On The Field Management of Common Orthopedics Injuries & When Can an Athlete Return to Play?

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Athlete Down

ABC’s?
Alert?
Other Injury:

What Next?

• Assess Rapidly
• Identify Problem

What Next?

Gross Deformity?
Yes...
- Upper extremity, can get off field and then align with traction, reduce, splint, send for x-ray
- Lower extremity, align and splint on field, then off for x-ray
What Next?

Gross Deformity?
No...
= Then get athlete off field and do further assessment on sideline
= No need to do complete exam on field
...except when need to give the team a breather ☺

On the Sidelines

Talk to Athlete

• What Happened?
• What Hurts?
• How bad?
• Where?
• Numbness?

On the Sidelines

Assess Injury
• General assessment
• Identify area of injury
• Tenderness
• Swelling
• Crepitation
• Laxity
• Neurovascular status

On the Sidelines

Functional Assessment
• Range of motion
• Strength
• Functional skills
  – Run, jump, cut, etc
• Sports Specific
  = Throw/catch a ball
  = Get out of stance
  = backpedal

On the Sidelines

Return to Play Considerations

• Safe Return
• Risk of Further Injury
• Can Protect Themselves
• Meet Criteria
CRITERIA

- Little / No Pain
- Near normal ROM
- Near normal Strength
- Functional Ability
- Sports Specific Skills
- Other Factors

Reality

- Might have less than ideal criteria
- Return if can protect with bracing or taping if needed
- Try to minimize risk of re-injury

Common Injuries

- Shoulder Dislocation
- AC joint Sprain
- Elbow Dislocation
- Finger (PIP) Dislocations

Common Upper Extremity Injuries

SHOULDER- Dislocation

SHOULDER- Dislocation
Return to Play upper extremity

SHOULDER - Dislocation

Kocher

Hippocrates

SHOULDER - Dislocation

Return to Play:
- Numerous factors
- Would like full motion, normal strength, no apprehension
- Risk of another dislocation

Management during football season
- Brace?

SHOULDER - Dislocation

Acromioclavicular joint
SHOULDER- Acromioclavicular (A/C) joint Injury

- A/C joint sprain aka "Shoulder Separation"
- Various grades
- Usually impact injury

A/C Joint Palpation

SHOULDER- Acromioclavicular (A/C) joint Injury

- Return to Play:
  - With types I – III, when able to tolerate pain with full movement of shoulder
  - Often will need to protect the A/C joint with pad in contact sports

Elbow Dislocations

Elbow Dislocation

Parvin Method of Closed Reduction

- Traction applied by physician for several minutes
- As olecranon begins to slip distally, physician lifts gently on arm
- Anesthesia not necessarily required
Elbow Dislocations

Meyn & Quigley Method of Reduction

- Traction applied at wrist
- Reduction of olecranon guided with opposite hand

Elbow Dislocation: Post-Reduction Care

- Neurovascular status
  - Nerve entrapment
  - Vascular injury
  - Compartment syndrome
- Stability
  - Palpable reduction "chunk" favorable indication of post-reduction stability
- Sling
  - For comfort, encourage early ROM

Elbow Dislocation: Post-Reduction Care

- Return to Play
  - Need functional motion
  - Relatively stable
  - Consider elbow bracing

Finger Dislocation

- Most frequently occur at the proximal interphalangeal joint (PIP)
- Can occur at distal interphalangeal (DIP), metacarpophalangeal joint (MCP), or metacarpal bases

PIP Dislocations

- Most dorsal (distal joint is dislocated toward the top of the hand)
- Often mistaken for jammed fingers
- If patient unable to flex finger and gentle passive flexion is unable to flex finger, X-ray is mandatory

PIP Dislocations

- Closed reduction employing longitudinal traction, slight extension, and dorsal pressure over middle phalanx for dorsal dislocations.
- Splint finger straight, in position of comfort
  - Aluma-foam splint
  - Tongue depressor
- Once reduced, splint for approximately 1 week, then start protected early range of motion
Finger Dislocations

- Splints, buddy tape
- Xrays to r/o fracture

SUMMARY - Return to Play

- Many facets in deciding Return to Play
- Consider Each Individual - No "Cookbook"
- Refer back to Basic Criteria
  - No Pain
  - Full ROM
  - Full Strength
  - Functional Ability
  - Sport Specific Skills
  - Surgery rarely indicated

Thank You

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7th Annual Fall Symposium

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Focus on Shoulder
Honorary Speakers: Ben Kibler, MD
George Davies, PT