Women’s Sprinting – Therapeutic Considerations for Speed & Power Development

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- Developing Concerns and Norms for Women’s Sprinters
- Prioritizing Neuromuscular Development
- Perceptual Grid & Analysis Tools
- Therapy Interventions & Overview
• Neuromuscular Development a Priority

• When identifying successful sprinters (speed-power athletes) we are primarily concerned with the athlete’s ability to develop and *express* speed-power abilities in various ways

• “never let power output drop!”

• What about other training?

• We do it, it’s important, but it has a different role.

• Our “General Training” is complimentary, supportive, prophylactic, and restorative
• Solid Training Design Key
  - Sets, Reps, Distance, Progressions, Surfaces, Density all are important considerations
  - Unique to your environment and situation

**What do we evaluate?**

• Posture
• Symmetry & Range of Motion
• Elasticity & Reflexivity
Foot/Lower Leg Issues

- Talus/Calcaneus, Cuboid
- Peroneals
- Tib Anterior
- ROM – flexion, extension, etc

Psoas
Superficial Back Line

Deep Lateral Rotators

In terms of rotation, the more horizontal a muscle is when it crosses the line of joint action, the more potent it will have to rotate. When the pelvis is pulled to one side, for example, in a right rotation of the pelvis, then the pectineus may be short on the right but the lateral rotators on the left may also be short.

Figure 6.32: When the pelvis rotates to the right the pubic ramus will move closer to the right femur (shortening pectineus) and the left iliac ramus will move closer to the femur on the left (shortening) of the lateral rotators on the left.

The body balances via many of these inter-operating agonist/antagonist relationships that the thorough therapist must watch for, as many are not drawn from the classical anatomy textbooks and so may not always be as obvious as one would expect.
• QL – Quadratus Lumborum

Unilateral contraction of the pain results in straightening of the trunk and alignment of the lumbar spine. It is composed of left and right groups and is very important in maintaining the lumbar spine in a non-rotational position.
• Lateral Line – Anatomy Trains

Major Championships
**Major Championships**
- Therapy Notebook
- NCAA Indoor 2010 – back
- NCAA Outdoor – ankle sprain

**Video Analysis**
- Sprint Drills
- Training Video
Sources for Additional Information

- Anatomy Trains, Thomas Myers
- Anatomy of Movement, Blandine Calais-Germain
- Soft Tissue Manipulation, Leon Chaitow
- Clinical Applications of Neuromuscular Techniques
- Touch for Health, James Thiel
- Movement, Gray Cook
- Myofascial Pain & Dysfunction, Travell & Simmons
- Fascia, Mark Lindsay
- Assess & Correct, Cressey & Robertson

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