Elbow Injuries in Football

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Anatomy

• Elbow

Literature

• Acute Elbow Injuries in the NFL
  — JSES (Jan-Feb. 2000:1-5)
  — Kenter, K., Behr, C., Warren, R., Obrien, S., Barnes, C.

  91 Injuries over 5 year period
  - 70 sprains
  - 16 Dislocation / Subluxations
  - 4 Fractures

• Mechanism of Injury
  — Blocking at Line of Scrimmage  50%
  — Hand planted on Ground  29%

  — Avg. time lost .64 games (0-4)
  — All injuries of UCL managed Non-operatively

• Upper Extremity Injuries in the NFL
  Carlisle, JC, Goldfarb, C., Mall, N., Powell, J. ATC., Montava, M.

  859 Upper Extremity Injuries,
  1996-2005

  58% Injuries to the Elbow

Literature

• Acute Elbow Injuries in the NFL

  70 Sprains:
  39 Hyperextension Injuries
  14 MCL Injuries
  2 LCL Injuries
  15 Non-specific
Upper Extremity Injuries in the NFL
- Game vs. Practice
- 2.8 – 1
- OL / DL Most Commonly Injured Positions
- 75% of their Injuries were Elbow Injuries

Elbow Dislocations
- (JBJS 2012, Feb. 94:240-5)
- 45% of Elbow Dislocations occur in Sports Participation, older than 10 y.o.

Shoulder and Elbow Dislocations
Guerra and Andrews (Clin Orth 2002)
- Conservative mgmt
- early mobilization
- recurrence rare
- improvement up to 1 Yr.

Elbow Injuries in Football
- Youth Football – Medial Epicondyle Avulsion fx
- Biceps Tear
- Biceps Contusions

Elbow Injuries in Football
- Triceps Tears
- Olecranon Bursitis
- Elbow Dislocations
  - UCL tears
  - Posterolateral Rotary Instability

Elbow Injuries in Football
- When to Operate? Or Not?
Case Presentations:

• 21 yo, Defensive Back.
• Elbow Dislocation when teammate fell on Right Elbow while making a tackle.

Case Presentation

• Closed Reduction on field.
• Xrays: anatomic reduction, no fx’s or avulsions
• MRI: Complete Disruption of MCL
  — High Grade Flexor Strain / Tear

Case Presentation

• Management:
  — Pain management, Swelling Control
  — Large Compressive Dressing
  — Daily Training Room Treatment Modalities
  — Early Mobilization with Active Assisted ROM

Case Presentation

• MRI:

Case Presentation

• Management:
  — Practice Modifications / Limitations
  — Stabilization Brace
  — RTP – 1 week
Case Presentation
• 16 yo, male, High School football QB
• Right (Dominate) Elbow injury,
• Xray Rt. Elbow:

Case Presentation
• Physical Exam:
  — Marked medial swelling
  — Tender medial epicondyle and UCL
  — Positive laxity with Valgus stress

Case Presentation
• Unable to Return to Play remainder of Season
• HS Baseball Pitcher with aspirations to play at next level.

Case Presentation
• MRI Right Elbow:

Case Presentation
• MRI Rt. Elbow:

Case Presentation
• Surgical Reconstruction:
Case Presentation

• Surgical Reconstruction:

Conclusions

• Elbow Injuries in Football Most Commonly Occur:
  – OL/DL Blocking at Line of Scrimmage
  – Hand Planted

• Frequently Involve Dislocations or Subluxations with Injury to the UCL

• Majority Rx’d with Early Mobilization, Appropriate Bracing and RTP