

SLAP is a Highly Overrated Pathology

Richard Dallalana

2017

“If you can’t stun with science, then baffle with bullshit”

Martin Richardson

2017

We know nothing about SLAP tears

Systematic Review

Current Practice for the Surgical Treatment of SLAP Lesions: A Systematic Review

W. Ben Kibler, M.D., and Aaron Sciascia, M.S., A.T.C., P.E.S.



Kibler, Arthroscopy 2016

Editorial Commentary: On Kibler & Sciascia: What Did the Five Fingers Say to the Face? SLAP. A Systematic Review Wake-Up Call to Improve SLAP Repair Guidelines



No consensus on surgical technique, operative indications or rehabilitation

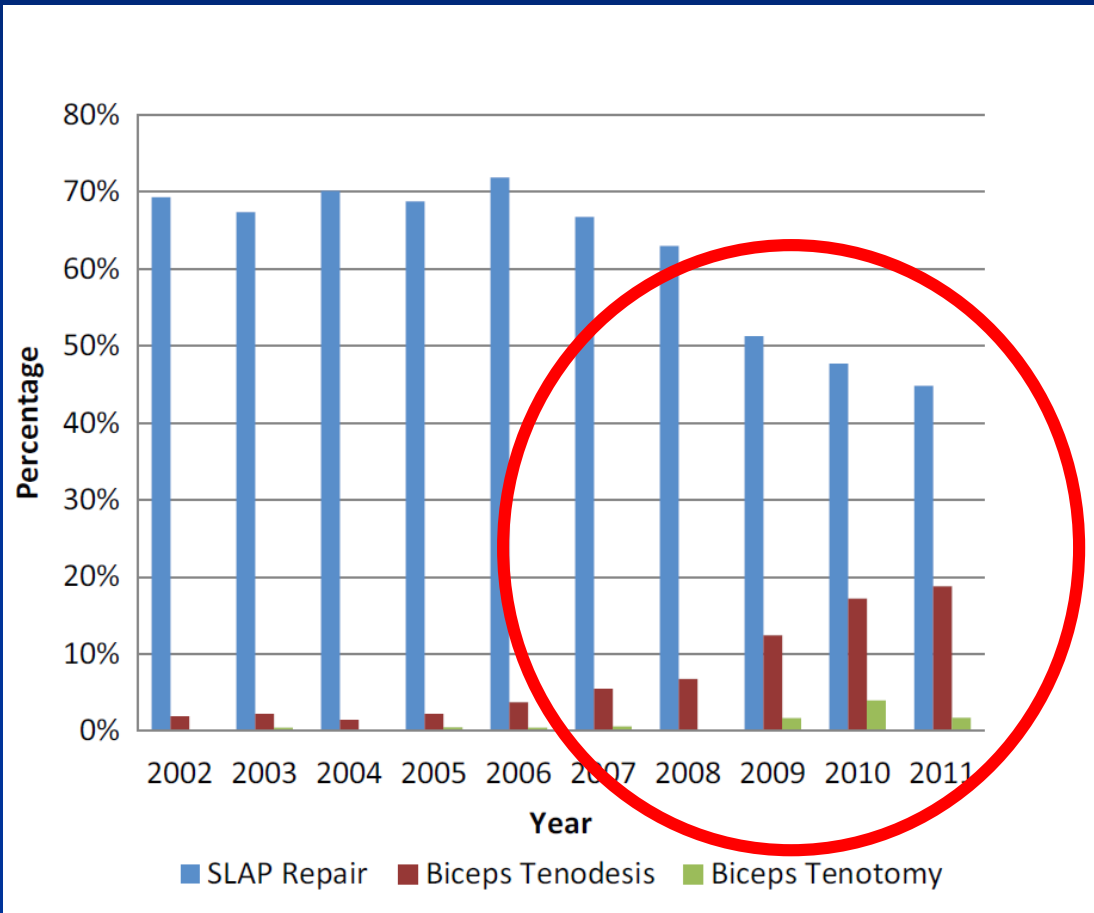
Thus ... based on current evidence

- “a SLAP tear cannot be considered a single unified entity”
- “we will not be able to make a diagnosis of a SLAP tear prior to surgery”
- “we will not know how to treat a SLAP lesion once in surgery.”

Joshua Harris
Associate Editor

*HOW CAN WE TREAT SOMETHING WE DON'T
UNDERSTAND ?!*

SLAP II Tear : Change in Treatment Trend



■ SLAP Repair ↓ (69% to 45%)

■ Biceps Tenodesis ↑ (2% to 19%)

■ Patterson (AJSM 2014) –American Board Orthopedic Surgeons database review

SLAP REPAIR LOSING VOTES



Hierarchy of Shoulder Pain Generators

Symptomatic Type II SLAP = DIAGNOSIS OF EXCLUSION

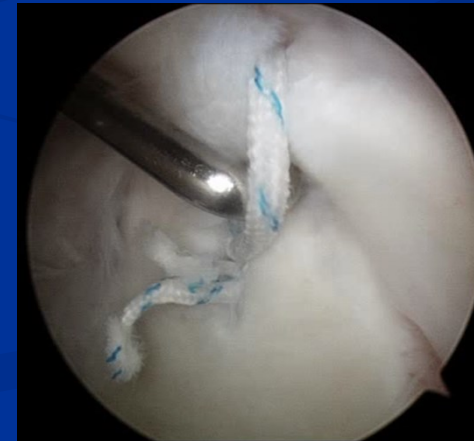
- 1. Synovitis [Adhesive capsulitis] (always symptomatic)
- 2. Calcific tendonitis (very painful)
- 3. LHB tendon (richly innervated)
- 4. Bursitis / cuff disease (occasionally asymptomatic)
- 5. AC joint (often asymptomatic)
- 6. Labrum
 - a. Posterior –
 - b. Superior (SLAP tear) –
 - c. Anterior

SLAP Repair – Poor Results

- Unsatisfactory clinical outcomes
 - Provencher (AJSM 2013)
 - 179 military ; isolated type II SLAP
 - 37% failed at 11 months; 28% revision
 - Coleman 65% satisfied
 - Verma (Romeo) 46% return to work
- High re-operation rates 8 to 40%
 - Friel, Frank, Mollon, Boileau, ...



MP



MR

Wrong Diagnosis

Failed SLAP repair = failure to treat other conditions

- Kim, (JBJS 2003) 139 SLAP lesions –
 - **89 % associated with additional pathology**

Snyder :
SLAP in 6% of 2500 arthroscopies

- Katz, (Arthroscopy 2009)
 - 40 painful shoulders after SLAP repair – 34 revised with alternate surgery
 - **Conclusion : Most slap lesions were not the primary cause of pain**
- Mollon, (Arthroscopy 2016) 2524 Repairs (New York database review)
 - 10.1 % repeat surgery
 - **Usually related to an additional diagnosis**

Wrong diagnosis

- Studies of SLAP repair : better outcomes when other pathology is treated also

(SAD, AC resection, debridement ...)

- Enad (KSSTA 2007)
- Waterman (Orth J Sp M) 2015 Military
- Brockmeier (JBJS 2009)

Normally, outcomes are WORSE when there are other problems which need treatment

Wrong Diagnosis = Unnecessary Surgery !

■ High incidence in asymptomatic sportspeople

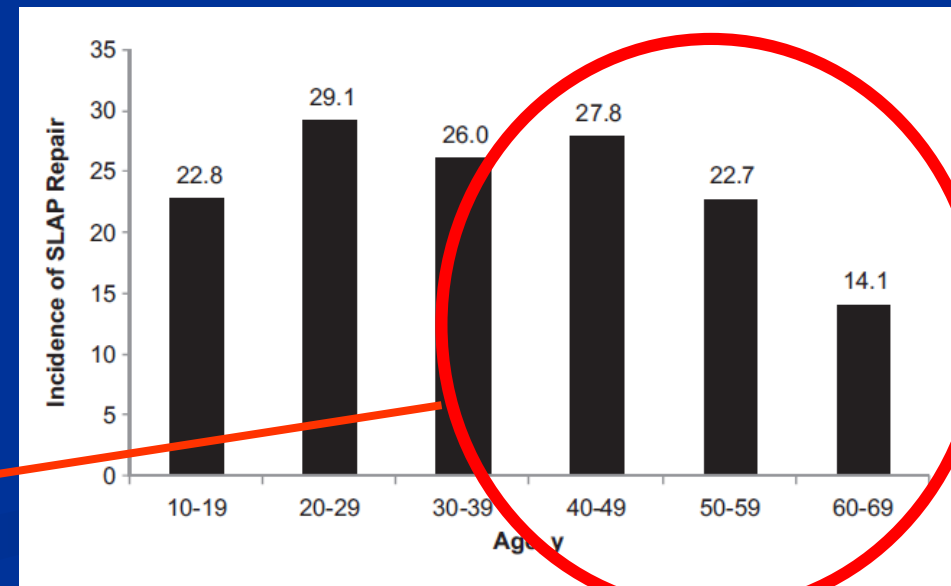
- Prof baseball pitchers 47% (Lesniak)
- Elite Volleyball 58% (Fredericson)
- Elite gymnasts 83%

■ 50 to 70% incidence SLAP on MRI

- asymptomatic 45 to 60 year olds
 - Schwartzberg (Orth JSM 2016)

■ 25,574 SLAP repairs 2004 to 2009

- Zhang AJSM 2012 US Database
- 50% performed aged 45 to 69 years



MOST SLAP TEARS ARE INNOCENT BYSTANDERS

The Painless Re-tear

- Integrity of repair (Trantalis, Int JSS 2015)
 - 25 Type II repairs
 - Age 40
 - 88% clinically satisfied
- MRI at 1 year
 - 43% re-tear !!
 - Same clinical scores healed vs. torn !!



*PEOPLE IMPROVE DESPITE RATHER THAN FROM
SLAP REPAIR*



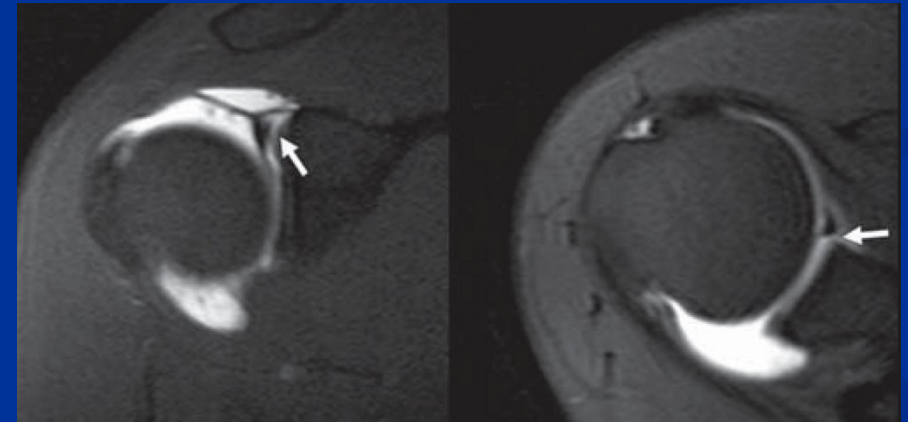
Diagnostic Dilemma

- “Treatment is based on accurate diagnosis”
 - Review and clinician survey
 - Kibler et al (Arthroscopy 2015)

No consensus on clinical features or imaging criteria

Imaging Errors

- Incorrect Interpretation of MRI
 - Poor accuracy in community (Reuss JSES 2006)
 - Debate about normal undercut
 - Anatomical variants common
 - Sublabral foramen
 - Up to 20% (Cadaveric study Pappas, 2013)
 - Buford, high MGHL, etc



Sublabral foramen

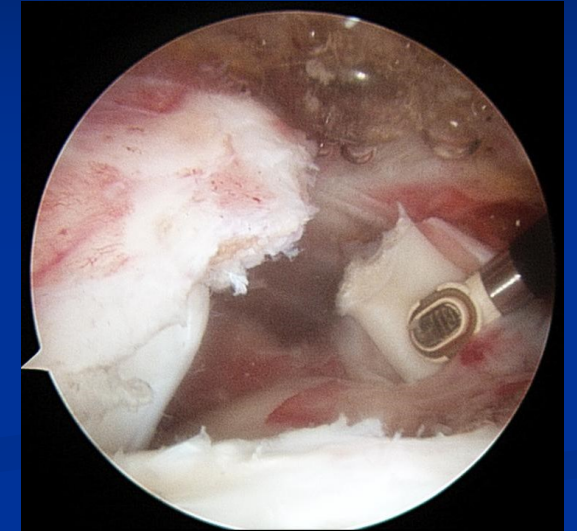
*SLAP TEARS CANNOT BE RELIABLY IMAGED
THERE ARE NO RELIABLE CLINICAL TESTS FOR THIS
CONDITION*



Rotator Cuff Repair

Outcome worse with repair of SLAP

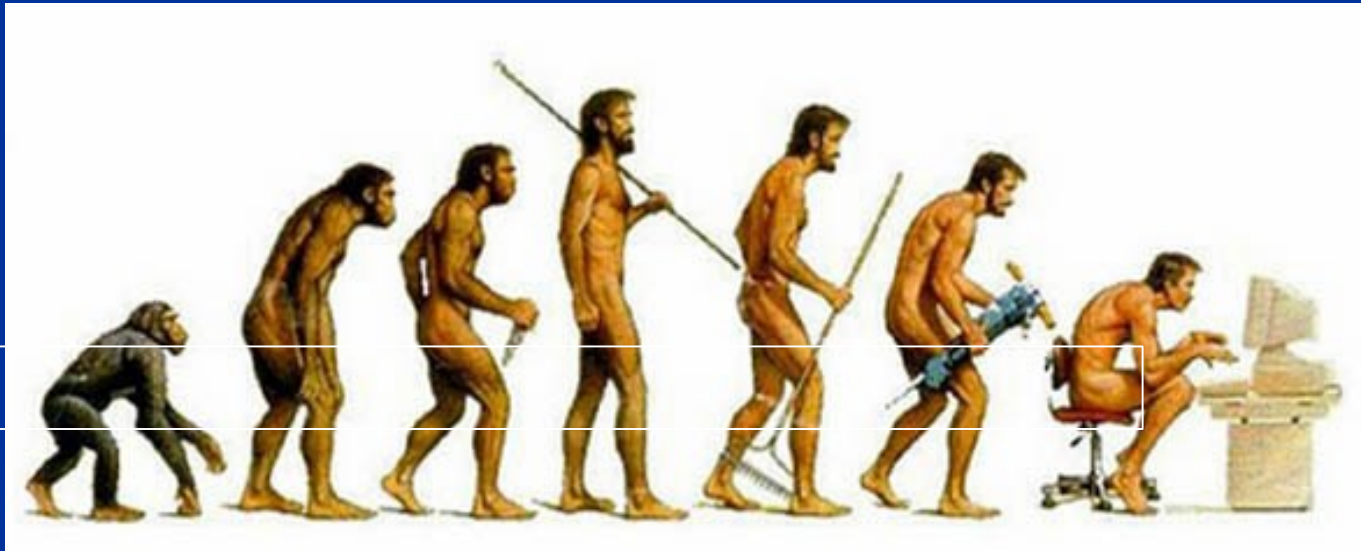
- Franceschi, RCT (AJSM 2008)
 - Patients >50 years
 - RCR + Biceps tenotomy vs. RCR + SLAP repair
 - Tenotomy group did better
- Other studies similar
 - Kim (AJSM 2012)
 - Huri (literature review Acta Orthop Traumatol Turc 2014)



*IF YOU WANT TO WRECK A GOOD CUFF REPAIR – REPAIR A
SLAP TEAR AT THE SAME TIME*

Role of the Biceps Anchor

- Human Evolution : LH Biceps on its way out ...
- Last's Anatomy : “Muscle with a short belly and long tendon = on it's way to extinction”



THE SLAP REGION IS CONNECTED TO A USELESS REMNANT

**IM NOT TOTALLY
USELESS.**

**I CAN
BE USED AS A
BAD EXAMPLE.**

Overhead / Throwing Athletes

- Kim
 - 22% RTPP
- Cohen
 - 38% good to excellent
- Smith
 - 54% RTPP
- Friel
 - 59% return to prior level
- Chalmers
 - 67% RTPP
- Ide
 - 75%, (60% baseball)
- Brockmeier
 - 71% RTPP
- Yung
 - Longer rehab to return
- Pagnani
 - 92%

SLAP Repair :

Inconsistent Return to Prior Level of Performance

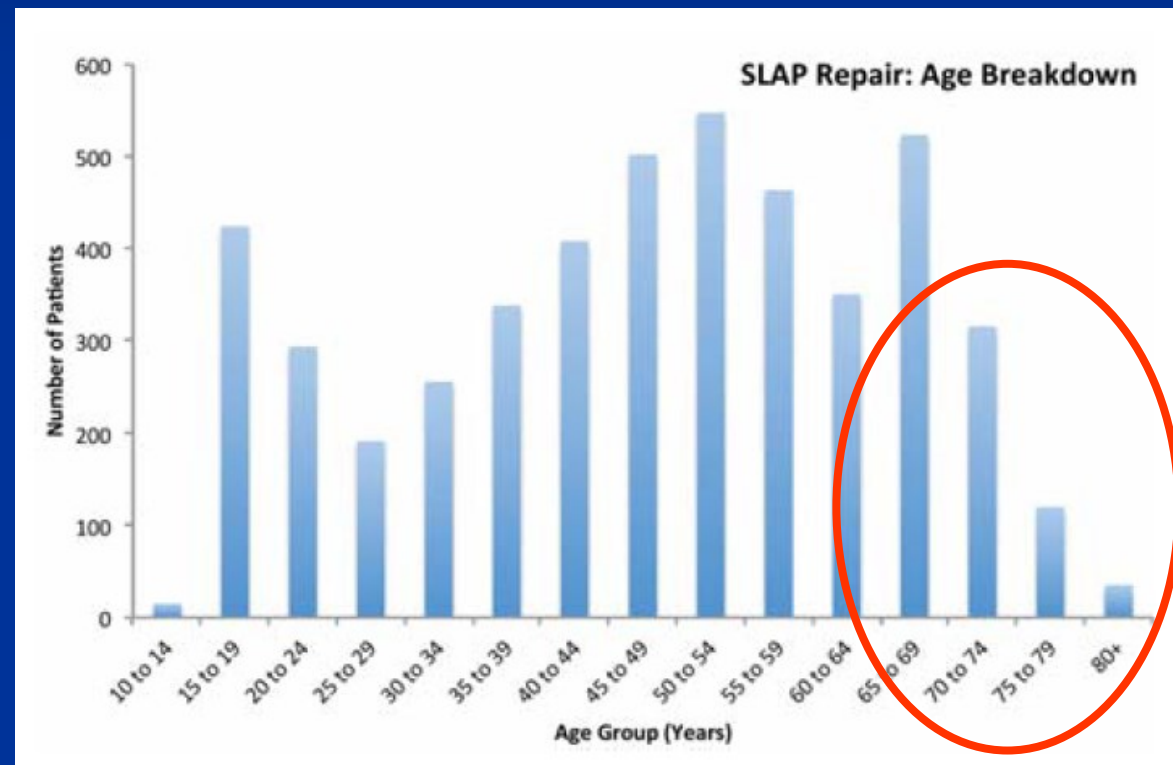
- Gorantla, Systematic review (Arthroscopy 2010)

2/3 Return

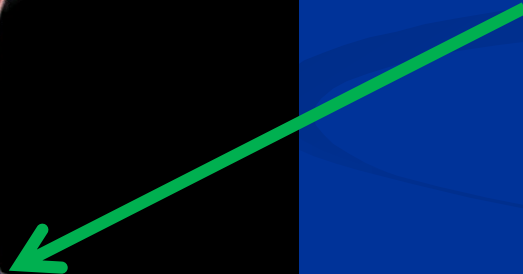
*IF YOU WANT TO RUIN A THROWING SPORT CAREER
– PERFORM A SLAP REPAIR*

Way too SLAP Happy ...

- US insurance company based database
 - Taylor (AJSM 2017)
 - Repairs from 2007 to 2015



SLAP TEARS ARE GETTING REPAIRED IN PEOPLE ABOUT TO DIE !



**“WHEN THE DEBATE
IS LOST, SLANDER
BECOMES THE TOOL
OF THE LOSER.”**

~SOCRATES

SLAP Tears -

- So, Martin, you want to repair something :
 - No-one can diagnose clinically
 - We can't see properly on scan
 - There is no uniform operation for
 - Is connected to something becoming extinct
 - Which is unlikely to be the cause of pain
 - At the expense of treating the actual problem
 - Will cripple a sporting career

Good Luck With That !



You're going to need it ...