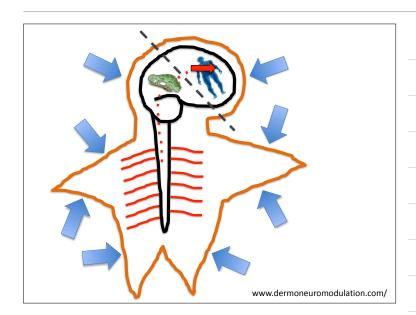
It's BioPlastic

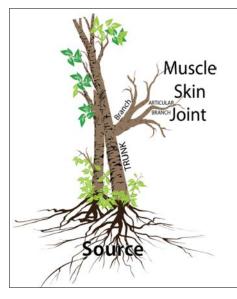


The Experience







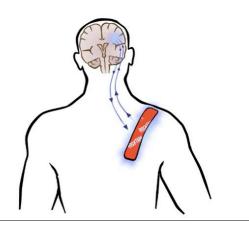


Hilton's Law

"The same trunks of nerves whose branches supply the groups of muscles moving a joint furnish also a distribution of nerves to the skin over the insertions of the same muscles; and - what at this moment more especially merits our attention - the interior of the joint receives its nerves from the same source."

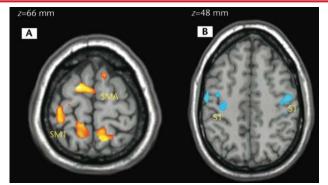
Hilton's Law (1863)

Tape the Brain (via the skin)



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Effects of Tape on the Brain



Effects of Patellar Taping on Brain Activity during Knee Joint Proprioception Tests Using functional Magnetic Resonance Imaging

Michael J.Callaghan, Shane McKie, Paul Richardson, Jacqueline A.Oldham 81

Tape your brain

Effects of Patellar Taping on Brain Activity During Knee Joint Proprioception Tests Using Functional Magnetic Resonance Imaging

Clinical Implications

Clinicians have developed a variety of complex taping techniques to alter patellar position, muscle activity, or pain. This study showed that the application of a simple patellar taping technique covering 50% of skin over the knee had effects on areas of the brain associated with sensation, coordination, decision making, and planning of complex coordination tasks and the coordination of the unconscious aspects of proprioception. Currently, there are no data to demonstrate whether using a simple or complex technique has a greater or lesser effect on activity in the proprioception areas of the brain.

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Extended Use of Kinesiology Tape and Balance in Participants With Chronic Ankle Instability

Kristen Jackson, MS, ATC*; Janet E. Simon, PhD, ATC†; Carrie L. Docherty, PhD, ATC, FNATA‡

*Central Michigan University, Mount Pleasant; †School of Applied Health Sciences and Wellness, Ohio Un Afhens; ‡School of Public Health, Indiana University, Bloomington

Conclusion:

Improved balance with chronic instability and for 72 hours after removal

nce improvements were retained 72 hours after the kinesiclogy tape had been removed.

Chronic Pain is a Cortical Dysfunction

Tactile thresholds are preserved yet complex sensory function is impaired over the lumbar spine of chronic non-specific low back pain patients: a preliminary investigation

chief M. Wand **, Flavia Di Pietro P, Pamela George *, Neil E. O'Connell *

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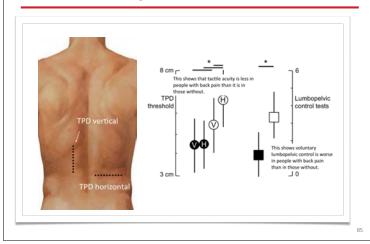
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Grows for Research and Admittations, School of Both Schools 100. Record University, Uthridge, UK

Conclusion:

2 Pt. Discrimination (perceptual abnormalities) deficits in chronic lower back pain patients.

Tactile Acuity and Pain



Improved Tactile Acuity
Improved Body Representation



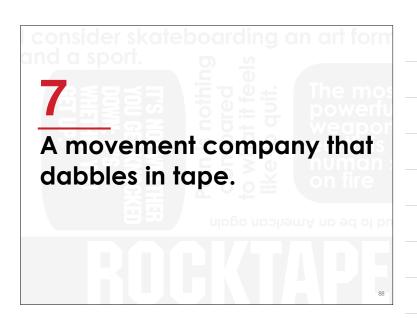
Decreased Pain Improved Control



Touch it. Tape it. Move it.

C. Shante Cofield, PT, DPT, OCS, CSCS, CF-L1 - The Movement Maestr







Muscle contraction) Muscle elongates (econetric contraction) Movement Movement

What we thought.

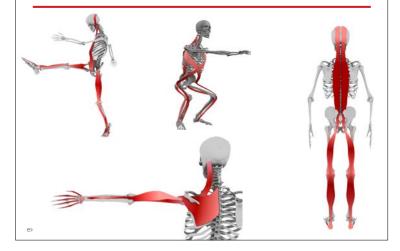
How do we MOVE?

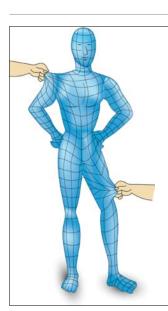
The Car Analogy



91

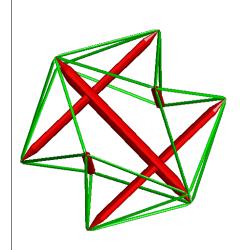
What we now know.





Fascia

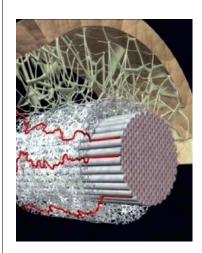
A layer of fibrous tissue.
Structure of connective tissue that surrounds muscles, groups of muscles, blood vessels and nerves. Binds some structures together while permitting others to slide smoothly over each other



Tensegrity

Structures that maintain their integrity due to a balance of continuous tensile forces through the structure

9.



A Sensory Organ

These layers are more densely populated with mechanoreceptors than tissues situated more internally

(Stecco et al, 2008).

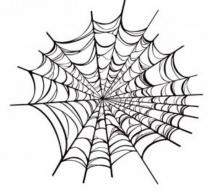
It is now believed that joints only provide joint feedback when at end of range movements and not during physiological motions

(Lu et al, 1985).

9

Fascia

It's alive. It senses.

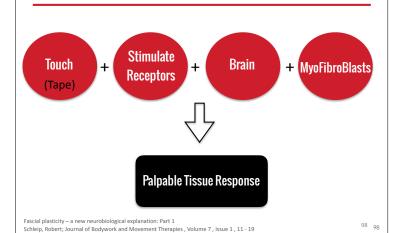


It transmits force globally.

How Does Tape Effect it?



Reflexive Activation



Does Direction of Tape Matter?

If there's more to say about the number above, then this is the best place to put it. Be concise though!





Contents lists available at SciVerse ScienceDirect

Journal of Science and Medicine in Sport

journal homepage: www.elsevier.com/locate/jsams



Original research

Influence of Kinesio Taping applied over biceps brachii on isokinetic elbow peak torque. A placebo controlled study in a population of young healthy subjects

Giancarlo Fratocchi^a, Francesco Di Mattia^a, Renato Rossi^a, Massimiliano Mangone^b, Valter Santilli^{a,b}, Marco Paoloni^{a,b,a}

* Physical Medicine and Rehabilisation Unit, Azienda Paliclinico Umberto I, Rome, Italy
* Department of Physical Medicine and Rehabilitation, Sopienza, University of Rome, Italy

Conclusion - Statistically significant concentric elbow peak torque improvement between no tape group and kinesiology tape group - opposite of what was supposed to happen.

100

No.

THE EFFECT OF APPLIED DIRECTION OF KINESIO TAPING IN ANKLE MUSCLE STRENGTH AND FLEXIBILITY

Yuan-Yuan Lee¹, Hsiao-Yun Chang², Yun-Chi Chang¹, Juo-Ming Chen¹

School of Medical Laboratory and Biotechnology, College of Medical Technology, Chung Shan Medical University, Taichung, Taiwan ¹ School of Physical Therapy, College of Medical Technology, Chung Shan Medical University, Taichung, Taiwan ²

The purpose of this study was to examine the effect of applied direction of Kinesio taping (KT) in ankle rarge of motion and calf muscle strength. Twenty healthy subjects voluntarily participated in this study. The ankle plantar flexor muscle strength and ankle dorsflexors (AN) were assessed in knee flexion and knee extension before and affer taping applied. Two applied directions, heel to posterior of knee cap (insertion to origin of calf muscles) were cap to heel (origin to insertion of calf muscles) were applied over both side of calf muscles, respectively. The results had not showed significantly difference in any of the results. The beneficial effects of applied direction of KT has not provided scientific evidence in this study. Future study may be able to seek other methods to identify the effect on strength or flexibility while KT applied.

KEY WORDS: Kinesio taping, strength, range of motion, ankle, tape.

Conclusion:

According to this study, there is NO evidence to support directional taping.

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No.



Conclusion:

NO evidence to support inhibitory nor facilitatory taping in healthy subjects.

Does amount of tape stretch matter?

If there's more to say about the number above, then this is the best place to put it. Be concise though!

103

No.

DESIGN: Randomised trial with concealed allocation, intention-to-treat analysis and blinded ass PARTICIPANTS: 148 participants with chronic non-specific low back pain.

INTERVENTION: Experimental group participants received eight sessions (over four weeks) of Kinesio Taping applied according to the Kinesio Taping Memor treatment manual (e. 10 to 15% tension applied in fiscion to create sich convolutions in neutral). Control group participants received eight sessions (over four weeks) of Kinesio Taping with on entirol, creating on convolutions.

OUTCOME MEASURES: The primary outcome measures were pain intensity and disability after the four-week intervention. I outcomes were pain intensity and disability 12 weeks after randomisation, and global perceived effect at both four and 12 we

RESULTS: Applying Kinesio Tape to create convolutions in the skin did not significantly change its effect on pain (MO-0.4 points, 90% Ci-1.3 to 0.4) or disability (MO-0.3 points, 90% Ci-1.3 to 1.3) at four weeks. There was a small difference in favour of the experimental group for the secondary outcome of ploisal preceived feet (MD-1.4 points, 90% Ci-0.3 to 2.5) at four weeks. No significant between-group differences were observed for the other secondary outcomes.

Conclusion - Tape applied with stretch was NO more effective than simple application of tape without tension

Minimally Effective Dose



The smallest dose that will produce a desired outcome.



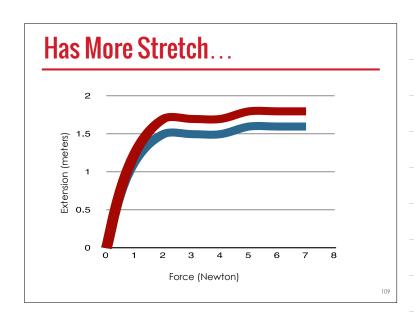
Less is More.

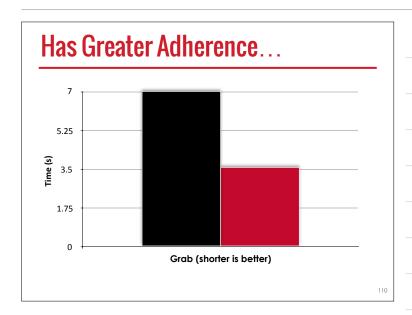
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The Tape







24 hrs/day 3-5 days





Do not Tape

- · Open Wounds
- Skin LesionsRashes
- · Clients Unable to Communicate
- · Decreased sensation -
- Neuropathies
- Adhesive Allergies
- Over Active Cancer Site
- Kidney/Heart Congestion
- · Front of the neck

Immediately remove the tape if you feel any skin reaction above and consult your physician if symptoms are severe or do not improve in 2 days.



Caution

- History past skin irritationTest Patch no tape
- experience
- Medication blood thinners
- Female hormone cycle
- Skin Type fair skin
- Extreme heat car seat heater, hot hot showers

Skin Prep Basics



- Clean Skin (skin free of oils/lotions)Alcohol wipes
- Apply on light body hair or trimmed hair

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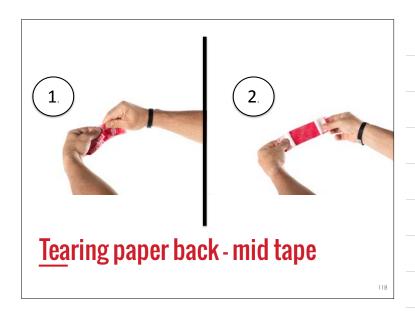
Application Basics

- Stretch the body area if you can
 • Round the Corners
- Avoid Handling Glue as much as possible
- Do not stretch ends of tape
 Minimal Stretch on center of
- tape (already has 15-20%)
- Apply 2 hours before activity
- No wrinkles in the tape
- End Tape on Skin
- Rub in adhesive

Round your edges











#Good

Removal Basics

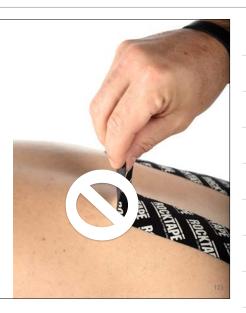
Parallel to skin while holding skin adjacent to tape edge



Alternate Removal Method Credit: Rick Daigle



So, you've chosen to divide your presentation in different sections. Well done.



Too Much Stretch



blister/traction non uniform



Allergic Reaction



uniform



Advanced Skin Care





All Negotiable

- Direction
- Where it starts
- Where it stops
- How long, how short
- Order of pieces
- Number of pieces



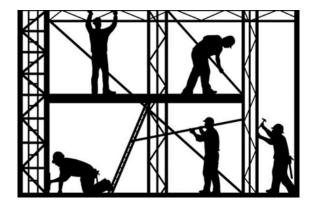
Non Negotiable

COMFORT SAFETY PRACTICAL

12

Not a Protocol-Based Technique





It's a Framework. You Rule the Tool.

130

66

Open source is a philosophy or pragmatic methodology that promotes free redistribution and access to an end product's design and implementation details.

You learn from us, we learn from you.

13

3 main effects

Pain Mitigation
Decompression
Neurosensory Input

10

Pain Taping

133

11

Pain Taping - Spine

134

Pain Mitigation Taping - 3 Steps

- 1. Stretch Skin
- 2. Stabilization Tape (1-2 Strips)
- 3. Decompression Tape (Pain Site)





Stretch the Skin

Pre-stretch is applied to the skin to engage the receptors and preload the elastic quality of the organ

136



Stabilization Strips

137



2 Stabilization Strips

Stimulate skin mechanoreceptors

Mitigate pain

Improve tactile threshold/ awareness

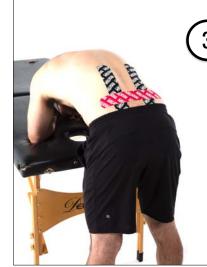


Decompression Strip

Increases biomechanical lifting effect on skin and superficial fascia (over focal point area)

Adds to increased mechanical disruption of local receptors

139



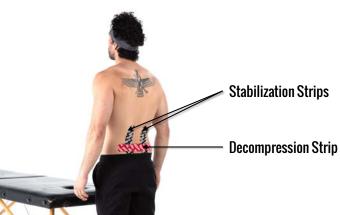
Decompression

Increases biomechanical lifting effect on skin and superficial fascia (over focal point area)

Adds to increased mechanical disruption of local receptors

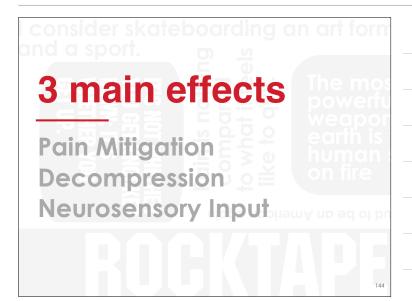
141

Low Back Application













Negotiables

Where to start

Order of strips

How many strips

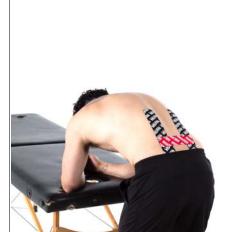
Length of strips

147



Direction?

Common Sense



Tape on Skin

Sticks Longer

148



Order of Strips

Equal, if not better, results

149

150



Direction & Number of Strips

Low Back variation - multi vector Diagonal Vector



Length of Strips

Depends on the need of the tissue

151

1. Stretch 2. Stabilize 3. Decompress



Paper Feed



Big Daddy - Greater Stimulus





1.5

3 main steps Stretch Stabilize Decompress (4" Big Daddy)

Tape + Capsaicin = Pain Relief







MECHANICAL Stimuli CHEMICAL STIMULI

Laing RJ, Dhaka A. ThermoTRPs and Pain. The Neuroscientist: a review journal bringing neurobiology, neurology and psychiatry. 2016;22(2):171-187.

15

consider skateboarding an art form

12

Pain Taping - Knee

The most powerful weapor earth is human on fire

nibgb nboiremA nb ed of b

158

3 Steps

1. Stretch



2. Stabilize

3. Decompress





Turning Corners

160





Knee Variation





Knee Variation

Decompression prior to Stabilization

163



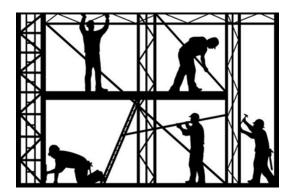
Don't judge a knee by its convolutions

16





Big Daddy Knee Variation



Pain Taping Framework

Stabilization: supports an area - can be one or more strips, no specific direction Decompression: can be more than one or none at all Tape on skin helps with pain reduction, fluid dynamics and neurosensory input

166

Pain Taping - Lower Extremity

167

Foot Pain

1. Stretch





2. Stabilize



3. Decompress



Foot Pain





169

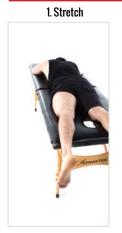
Foot Pain





17

Achilles Pain







Calf Pain

1. Stretch

2. Stabilize

3. Decompress





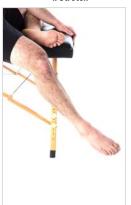


Anterior Shin Splints

1. Stretch

2. Stabilize

3. Decompress







Medial Tibial Border Pain

1. Stretch

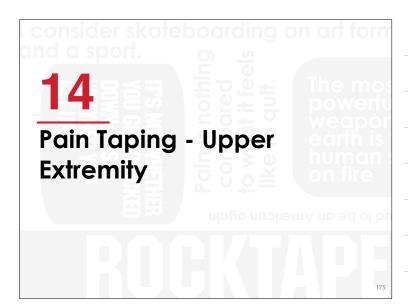
2. Stabilize

3. Decompress

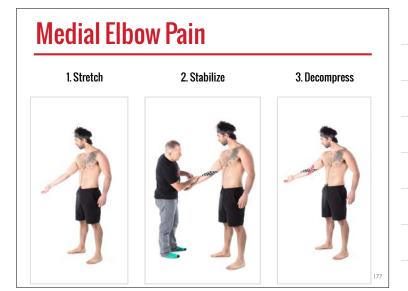








1. Stretch 2. Stabilize 3. Decompress



Wrist Pain

1. Stretch

2. Stabilize

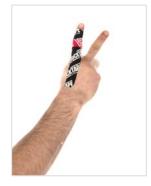
3. Decompress







More....





The most powerful to the power

Shoulder Application 1. Stretch 2. Stabilize





Shoulder Variation

1. Stretch

2. Stabilize

3. Decompress







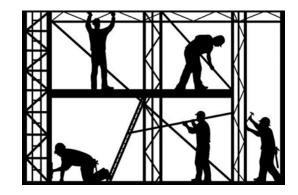
AC Joint Pain





Multiple Decompression Strips

185



Pain Taping Framework

Stabilization: supports an area - can be one or more strips, no specific direction Decompression: can be more than one or none at all Tape on skin helps with pain reduction, fluid dynamics and neurosensory input

Case Study

- 1. Group 1 Hamstring Pn and SI Jt Pn
- 2. **Group 2** Ant. Lat. Rib Pn and Sternal Pn
- 3. **Group 3** IT Band Prox. and Distal and Ankle injury
- 4. **Group 4** Dequervains Syndrome and Med. Epi Condylitis/osis
- 5. **Group 5** MTSS bilateral and TFCC pn

187

16

Fluid Dynamics

The most powerful weapor earth is human :

nibgb nbairəmA nb əd of b

188

nd a sport.

3 main effects

Pain Mitigation
Decompression
Neurosensory Input

The most powerful weapon earth is human on fire

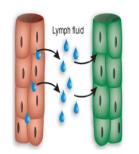


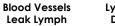
Assist Fluid Dynamics

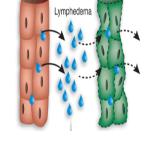
Lifting effect of tape decompresses the affected area, assisting fluid dynamics

190

Theoretical Mechanism



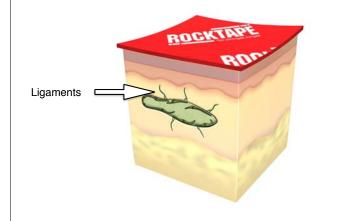




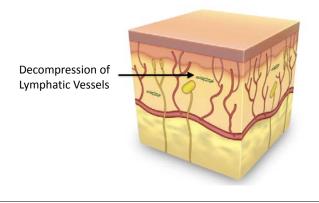
Lymph Vessels Abnormal Lymph
Drain Lymph Vessels Fail to
Drain Lymph

191

External Pump



Decompression of Vessels



19

Fluid Dynamics



Speed Recovery











Fluid Dynamic Taping - 2 Steps

- 1. Fan Strips Over Epicenter of Swelling
- 2. Create Multiple X's with Strips

196

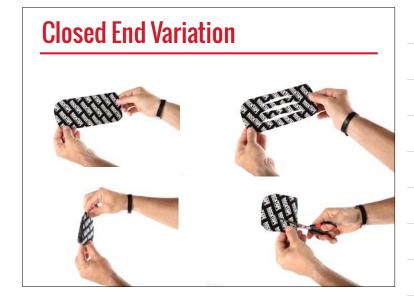
Fan Method



Acute Low Back







Closed End Variation



202

Tape and Lymphedema

Could Kinesio tape replace the bandage in decongestive lymphatic therapy for breast-cancer-related lymphedems? A pilot study.

A pilot study.

Bank has the three breast bear breast cancer-related lymphedems? A pilot study.

Bank has the three breast bear breast cancer-related lymphedems?

A pilot study.

Bank has the three breast breast breast cancer breast breast limited by the pilot of the pipe of the study in the pilot of the pipe of the study in the pilot of the pipe of the study in the pilot of the pipe of the study in the pilot of the pipe of the study in the pilot of the pipe of the study in the pilot of the pipe of the study in the pilot of the pipe of the study in the pilot of the pipe of the study in the pilot of the pipe of the pipe of the pipe of the study in the pipe of the

Conclusion:

- 1. this paper does not say bandages or tape is better, it talks about compliance
- 3. Very important to understand pt compliance is important to outcomes
- 5. Tape is a great adjunct to treat swelling as stay on for days

20

66

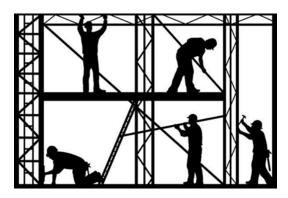
When comparing bandage vs. kinesiology taping in breast cancer-related lymphedema, this study suggests that bandaging could be replaced with taping and have better compliance

Upper Extremity Lymphedema



Post Surgical





Fluid Dynamics Framework

Create a "basket" around the area to improve fluid dynamics and speed the healing process

208



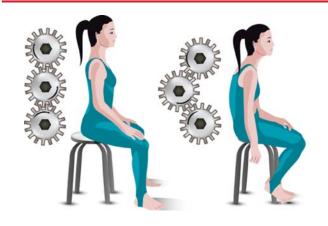


"

Movement becomes habit, which becomes posture, which becomes structure.

Thomas Myers, author of Anatomy Trains

Optimal Congruent Joint Position



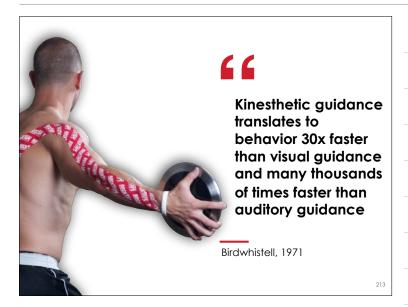
211

Why Tape for Posture?

- 1. Improve length-tension relationships
- 2. Improve force couple relationships
- 3. Improve neuromuscular efficiency



All via cutaneous stimulation



Taping for Proprioception

Increasing cutaneous afferent feedback improves proprioceptive accuracy at the knee in patients with sensory ataxia.

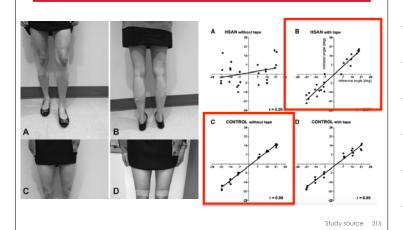
Macefield VG¹, Norcliffe-Kaufmann L², Goulding N², Palma JA², Fuente Mora C², Kaufmann H².

Author information

⊕ Author Information
Abstract
Hereditary sensory and autonomic neuropathy type III (HSAN III) features disturbed proprioception and a marked ataxic gait. We recently showed that joint angle matching error at the knee is positively correlated with the degree of ataxic. Using intraneural microelectrodes, we also documented that these patients lack functional muscle spinides per persenvel large-diameter cutaneous afferents. Suggesting that patients with better proprioception may be relying more on proprioceptive cues provided by tactile afferents. We tested the hypothesis that enhancing cutaneous sensory feedback by stretching the skin at the knee joint using unidirectional elasticity tage could improve proprioceptive accuracy in 25 patients with HSAN III and 9 age-matched control subjects, with and without taping. Angles of the reference and indicator knees were recorded with digital inclinemeters and the absolute error, gradient, and correlation coefficient between the two sides calculated. Patients with HSAN III performed poorly on the joint angle matching test (mean matching error 8.0 ± 0.8" (±SE); controls 3.0 ± 0.3", Following application of tape bilaterally to the knee in an X-shaped patiern, proprioceptive performance improved significantly in the patients (mean error 5.4 ± 0.7") but not in the controls (3.0 ± 0.2"). Across patients, but not controls, significant increases in gradient and correlation coefficient were also apparent following taping. We conclude that taping improves proprioception at the knee in HSAN IIII, preventably via enhanced sensory feedback from the skin.

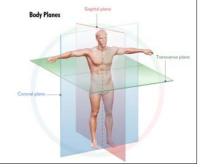
Copyright © 2016 the American Physiological Society.

Taping for Proprioception



Everything moves in 3 planes

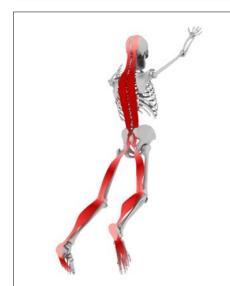
- Sagittal Plan
- Coronal/Frontal Plane
- Transverse Plane



Tape Patterns, Not Muscles



217

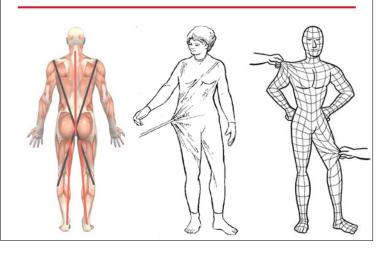


Myofascial Lines

Muscular strain is applied along fraceable "myofascial lines." - Thomas Myers, Anatomy Trains

21

Skin/Fascial Strain Vectors





Static Postural Analysis

Checkpoints:

Feet
Ankle
Knees
Lumbo-pelvic Hip Complex
Scapula/Thoracic
Cervical
Upper Extremity

220







Postural Taping Steps

- 1. Place area in a neutral posture
- 2. Apply the tape (with no stretch) to the appropriate tissues to provide the cue







How To Find "Good Posture"

- Posture is dynamic
- Posture is generated by habit
- Where you think it is, it ain't

223

Short Foot and Balance

J. Phus Ther Sci. 2014 Jan: 26(1): 117-119
Published online 2014 Feb 8. doi: 10.1589/jois 20.117

Immediate Effect of Short-foot Exercise on Dynamic Balance of Subjects with Excessively Pronated Feet

Dong-chul Moon, PT, MS, ¹ Kyoung Kim, PT, PhD, ¹.¹ and Su-kyoung Lee, PT, PhD²

Author Information. ► Article notes ► Copyright and License Information. ►

This article has been cited by other articles in PMC.

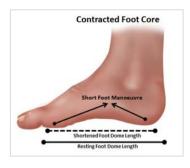
Abstract

Go to: □

[Purpose] The aim of this study was to determine the immediate effect of short-foot exercise (SFE) on the dynamic balance of subjects with excessively pronated feet. [Subjects] This study included 18 subjects with excessively pronated feet (navicular drop ≥ 10 mm) selected using the navicular drop test. [Methods] The limit of stability (LOS) was measured to determine the changes in the dynamic balance from before and after SFE in the standing and sitting positions. [Result] After the SFE, LOS increased significantly in all areas, namely, the left, right, front, back, and overall. [Conclusion] SFE immediately improved the dynamic balance of subjects with excessively pronated feet. Subsequent studies will be conducted to examine the effects of SFE performed over the long term on postural stability.

Corrected Foot Position





Short Foot Modeling - Pre Tape

22

Foot Variation - Tape Tab





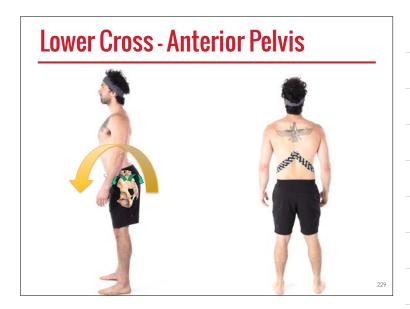
2

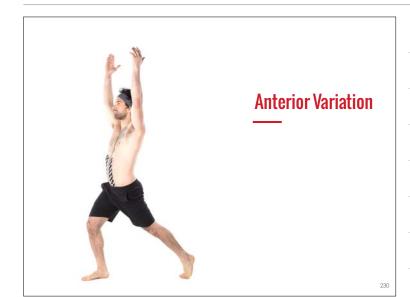
Foot Variation - Tape Tab













Upper Cross





232

Neutral (quiet posture)





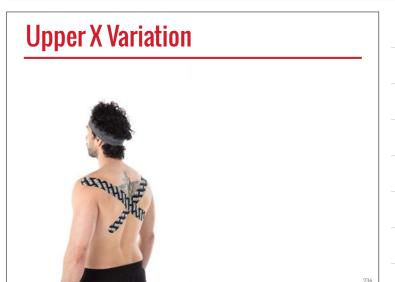
233

Upper Cross - Cervicothoracic Junction

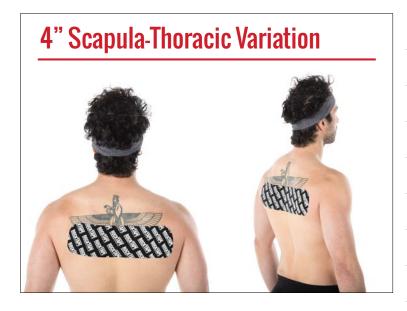




Upper Cross - Glenohumeral Joint

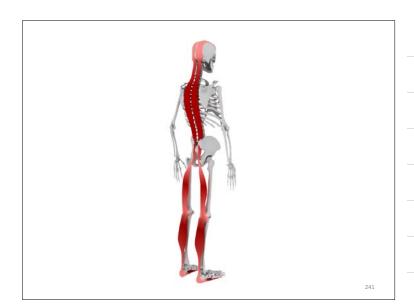












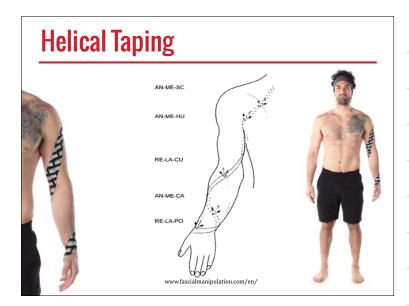
Hyperkyphosis





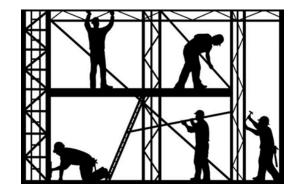
Sport Application





Upper Extremity Helix





Posture Framework

Put the patient in the intended posture and apply tape **with no stretch**. When the patient goes into the undesired posture, the tape with stimulate the mechanoreceptors in the skin to aid in proprioception and positioning, without restricting motion



Nerve Entrapment Taping





Peripheral Entrapments

Compression of nerve (muscle/fascia)

Mechanical irritation

Ischemia

Inflammatory response

Abnormal impulse

Peripheral sensitization

Leading to central sensitization

Theoretical Construct

Decrease pressure (decompression effect)

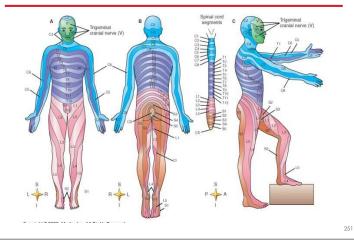
Axonal transport

Nerve conduction

Reduction of pain/neuro symptoms

250

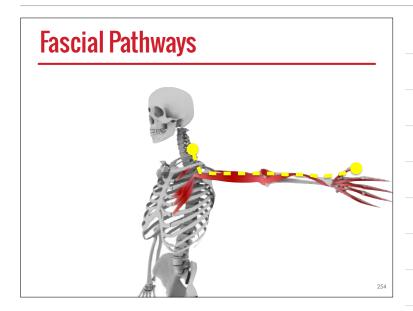
Dermatomal Pathways

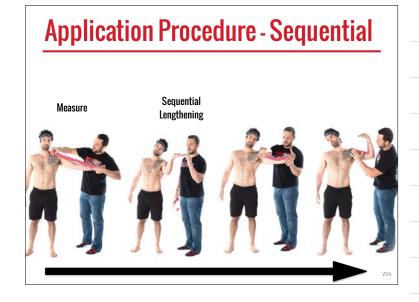


Nerve Symptom Pathways









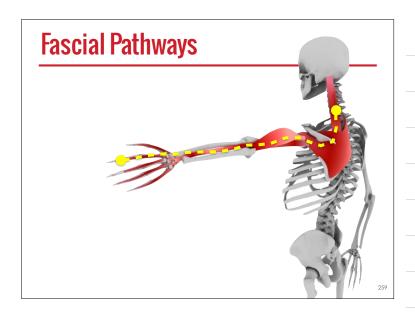
Combination Therapy Neuromobilization + Entrapment Taping

256

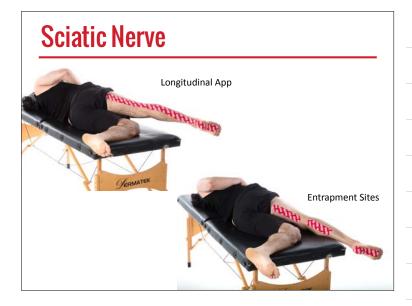
Entrapment Site Application

Radial Nerve

Short strips of tape over site of entrapment







Fascial Pathways





Fascial Pathways



265

consider skateboarding an art form

19 Scar Taping The most powerful weapor earth is human on fire

Scar Taping Goals



Improving mobility and flexibility of post surgical incisions

Created via the biomechanical lifting effect (similar to skin rolling) and skin shear effect (micro-massage mechanism).

Types of Scars



HYPERTROPHIC SCAR



CONTRACTURE SCAR



KELOID SCAR



ATROPHIC SCAR

268

CESAREAN DELIVERY RATE (US)

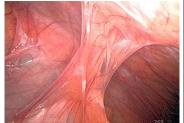
32%

UP TO 90% OCCURRENCE RATE OF INTRA-ABDOMINAL ADHESIONS

ADHESIONS FREQUENTLY MIMIC MUSCULOSKELETAL PAIN

CDC National Vital Statistics Report, Volume 64, Number 12, 2015





Significance of Scars

CLINICAL IMPORTANCE OF ACTIVE SCARS: ABNORMAL SCARS AS A CAUSE OF MYOFASCIAL PAIN

Karel Lewit, MD,⁴ and Sarka Olsanska⁵

ABSTRACT

ackground: Active scars are a model of self tissue losions. Self tissues surround the locomotor system everywhen one tissues shift and stretch in harmony with pions and muscles. Active scars interfere with this type of movement, as disturbing the function of the entire motor system.

manipularie themps;

Methodus Ahr discussing the diagnosis, 51 cases are presented, the majority being scars after operation. The patient suffered from various types of myofascial pain from all sections of the locomoter system. The type of operation and

Resultes in 36 of the cases, treatment of soars proved highly relevant, giving striking results at first treatment and in the course of therapy. In 13 further cases, the soar was partly relevant, in, one of several pathogenic lexions, it proved irrelevant in 3 cases.

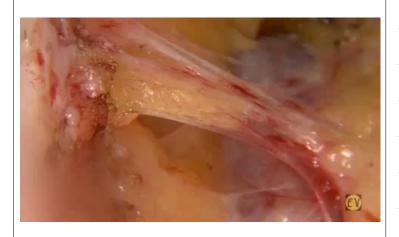
Conclusion: The treatment of active scars can be of importance in a great number of cases; untreated, active scars as an important cause of therapeutic failure. Treatment also widens the scope of manipulative therapy. (J Manipulative

siol Ther 2004;27:399-402)

Conclusion:

Treatment of active scars is important in the care of myofascial pain.

Lewit, Karl, et al. Clinical Importance of Active Scars: Abnormal Scars as a Cause of Myofascial Pain.



www.guimberteau-jc-md.com/en/videos.php



Caution

- Only apply over incisions/ wounds when they are CLOSED
- Diabetics
- Venous insufficiencyPeripheral neuropahty

Early Intervention





Post-surgical





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Post-surgical



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One Week Post-Taping



Pre-Tape



Post-Tape

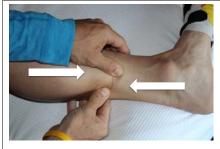


Pre-Tape



Post-Tape





Skin Glide



277

Pitting Scar - Multiple Decompression Strips



278

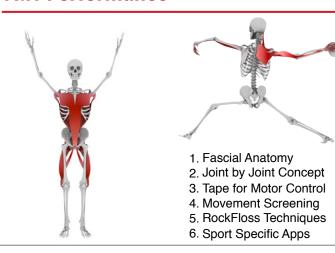
Pitting (atrophic) Scar



Alternating Vectors



FMT Performance



Summary

Skin is the outside of the Brain

Tape can:

- Mitigate Pain
- Effects Fluid Dynamics (inflammation)
- Improves Cortical Representation
- Complements Neuromobilization Techniques
- Manipulates Scars







