“To Reduce or Not Reduce: Is That A Question?”

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Patient Presentation:
- First game of the high school football season
- 16-year-old player had his left arm extended as he grabbed the opposition’s jersey
- Subsequently fell onto his outstretched left arm

Tests and Results:
- Three views of the elbow obtained ➔ dislocation of the proximal radius and ulna with respect to the humerus. No associated fracture.
- Post reduction 2 views ➔ satisfactory reduction of previously noted posterior dislocation.

Discussion/Follow-up:
- Initial evaluation of the athlete ➔ integrity of the bony elements and neurovascular structures should be assessed.
- Assessing for neurovascular compromise (paresthesias in the distal median and ulnar nerve distribution and integrity of the radial pulse) is paramount.
- Suspicion for bony injury of the distal humerus or the proximal radius ➔ sideline reduction should be avoided, unless there is significant neurovascular compromise.
- Case highlights the question of whether sideline closed reduction should be performed for posterior elbow dislocation.

Return To Activity:
- No set return-to-play guidelines for posterior elbow dislocations.
- In this case, approximately eight weeks from his injury, which included twice-weekly occupational therapy sessions, the player returned to football with a hinged orthosis.

Differential:
- Fracture/Dislocation of the Ulna &/or Radius
- Capsule Ligament Sprain
- UCL/RCL Sprain
- Biceps and/or Triceps Tendon Strain
- Humeral Shaft Fracture

Final Diagnosis:
Posterior Elbow Dislocation

Treatment and Outcome:
- Player’s significant pain: sideline closed reduction not attempted.
- Arm was splinted and the player was transported to the hospital.
- Elbow was reduced under conscious sedation.

Return To Activity:
- No set return-to-play guidelines for posterior elbow dislocations.
- In this case, approximately eight weeks from his injury, which included twice-weekly occupational therapy sessions, the player returned to football with a hinged orthosis.