Hip Arthroscopy, Rehabilitation and Return to Function

The rate of surgical intervention for activity related intra-articular hip pain has increased 2600% from 2004 to 2016, and is expected to continue to rise. A greater number of surgeons are utilizing hip arthroscopy as a treatment strategy for their hip pain patients. One-third of this 2600% growth is new surgeons. Therefore, the number of physical therapists that will be treating these surgical patients is increasing, and will continue to increase.

Large increases in surgical utilization have historically been followed by a lapse in post-surgical rehabilitation planning and implementation. Surgical outcome studies related to the hip have been currently limited to level IV evidence. Published reports on post-surgical hip arthroscopy protocols are limited and heterogeneous. The overall goal of this educational session is to provide course attendees with in-depth understanding of hip joint pathology, how these various pathologies are treated surgically and provide the learner with the best evidence synthesis of post-surgical rehabilitation. Post-surgical guidelines will include current evidence support, as well as proposed guidance based on principles of biomechanics, biological healing and neuromuscular training.

Course Objectives:

At the conclusion of the course, each attendee will:

a) Understand the various intra-articular hip joint pathomechanics.
b) Differentiate the structural variations/pathologies that contribute to intra-articular hip pain.
c) Describe the key considerations regarding surgical intervention with respect to the principally discussed pathologies.
d) Identify and describe key components of post-surgical rehabilitation with respect to the principally discussed pathologies.
e) Identify key patient variables associated with poor surgical outcomes and success.

1) Hip joint pathomechanics (35 minutes) - Cara Lewis
   a) Femoroacetabular impingement syndrome (FAIS)
      i) Measures of acetabular anatomy
         (1) Center edge angle
         (2) Anteversion angle
      ii) Measures of femoral anatomy
         (1) Alpha angle
         (2) Neck-shaft angle
         (3) Version
      iii) Implications for femoroacetabular impingement (FAIS)
   b) Acetabular labrum
i) Structure
ii) Function
iii) Implications of labral lesions

c) Hip capsule
   i) Structure
   ii) Function
   iii) Implications of dysfunction

2) Surgical procedures (35 minutes) – Stephanie Di Stasi
      i) Indications and summary of techniques
      ii) Evidence for use in the presence of borderline dysplasia
      iii) Risks and factors associated with revision procedures
      i) Indications and summary of techniques
      ii) Isolated labral treatment vs combination with osteoplasty
      iii) Comparison of outcomes between techniques
         (1) Repair vs resection
         (2) Reconstruction vs refixation
      i) Indications and summary of techniques
      ii) Capsular reconstruction procedures
      iii) Combined procedures with osteoplasty, iliofractional lengthening
      i) Indications and summary of techniques
         (1) acetabular vs femoral side pathology
      ii) Contemporary cartilage procedures
         (1) early outcomes and limitations
3) Rehabilitation guidelines (35 minutes) - Mike Reiman
   b) General guidelines
   c) Specific surgical procedure rehabilitation concerns
      i) Osteoplasty: femoro vs acetabuloplasty
      ii) Labral: resection, repair, reconstruction
      iii) Capsular
      iv) Chondral: microfracture
   d) Outcomes, including Return to work/duty/sport
      i) Overall outcomes:
         (1) 2600% increase in surgical outcome reporting between 2004 and 2016
            (Reiman MP, et al. Arthroscopy 2018)
            (a) Primarily still level 3b and 4 studies
            (b) Inconsistency in reporting
         (2) Return to sport rates (Reiman et al. BJSM 2018; Ishoi et al. AJSM. 2018)
   4) Questions and answers / panel discussion (15 min) – All

Bibliographic References

7. Kuhns BD, Weber AE, Batko B, Nho SJ, Stegemann C. A FOUR-PHASE PHYSICAL THERAPY REGIMEN FOR RETURNING ATHLETES TO SPORT FOLLOWING HIP ARTHROSCOPY FOR FEMOROACETABULAR IMPINGEMENT WITH ROUTINE CAPSULAR CLOSURE.
32. de Girolamo L, Jannelli E, Fioruzzi A, Fontana A. Acetabular Chondral Lesions Associated With Femoroacetabular Impingement Treated by Autologous Matrix-Induced Chondrogenesis or Microfracture: A Comparative Study at 8-Year


