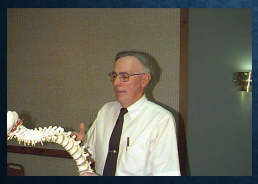
THE MULLIGAN CONCEPT

Clinical Application of Mulligan's MWM and Taping Techniques of the Ankle



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LEARNING OBJECTIVES

1. Describe the principles and indications of Mulligan's Mobilization with Movement as applied to the ankle joint.
2. Demonstrate proper hand placement , patient positioning , and movement patterns for ankle MWM techniques
- 3. Integrate ankle MWM into a comprehensive rehabilitation program to improve dorsiflexion, function, and return-to-play outcomes

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CONFLICT OF INTEREST

To comply with professional board and accreditation standards, I declare that I do have a financial interest in products or services discussed in my presentation.

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WHAT IS MWM?

"MWM" mobilization with movement

Application of a passive accessory glide (force) followed by active or passive physiological movement; typically done in weight bearing.

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MWM PRINCIPLES

- Identify painful &/or restricted movement
- Mobilize in the *direction* that turns off pain
- Use minimum *force* necessary
- *Sustain* glide without restricting movement
- Perform sufficient *repetitions*
- Apply *overpressure*
- *Teach* self-MWMs
- *Tape* to sustain positional corrections

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MULLIGAN'S THEORETICAL MODEL

- Minor articular "positional faults" occur due to trauma, muscle imbalances, and/or degenerative changes.
- MWM's correct positional faults allowing pain-free movement or function to occur.

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LATERAL ANKLE SPRAINS

- Textbooks focus on anterior talofibular ligaments and calcaneal fibular ligaments
- Treatment focused on ligaments secondary to objective findings of pain with passive plantarflexion and inversion
- MULLIGAN FEELS THIS IS WRONG!

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MULLIGAN THEORY

Mulligan feels lateral ankle sprain is a joint problem related to fibula and tibia positioning and NOT extra-articular problem associated with ATFL

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MULLIGAN THEORY

Mulligan Theory: Fibula positioned anteriorly relative to tibia ("Positional Fault")

When fibula repositioned dorsally and cranially passive PF and Inv is PAINFREE

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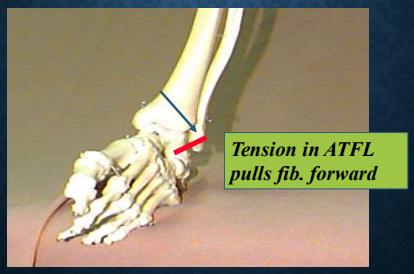
A.T.F. LIGAMENT WITH INVERSION



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LATERAL ANKLE SPRAINS

- Objective Test: PAIN with passive Plantarflexion(PF) and Inversion (INV)
- Mulligan Theory: Fibula positioned anteriorly relative to tibia ("Positional Fault") when repositioned passive PF and Inv is PAINFREE

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LATERAL ANKLE INJURIES

In lateral ankle injuries prime injury occurs between tibia and fibula

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TAPING

- Traditional taping restricts motion secondary to DF/EV foot
- Traditional taping does not allow for PF/INV and unable to move ankle and decrease swelling
- Traditional taping “useless”

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TAPING

Mulligan Taping for Acute Lateral Ankle Sprains

MWM IMMEDIATELY!

TAPE IMMEDIATELY!

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ANKLE SPRAIN - DISTAL FIBULA MWM REFERENCE

- Kavanagh J. (1999) Is there a positional fault at the tibiofibular joint in patients with acute or chronic ankle sprains compared to normals. Manual Therapy, 4(1), 19-24.
- Results indicated a significantly greater amount of movement per unit force after ankle sprains.

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ANKLE SPRAIN - DISTAL FIBULA MWM REFERENCE

- Hubbard T, Hertel J, Sherbondy P. (2006) Fibular position in individuals with self-reported chronic ankle instability. Journal of Orthopedic and Sports Physical Therapy, 36(1) 3-9.
- Conclusion: Fibula positioned more anteriorly in relation to tibia in CAI than control group

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ANKLE SPRAIN - DISTAL FIBULA MWM REFERENCE

- Hubbard T., Hertel J. (2008). Anterior positional fault of the fibula after subacute lateral ankle sprain. Manual Therapy, 13(1): 63-67.
- Results: 82% (n=11) of ankle sprains had anteriorly positioned fibula as well as direct correlation between amount of swelling and anterior position

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INVERSION ANKLE SPRAIN REFERENCE

- Moiler K.,Hall T., Robinson K. (2006). The Role of Fibula tape in the prevention of ankle injury in basketball: a pilot study. JOSPT, Sept.
- Results: 443 basketball exposures resulted in 11 ankle injuries. All injuries occurred in subjects with a history of previous ankle sprains. Significantly less ankle injuries were sustained by members of the fibula repositioning taping (FRT) condition compared to the control group
- Conclusion: study provided preliminary data regarding the prophylactic effects of FRT on ankle injuries in basketball players

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