

Survivorship & Patient-Reported Outcomes After Comprehensive Arthroscopic Management (CAM) of GHOA: Min 10-year F/u

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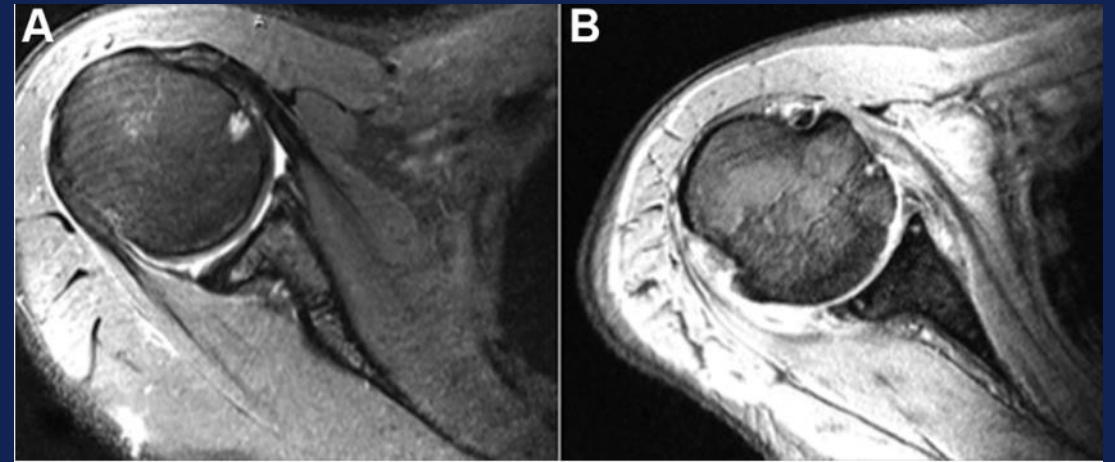
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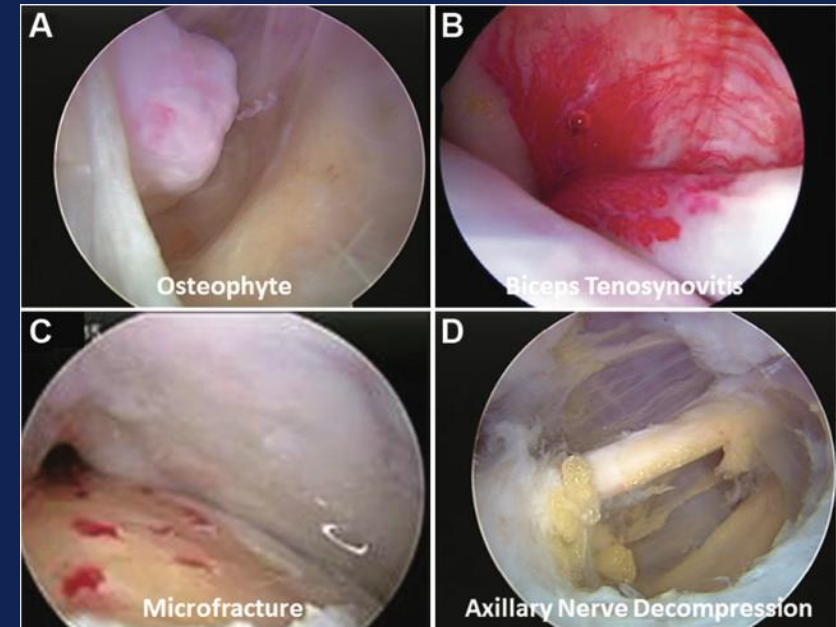
Introduction

- Glenohumeral osteoarthritis in young:
 - Non-operative
 - Operative
 - Arthroscopy
 - all not created equal
 - Hemiarthroplasty
 - TSA



Comprehensive Arthroscopic Management (CAM)

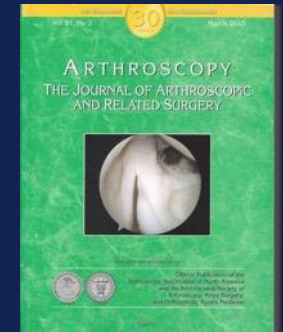
- Addresses all pathology:
 - Debridement, chondroplasty, synovectomy, loose body removal, capsular release, SAD
 - CAM adds:
 - inferior humeral osteoplasty, complete capsular release, ax neurolysis, biceps tenodesis



GHOA Arthroscopic Management

- Simple debridement

- Short term benefit
- Mid term = high progression to TSA
 - 16% - 42% at 8 - 24 months



Williams et. al 2016

- CAM - 5-year outcomes

- 77% survival
- 9/10 satisfaction, high PROMs
- Predictors of failure:
 - narrower joint space, worse OA, >50 yo, Walch B2 or C



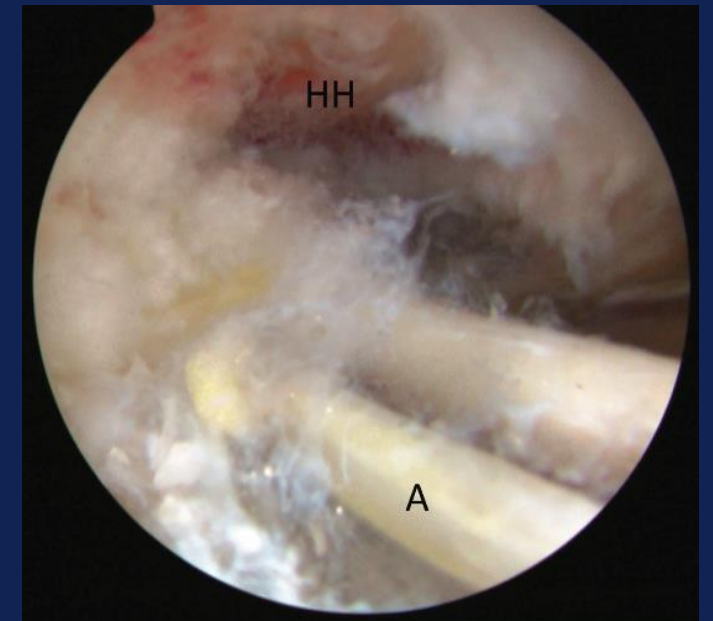
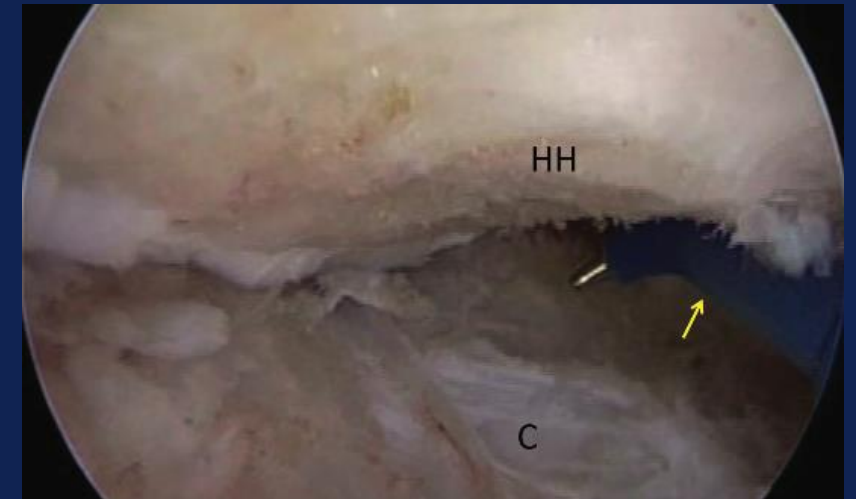
Millett et. al 2016

Comprehensive Arthroscopic Management (CAM)

- Purpose: Report long term outcomes & survivorship of CAM for GHOA at min 10-year f/u
- Hypothesis: Pts will have sustained improvement in PROs & satisfaction w/o conversion to TSA at long term follow-up.

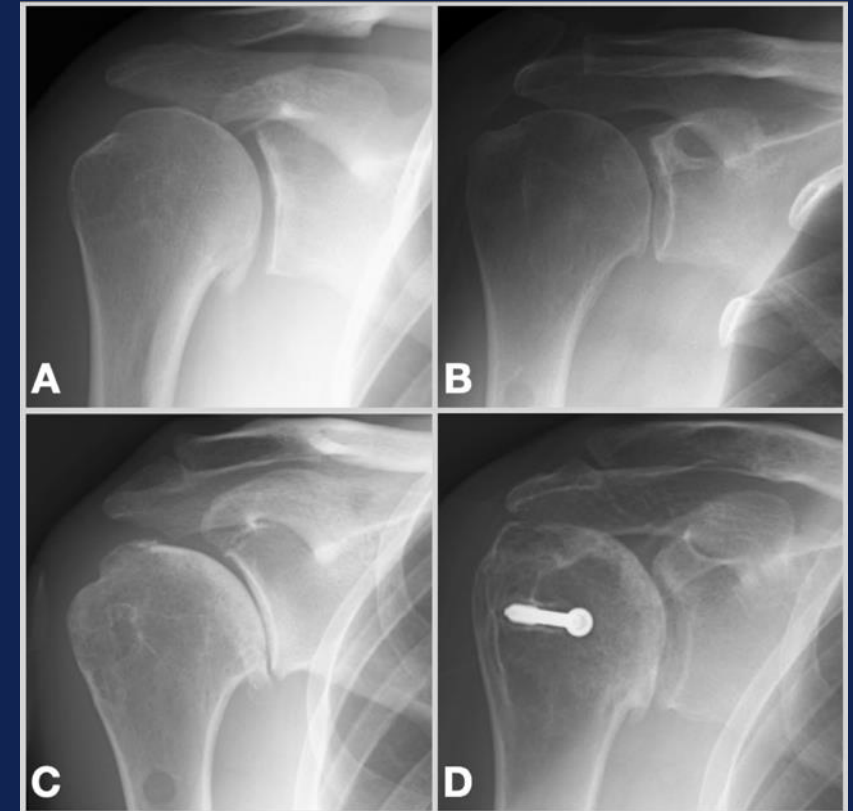
Methods

- Demographics: 38 CAM procedures
- Surgical procedures
- ROM
- Outcome Measures:
 - ASES
 - SF-12 PCS
 - SANE
 - QuickDASH
 - Satisfaction
 - Pain



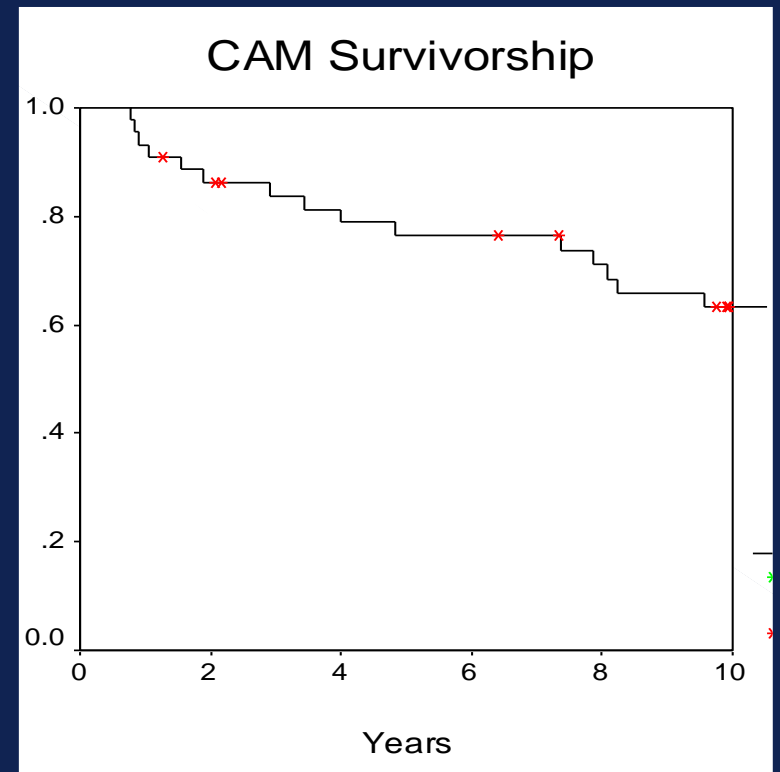
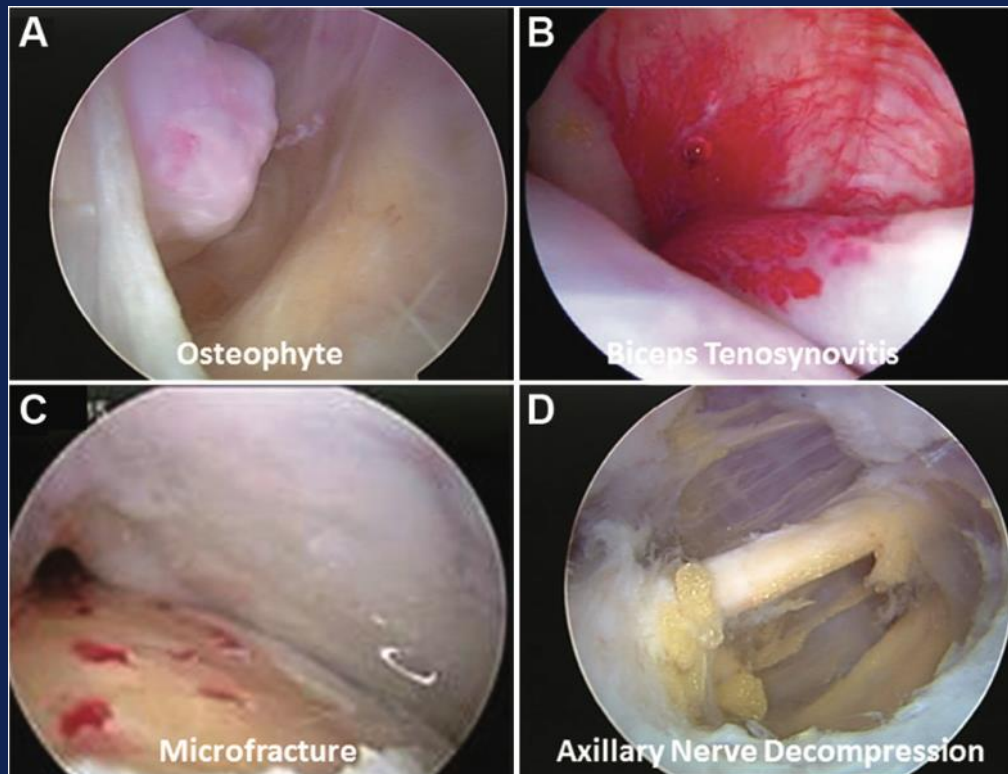
Methods

- Radiographic parameters:
 - Kellgren-Lawrence Grade
 - Outerbridge Grade
 - Walch Classification
 - Humeral and glenoid spur size (mm)
 - Humeral Incongruity Classification
 - Joint space (mm)
 - CSA
 - HH to acromial distance
- Survivorship: No progression to TSA



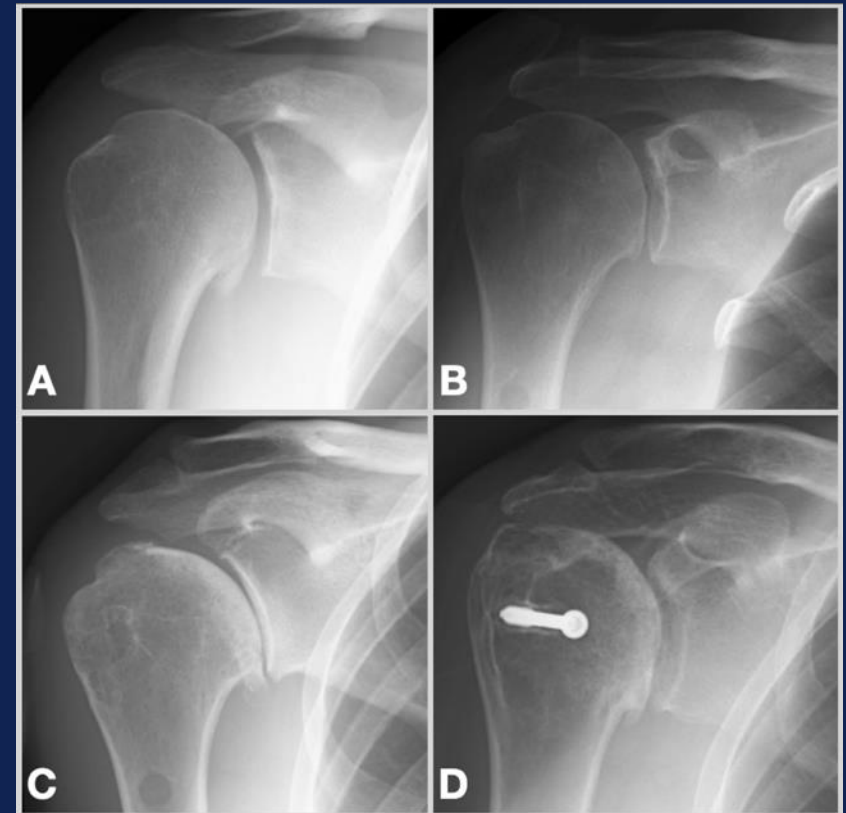
Results: No Progression to TSA

- At 5 years: 75% survivorship
- At 10 years: 63% survivorship (23/38)



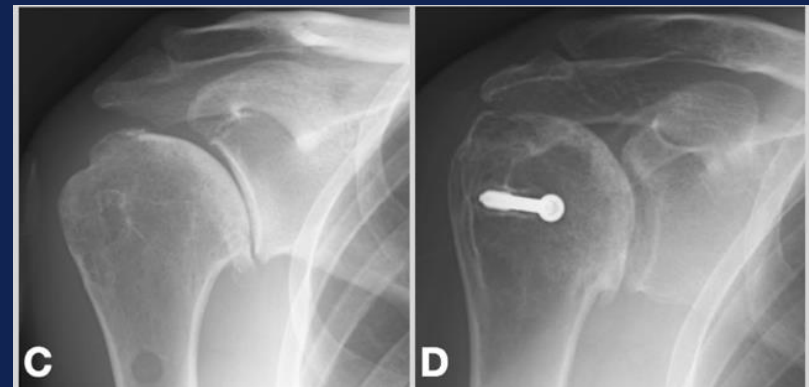
Results

- Risk factor for CAM failure:
 - Humeral head flattening
 - Central flattening & severe joint incongruity
 - 94% of failures
 - 50% of survivors



Results

- No difference btw TSA vs CAM survival in:
 - Demographics
 - Surgical procedures
 - Dominate arm
 - Prior sx
 - ROM
 - Sx procedures
 - X-ray: KL, Outerbridge, Walch, HH/glenoid spur, <2 mm jt space, CSA, HH to acromial distance



Note: some factors may not be sig due to small numbers

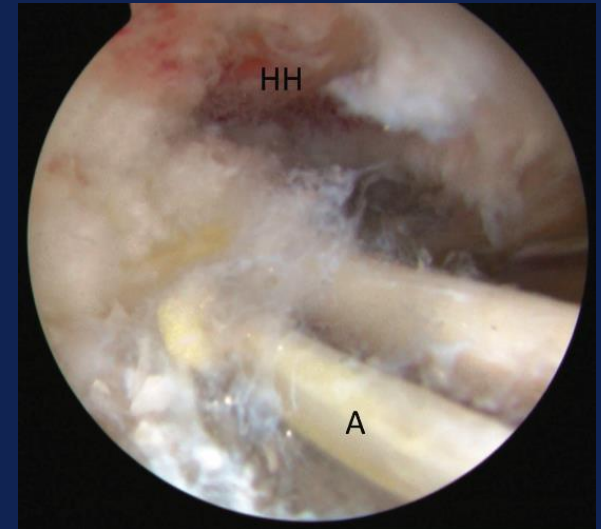
Results: Outcomes

<i>N= 20</i>	Pre-op	5 yr post-op	10 yr post-op	p-value: pre-op vs 10 yr	p-value: 5 vs 10 yr
ASES	63.7	84.2	80.6	.007*	.096
SANE		82.3	73.4		.033*
QuickDASH		16.8	17.7		.760
SF-12 PCS	48.8	52.3	48.3	.866	.174
Satisfaction		9.5	7.5		.028*
Pain	3		1	.001	

CAM procedure is durable in survivors

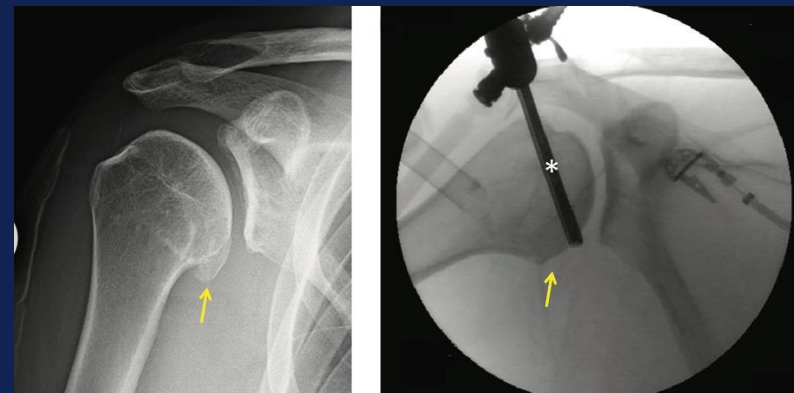
Limitations

- Single Surgeon, technically challenging
 - Ax neurolysis
- Active population
 - Generalizability?
 - Self selection against TSA?
- No comparison group (CAM vs TSA in young pts)



Conclusions

- Sig improvements in PROs & satisfaction at long term, 10-year min f/u
- Humeral head flattening/severe joint incongruity = CAM failure
- 63% CAM survival at min 10-year f/u



Thank you



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