Unraveling the Mystery of Low Back Pain #4:
Sacrotuberous Ligament Sprains

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Webinar Goal

- Explore the assessment and treatment of sacrotuberous ligament sprains
Pretest

1. When there is pain in the back thigh on bending into forward flexion, what are the two most likely injuries?
2. The sacrotuberous ligament refers pain down the anterior thigh and lateral lower leg, and into the great toe. True or False?
3. Extension of the low back stresses the sacrotuberous ligament. True or False?
4. A side-lying position puts the sacrotuberous ligament on the stretch so it is easily treated. True or False?
5. The sacrotuberous ligament is in part attached to the coccyx. True or False?

Anatomy

Anatomy of the Sacrotuberous Ligament

- Thin, fan-shaped

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Anatomy of the Sacrotuberous Ligament

- Thin, fan-shaped
- Attached to PSIS, sacrum, and coccyx
- Inserts into the ischial tuberosity
Anatomy of the Sacrotuberous Ligament

- Thin, fan-shaped
- Attached to PSIS, sacrum, and coccyx
- Inserts into the ischial tuberosity
- Sometimes connected to biceps femoris

Anatomy of the Sacrospinous Ligament

- Attached to ischium, sacrum, and coccyx
- Fibers intermingle with the sacrotuberous
- Sometimes called the sacrosciatic ligaments (sacrospinous = anterior, sacrotuberous = posterior)

How These Ligaments Work Together

- Prevent posterior rotation of the ilium and sacrum
How These Ligaments Work Together

- Prevent posterior rotation of the ilium and sacrum
- Create boundaries of the lesser sciatic foramen and greater sciatic foramen

Anatomy of the Coccyx

- Prevent posterior rotation of the ilium and sacrum
- Create boundaries of the lesser sciatic foramen and greater sciatic foramen

Assessment
Test 1: Forward flexion

Test 2: Straight leg raising

Test 3: Resisted flexion of the knee
Theory

Assessment Test Results for Sacrotuberous Ligament Injuries

- Pain on forward flexion
- Unique pain pattern
- No pain on straight leg raise or resisted flexion of the knee
- Local pain on palpation

Causes of Sacrotuberous Ligament Injuries

- Usually stretched slowly, sometimes strained in a sudden trauma
- Poorly designed exercise program
- Lack of exercise
- Weak or inflexible hamstrings
Patterns of Sacrotuberous Ligament Injuries

- Tends to affect both sides, one side more than the other
- Often co-occurs with sacroiliac and iliolumbar injuries

Treatment

Friction Therapy

Prone
Side-lying

Watch the video at the end of the Webinar
Friction Therapy

• Be sensitive to the client’s comfort level as you work in this area
• Obtain informed consent before proceeding

Myofascial Therapy

Massage Therapy

• Buttock, lateral border of the sacrum, and lower attachment at the ischial tuberosity
• Hamstrings
Primary Low Back Exercises

Auxiliary Low Back Exercises

- Gentler options
- Used until the client can perform forward bending without pain

Exercises on All Fours
The Cat

The Dog

Weight Shift
Supine Exercises

Pelvic Tilt & Pelvic Tilt Through the Back

Pelvic Clock
Questions

Facebook.com/DrBenBenjamin

Post-test

1. When there is pain in the back thigh on bending into forward flexion, what are the two most likely injuries?
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