Internal Impingement

- TREATMENT -

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Wrightington Sports Shoulder Conference
Internal impingement of the undersurface of rotator cuff with the posterior superior glenoid and labrum.

**Theory**

- Internal Contact
  - Physiologic
- Internal Impingement
  - Pathologic
  - Morgan – 2006
  - Burkhart - 2003
  - Kibler – 2001
Theory

SICK Scapula

Scapular diskynesis

Lower scapular retraction and loss of scapular elevation due to weak and fatigue muscle

Kibler – 1991
Burkhart - 2003
Arthroscopic Findings

1. Labral tears
2. Anterior laxity and instability
3. Posterior capsular contracture (+ SLAP lesion; cyst)
4. Cuff tears
5. SLAC lesion
6. Humeral Head Lesion (chondral damage and osteochondral lesion – posterior part)
7. Bony Glenoid Lesion
    - Meister – 1999
    - Yoneda - 2002
    - Ferrari – 1994 (non operative treatment)
1. **Labral tears**
2. Anterior laxity and instability
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Ferrari – 1994 (non operative treatment)
Arthroscopic Findings and treatment

1. Labral tears

2. **Anterior laxity and instability**

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Arthroscopic Findings and treatment

1. Labral tears

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Arthroscopic Findings and treatment

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Heyworth - 2009
Arthroscopic Findings and treatment

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7. Bony Glenoid Lesion

- Meister – 1999
- Yoneda – 2002
- Nakagawa - 2007

- Ferrari – 1994 (non operative treatment)
Arthroscopic Findings and treatment

7. Bony Glenoid Lesion

- Bennett’s lesion

- Meister – 1999
- Yoneda – 2002
- Nakagawa - 2007
- Ferrari – 1994 (non operative treatment)
Arthroscopic Findings and treatment

7. Bony Glenoid Lesion

Meister – 1999
Yonedo – 2002
Nakagawa – 2007
Ferrari – 1994 (non operative treatment)
Cuff lesion

1. Frayed cuff
2. Partial tear
3. PASTA lesion
4. Full thickness
Cuff lesion

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Cuff lesion

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Evaluate FOOTPRINT after debridement

- 50% complete the tear and repair (standard technique)
- <50% PASTA repair technique (eventful transtendinous repair)

Ruotolo et al, Arthroscopy 2004
Ide J Am J Sport Med 2005
Cuff lesion

1. Frayed cuff
2. Partial tear
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4. Full thickness
Cuff lesion

1. Debridement
2. Partial tear
3. PASTA lesion
4. Full thickness
Kim lesion
Conclusion

Theory is important

Treatment has not yet been defined
Conclusion

In partial cuff tear

< 50% able to return previous high level competition after arthroscopic debridement

Débridement of Small Partial-thickness Rotator Cuff Tears in Elite Overhead Throwers

Scott B. Reynolds MD, Jeffrey R. Dugas MD, E. Lyle Cain MD, Christopher S. McMichael MPH, James R. Andrews MD
Conclusion

In full-thickness cuff tear

8% able to return previous high level competition after mini-open repair

Repair of Full-Thickness Rotator Cuff Tears in Professional Baseball Players

Christopher G. Mazoué, MD, and James R. Andrews, MD

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THANKS