Glenoid OCD In Baseball

Christopher S. Ahmad, MD
Head Team Physician, New York Yankees
Head Team Physician, New York City Football Club
Chief, Sports Medicine Service
Vice Chair of Clinical Research
Professor, Clinical Orthopaedic Surgery
Columbia University Medical Center

Disclosure

1. Basic Science Support
   a. Arthrex
   b. Smith-Nephew

2. Consultant
   a. Arthrex

3. Royalties
   a. Arthrex
   b. Lead Player Publishing

4. Board Member
   1. Baseball Health Network
   2. Sports Science Institute of America

Case

• 22M pro position player (bats R/throws R)
• R shoulder pain
• Mechanical symptoms
Glenoid OCD

Osteochondritis Disseccans (OCD)
- Med Femoral Condyle
- Capitellum
- Talus

Capitellar OCD

What is OCD?
- Focal osteonecrosis with subchondral separation
- Pain, mechanical sx, flexion contracture
- Treatment depends on degree of separation and size of lesion

Why?
Ischemia
Repetitive microtrauma
- Immature capitellar epiphysis supplied by one or two vessels
- End artery supply
Capitellar OCD

High prevalence
- Male throwers
- Female gymnasts

Stage 1: non-displaced
Treat non-operatively

Stage 2: partially separated
- In situ fixation - low healing rate
- Debridement/drilling
Capitellar OCD

- Stage 3: fully displaced
- Loose body removal
- Debridement/drilling

Glenoid OCD

Glenohumeral Forces

Compressive Force
- 480N Shoulder
- 270N Elbow

Scapular mechanics
- Throwing mechanics

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CASE 2

- 19 yo RHD M
- Collegiate shortstop
- Right shoulder pain x 6 months
- No trauma
- Denies mech symptoms
- Failed rest PT, NSAIDs, injection

Physical Examination

- Pain with posterior load and shift
Glenoid OCD

Rehab

Week 0 – 6: Immediate active ROM without resistance
Week 6 – 16: Gentle Strengthening
Week 16: Throwing

Outcomes

Literature Limited to Case reports

Mark 21 yo collegiate outfielder

Anthony 21 right handed collegiate pitcher
- Mark and Anthony attend same college
- Mark and Anthony are twins

Glenoid OCD Summary
- Repetitive compressive forces
- Problem of bone not supporting cartilage
- More common in elbow than shoulder
- Arthroscopic treatment can be successful
Thank You