Subscapularis Management: How I do it and why its better
Lesser Tuberosity Osteotomy with Anteroinferior Capsulectomy

Disclosures
• Consultant: DJO/Encore; Tornier/Wright
• Education/Fellowship funding: Arthrex; Breg; Smith & Nephew
• Research/Cadaver Funding: DePuy-Synthes; DePuy-Mitek; Stryker
• This technique is 100% unchanged from the one I learned in fellowship >8 years ago from Gerry Williams

Lesser Tuberosity Osteotomy...
• Subscapularis insufficiency is real
  – Pain, weakness, early glenoid loosening
  – One of the most common reasons for revision of anatomic TSA
  – Even with complete healing, up to 2/3 have weakness, progression of fatty infiltration (Miller JSES 2003)
• LTO
  – Preserves the muscle-tendon-bone unit
  – Bone to bone healing (Gerber JBJS 2005; 2006)
  – Improved biomechanics (Schrock S&E 2017)
  – Improved results in retrospective review (Scalise JBJS 2010)
…with Anteroinferior Capsulectomy

- Capsule is pathologically thickened
- Improved exposure
- Easier palpation and location of axillary nerve
- Decreased tension on subscapularis repair
- Improved post-operative range of motion

LTO with capsulectomy

- Exposure
- ROM
- Secure repair
- Robust healing
- Post-op monitoring
LTO with mini-stem/stemless

• Reviewed 156 cases with minimum 2-year follow up
• Only complications were
  – Post op: 4 patient trauma or noncompliance
  – Intra op: 2 greater tuberosity fracture in obese patients humeral prep with arm in extension and adduction.
• Solution
  – Leave 1-2 mm of bone between LTO bed and humeral head cut
  – Don’t remove osteophytes in this area until final implantation