

The Hip and Pelvis

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What today is all about....



I could talk for days!

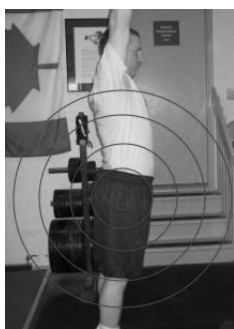
- 3 Key Points

1. Centerpiece of our body
2. Hips and pelvis are intimately linked
3. The hips need everything!

It's all in the hips...

- Hip strength/mobility can influence the following
 - Knee pain (Ireland, Powers)
 - Low back pain (Murray)
 - Lower leg injuries (Niemuth)
 - Opposite shoulder pain/dysfunction

The Functional Centerpiece!



Patterns of Injury Development: The Joint-by-Joint Approach

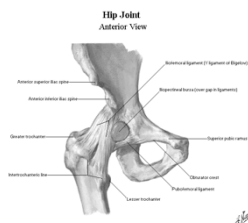
Joint	Needs
Ankle	Mobility
Knee	Stability
Hip	Mobility
Lumbar Spine	Stability
Thoracic Spine	Mobility
Scapula	Mobility/Stability
Gleno-Humeral	Mobility



What about the PELVIS?

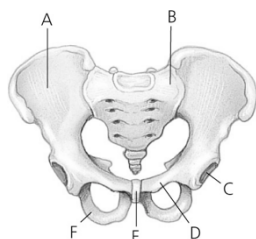
Gross Anatomy – Hip Joint

- Ball and socket
- Movements in multiple planes

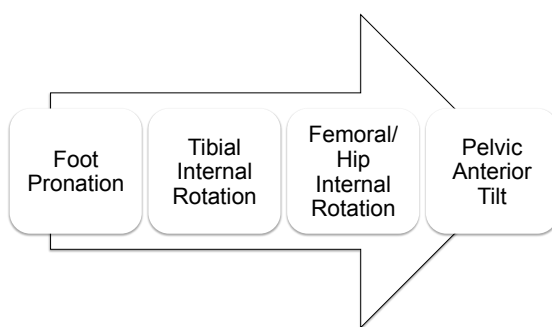


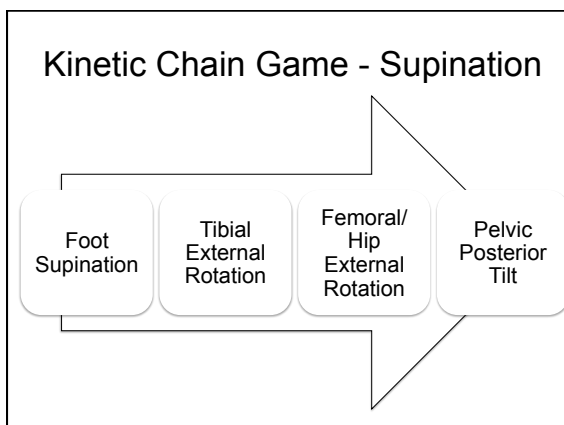
Gross Anatomy – The Pelvis

- Pelvic position drives hip position!



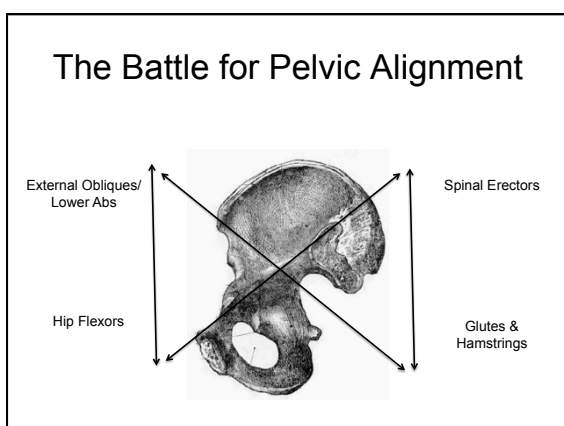
Kinetic Chain Game - Pronation



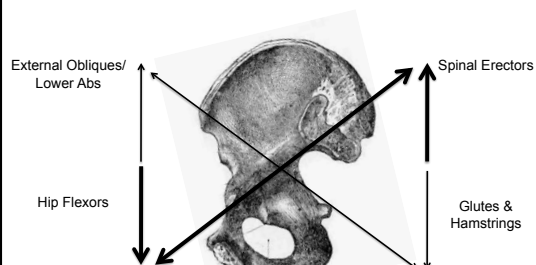


Kinetic Chain Game

But....it works the opposite way as well!



Pelvic Alignment – Anterior Tilt



Pelvic Alignment – Anterior Tilt

Glutes and Lower Abs are KEY!



Assessment

Hip Rotation - Supine

Hip Rotation - Prone

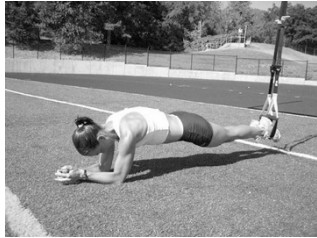
Front Plank

Quantity AND Quality!!!



Front Plank

Poor Quality



Leg Lowering

Squat

Squat – Quad Dominance

Squat – Knock Knees

Lunge

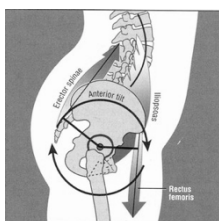
Lunge – Knee Cave

Lunge – Quad Dominance

Training

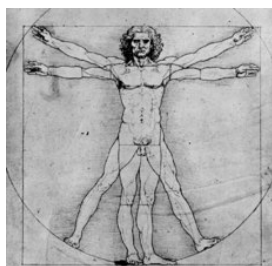
What did our assessment tell us?

- Primary limitations
 - Pelvic stability/alignment
 - Hip mobility
 - Hip motor control
 - Hip strength
 - Hip stability



What does a healthy body need?

- Symmetry
 - Mobility
 - Motor Control
 - Strength



But....

Athletes are different!



What does a healthy body need?

- QUALITY movement

Training Principles


Rehab

Performance




Training Principles

Isolated




Integrated



Training Principles

Address asymmetries first!



Pelvic Stability/Alignment

- Phase 1 – McGill
- Phase 2 – Corrective
- Phase 3 – Dynamic Stabilization

Phase 1 - McGill

- Planks
- Side Planks
- Bird dogs



Phase 1 – Quality is KEY!

Rectus dominant pattern



Phase 2 - Corrective

- Chop/Lift Variations

Phase 2 - Corrective

- Split-Stance Push/Pulls

Phase 3 – Dynamic Stabilization

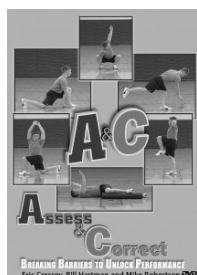
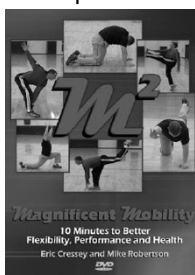
- Push-ups
- Split-Squats
- Offset Loading
- Everything can be stabilization work!

Phase 3 – Dynamic Stabilization

- Poor stabilization

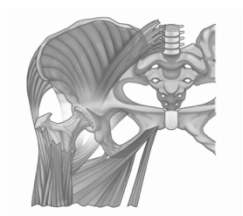
Hip Mobility

- HUGE Topic!



Hip Motor Control

- Hip flexion (above 90)
- Hip extension
- Hip abduction
- Hip external rotation



Hip Motor Control

- Hip flexion (above 90)

Hip Motor Control

Hip separation



Hip Motor Control

- Hip extension

Hip Motor Control

- Hip abduction

Hip Motor Control

- Hip external rotation

Hip Strength and Power

- Why is strength a bad word?
 - Squats
 - Deads
 - Power Cleans
 - Snatches



Trunk Extension

Hip Extension

Hip Stability

- Ability to prevent movement/motion
 - Starts at pelvis!
 - Single-Leg Work



Hip Stability

Hip Stability

Summary

- Remember our key points!
 1. Centerpiece of our body
 2. Hips and pelvis are intimately linked
 3. The hips need everything!



Thank You!

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