Athletic Pubalgia (Sports Hernia)

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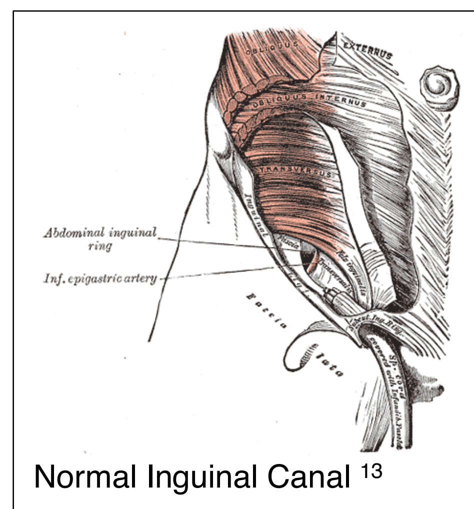
Pathophysiology and Presentation

Also Known as “Sports Hernia”, “Sportsman’s Hernia”, “Athletic Hernia”, “Gilmore’s Groin”, “Hockey Groin”, “Core Muscle Injury”, or “Inguinal Disruption”

Basics

- Definition: Chronic Groin Pain (> 6-8 Weeks) without a Demonstrable Hernia in the Setting of Frequent Athletic/Strenuous Activity
    - Not a True Hernia
- From Chronic-Repetitive Trauma/Stress to the Groin
- Most Common in High-Intensity Sports – Rugby, Football, Hockey, and Soccer [1-4]
    - Can Occur Even with Low-Intensity Activity



Normal Inguinal Canal [13]

Causes [5-9]

- Muscle Tears
    - Rectus Abdominis at the Distal Insertion
    - Transversalis Fascia of the Posterior Inguinal Wall
    - Conjoint Tendon at the Distal Attachment
    - External Oblique Aponeurosis
- Nerve Impingement
- Compartment Syndrome
- Inflammation
- *Incipient Hernia May Play a Role – Not Entirely Understood

Groin Hernias

- *Inguinal Hernia*
    - *See Inguinal Hernia
- *Femoral Hernia*
    - *See Femoral Hernia
- *Obturator Hernia*
    - *See Obturator Hernia

Presentation [10-12]

- Presentation is Generally Nonspecific
- Groin Pain with No Evidence of a Groin Hernia
- Pain is Generally Activity Related and Resolves with Rest
- Often Reproduced by Straining, Abdominal Crunches, Twisting, Valsalva, Coughing, or Sneezing

Diagnosis and Treatment

Diagnosis

- Diagnosis is Clinical Based on History and Physical Examination
- The Majority of Surgeons Will Order Diagnostic Imaging (MRI, US, or CT) Prior to Surgical Intervention
- Other Similar Pathology to Rule Out: [5]
    - Adductor Strain
    - Osteitis Pubis
    - Stress Fracture of the Femoral Neck or Pubic Rami
    - Femoroacetabular Impingement (FAI)

British Hernia Society 2014 Consensus Guidelines for Diagnosis [14]

- At Least Three of the Five:
- 1. Pinpoint Tenderness Over the Pubic Tubercle at the Insertion of the Conjoint Tendon
- 2. Palpable Tenderness Over the Deep Inguinal Ring
- 3. Pain and/or Dilation of the External Ring with No Obvious Hernia Evident
- 4. Pain at the Origin of the Adductor Longus Tendon
- 5. Dull, Diffused Pain in the Groin, Often Radiating to the Perineum and Inner Thigh or Across the Midline

Treatment

- Initial: Rest and Physical Therapy [4,5,15-18]
  - Rest for 6-8 Weeks with Gradual Return to Activity
  - NSAIDs or Steroid Injections
  - Ice or Heat
  - Massage
- If Fails: Surgical Repair
  - Explore and Reinforce the Wall (Similar to Inguinal Hernia Repair with Mesh)
  - Can Be Performed Open or Minimally Invasive
    - *See Open Inguinal Hernia Repair
    - *See Minimally Invasive Inguinal Hernia Repair
  - May Consider Addition of Neurectomy or Neural Ablation
  - For Concurrent Femoroacetabular Impingement (FAI) Consider Arthroscopic Intervention in a Staged or Concurrent Fashion [19]

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