

Right shoulder pain status post fall

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AP Internal Rotation



Grashay

A large, stylized oak leaf graphic in a dark blue color, positioned on the left side of the slide. The leaf has a prominent central vein and several smaller veins branching off it. The leaf's edge is serrated.

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Hill-Sachs and Bony Bankart



- Arrow over humeral head demonstrates impaction deformity
- Arrow at inferior aspect of glenoid demonstrates glenoid fracture



Arrow demonstrates inferior glenoid fracture

Hill-Sachs and Bony Bankart

- Commonly due to anterior shoulder dislocation
 - Glenohumeral joint most commonly dislocated joint
 - 95% are anterior
- Mechanism: Humeral head displaced anteriorly, inferiorly, and medially
 - Posterolateral aspect of the humeral head catches on the anteroinferior aspect of the glenoid
 - Hill-Sachs: posterolateral impaction fracture of the humeral head
 - Bony Bankart: anteroinferior fracture of the glenoid

Hill-Sachs

- Hill-Sachs deformity found in 80% of initial anterior shoulder dislocations
- Best seen on AP Internal Rotation radiograph
- Redislocation based on articular involvement
- Engaging Hill-Sachs occurs when lesion catches on glenoid rim during movement

Bony Bankart

- Bony Bankart deformity found in 15% of initial anterior shoulder dislocations
- Defect in glenoid can enlarge with repeated anterior shoulder dislocations
- Glenoid defect $> 20\%$ of total surface, a bone graft could be required for shoulder stability
- Fx fragment can go on to nonunion or be resorbed

References

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- Gyftopoulos, S., Yemin, A., & Bencardino, J. (2013). Engaging Hill-Sachs Lesion: Is There an Association Between This Lesion and Findings on MRI? *American Journal of Roentgenology*, 201(4). doi:10.2214/ajr.12.10206