23 y/o male with right shoulder pain while bench pressing

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AP internal rotation

Grashey
Posterior shoulder dislocation
"Trough" sign

Lightbulb sign

Not typical AP internal rotation appearance
Posterior shoulder dislocation

• Mechanism
  – Epileptic seizure: Most common
  – Fall on outstretched hand or blow to flexed, adducted, internal rotated shoulder

• Imaging
  – Arm in fixed internal rotation
  – Trough sign (reverse Hill-Sachs lesion)
    • Vertical linear sclerosis of medial humeral head
    • 75% of posterior dislocations
    • Due to anteromedial humeral head impaction fracture on posterior glenoid rim
  – Light bulb sign (fixed internal rotation)
    • Lesser tuberosity medial and greater tuberosity lateral so proximal humerus shaped like light bulb
  – Rim sign (shoulder joint width > 6 mm)
Treatment

- Nonoperative: If reverse Hill-Sachs lesion, defect < 20%
  - Strengthen external rotators
- Surgery: Instability or recurrent posterior dislocations
References