

Functional and Coupled Adjusting Techniques for Athletes



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Functional Adjusting

- ▶ Find the most restricted directional movement of a joint or muscle/soft tissue and the position or function that produces the most restriction in that joint or muscle/soft tissue.
- ▶ Adjust the joint or muscle/soft tissue in that position



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Are we in a Rut?

- ▶ Do we make the patient fit what we do?
- ▶ Do we change what we do to fit the patient?



Functional and Coupled Motion

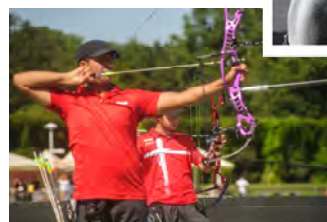
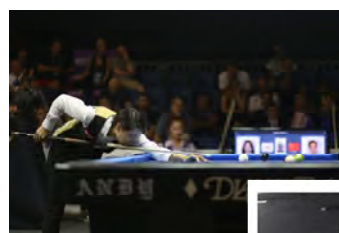
▶ Joint Evaluation

▶ Coupled Motions

- ▶ this is used to evaluate the joint in coupled or complex moves
- ▶ this is often more sensitive than our basic moves
- ▶ Procedure:



- ▶ feel for springiness in multiple positions
- ▶ feel for springiness in coupled positions
- ▶ test with muscle contraction
- ▶ test in weight bearing position
- ▶ test in sports specific condition



Functional and Coupled Motion for Adjustments & Treatment

▶ Joint Evaluation

▶ Coupled Motions

- ▶ Contact is around the joint capsule
- ▶ spring the joint as you move it through the motions
- ▶ find the most restricted position
- ▶ add muscle contraction
- ▶ add weight bearing and sports specific position
- ▶ adjust in position of most restriction



Functional/Coupling Technique Principles

Two types:

- ▶ As an add-on to Traditional Mobilisation and Adjusting Techniques
- ▶ As an extension of coupled motion palpation i.e. feel then adjust
- ▶ Both types represented in this presentation

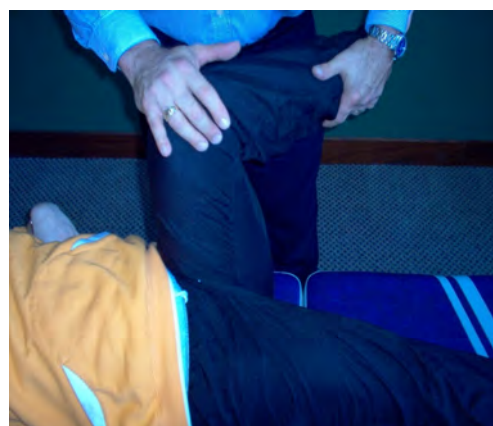
Thoracic Spine and Ribs Adjusting

- ▶ Seated or Standing
- ▶ Sternal Costotransverse
- ▶ IND fixation of costotransverse
- ▶ PP patient is standing or seated with arms crossed neck
- ▶ DP standing behind patient
- ▶ SCP costotransverse joint
- ▶ CP sternal contact
- ▶ IH both hands wrap around patient and contacts their folded arms
- ▶ VEC inferior to superior and posterior to anterior
- ▶ P patient is positions in rotation same as during palpation, joint slack is taken out till resistance is felt and a thrust with your sternum by hyper extending your thoracic spine



Femoro-acetabular Adjustments and Hip and Thigh treatment

- ▶ Joint Evaluation
 - ▶ Internal Rotation
 - ▶ PP supine
 - ▶ CH on knee and ankle
 - ▶ Procedure stress in internal rotation
 - ▶ Normal should feel a normal springiness
 - ▶ Abnormal hard joint play or restriction of motion indicates loss of internal rotation



Femoro-acetabular Adjustments and Hip and Thigh treatment

- ▶ Joint Evaluation
 - ▶ Coupled Motions supine position

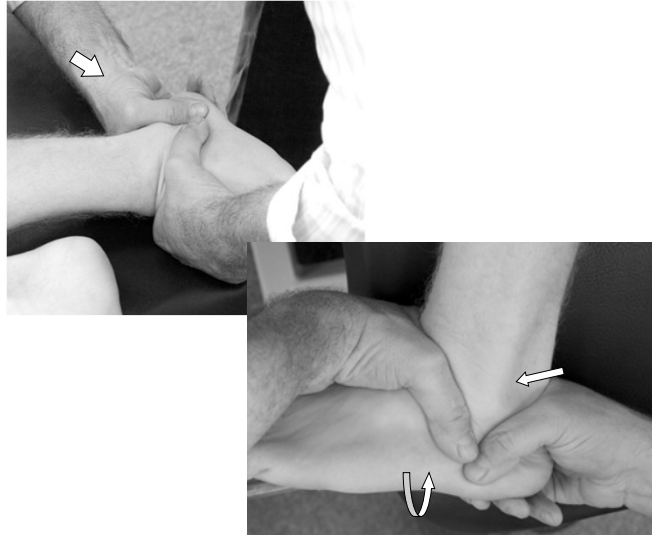


Eversion/Inversion End Feel Subtalar Joint and Adjustment



Ankle & Foot Joint Complex: Traditional Adjustment Techniques

- ▶ Great with drop piece
- ▶ Coupled with lateral or medial subluxation
 - ▶ Lat=top leg
 - ▶ Med=bottom leg
- ▶ Coupled with plantar or dorsiflexion
- ▶ Combine with breathing pattern or muscle contraction



Ankle & Foot Joint Complex: Traditional Adjustment Techniques

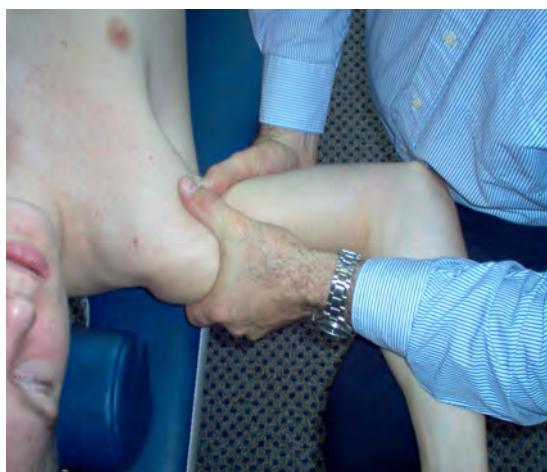
- ▶ Lateral Talus/Calcaneus Subluxation Technique (Supine)



Coupled Subtalar End Feel in Dorsiflexion



Internal Rotation in External Rotated Position



Internal Rotation in Internal Rotated Position



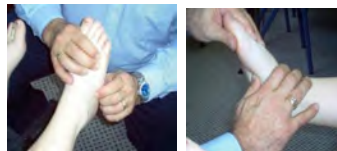
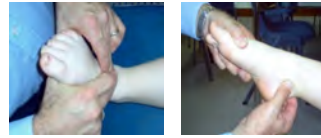
Lumbar & SI Functional Adjusting

- ▶ Sacrum/index - facet
- ▶ IND loss of extension fixation
- ▶ PP standing
- ▶ DP standing
- ▶ IH reinforces contact hand
- ▶ SCP index contact on the fixated facet
- ▶ CP facet joint of fixated segment
- ▶ VEC posterior to anterior
- ▶ P patient and doctor stand back-to-back and interlace arm with the doctor's going underneath. Doctor then takes an index contact on the facet of the fixated segment. Doctor then walks forward asking the patient to lean into the doctor and "just let me have your body weight". The doctor will then traction forward until resistance is felt at the fixation. Care is taken so the weight of the patient is on the doctor's legs and not their own low back. At the point the resistance is felt, a thrust is applied into the patient's spine by the doctor lift with their pelvis into their contact hands. This lifting is achieved by "popping or hiking up" the doctors sacrum.



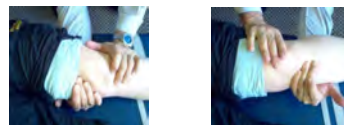
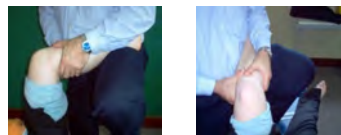
Quick Screen

- ▶ Foot and Ankle
 - ▶ Dorsiflexion and Plantar Flexion Mortise Joint
 - ▶ Dorsiflexion Cuneiforms and Metatarsals
 - ▶ Inversion and Eversion Subtalar
 - ▶ AP-PA Navicular and Cuboid



Quick Screen

- ⊙ Knee
 - > Patella mobilisation
 - > Internal and External Rotation
 - > Proximal Fibula Head
 - > Medial-Lateral and Lateral-Medial



Quick Screen

▶ Hip

▶ Flexion

▶ Internal and External Rotation



▶ Adduction and 90 degree Flexion



▶ Adduction and 90 degree Flexion and Internal-External Rotation



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Quick Screen

▶ Wrist

▶ Flexion and Extension



▶ Ulna and Radial Deviation



▶ Supination and Pronation



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Quick Screen

- ▶ Elbow
 - ▶ Flexion and Extension
 - ▶ Medial-Lateral and Lateral-Medial
 - ▶ Radial Head PA and AP Glide Supination and Pronation



Quick Screen

- ▶ Shoulder SC and AC Joint
 - ▶ Seated Flexion and Extension
 - ▶ Seated Abduction and Adduction
 - ▶ Seated Internal and External Rotation
 - ▶ Seated Horizontal Abduction and Adduction

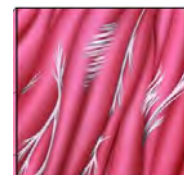
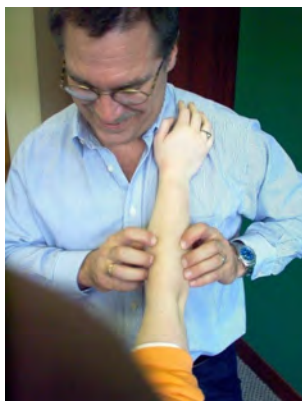


Quick Screen

- ▶ Shoulder GH Joint
 - ▶ Seated Flexion and Extension
 - ▶ Seated Abduction and Adduction
 - ▶ Supine Flexion and Extension
 - ▶ Supine Abduction and Adduction
 - ▶ Supine 90 degree Adduction and Adduction with Internal and External Rotation
 - ▶ Supine 90 degree Internal and External Rotation



Grip and Rip Soft Tissue Technique



Thank You



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