MSK Imaging

Shoulder joint II

Labral pathology

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Glenoid labrium

- Fibrous connective tissue structure
- Low signal in T1 and T2 WIs
- Usually triangular in configuration
- Rounded, cleaved, notched (variants)
Labrium on MR images

- Anterior and posterior labrium (axial)
- Inferior and superior labrium (coronal)

Normal Glenoid labrium
Gleno - humeral instability

Anterior instability [IGHL/ LC]  95%

- Lesions of the anterior labrum and inferior glenohumeral ligament
- Assess the anterior labrum at the level of the Subscapularies tendon in the axial image.
Sub-labral foramen
Bankart’s lesion

- IGHL-Labral complex avulsion
- Rupture periostium
- Fractured labrum[ osseous Bankart ]
- May be associated with HAGL
- Young patient with history of dislocation
- Do not occur spontaneously
Bankart’s lesion

Detachment of the anterior labrum as well as the related periostium
Bankart lesion
Bankart lesion
Bankart lesion
Osseous Bankart

Avulsion of the anterior labrium + detachment of the inferior glenoid rim
Osseous Bankart lesion
Osseous Bankart lesion
Hill- Sachs fracture 1940

- Grooved defect in the postrolateral aspect of the humeral head in cases of anterior instability
- 75% of cases with recurrent dislocation have Hill - Sachs fracture
- HS fracture is pathognomonic of Bankart’s lesion
Bankart lesion with Hill Sachs injury
Bankart lesion  with Hill Sachs injury
Hill Sachs injury
Bankart lesion  with Hill Sachs injury
Hill–Sachs lesion

Greater tuberosity fracture
Partial tear with GT fracture
Small tear at the base of a non-displaced or slightly displaced anterior labrium

Young patient with history of dislocation
Perthes lesion; Avulsed labrum with intact perostium
ALPSA

- Bankart lesion + intact periostium $\rightarrow$ medial and inferior displacement of the labrium
- ALPSA is converted to Bankart at arthroscopy

Anterior
Labroligamentous
Periosteal
Sleeve
Avulsion
Medial displacement with inferior rotation of the labrum
Posterior instability 2-4%

Reverse of Bankart

- Torn posterior labrium
- Antromedial humeral head defect
- Anterior humeral [lesser tub. Edema]

Reverse of Bankart with Anterior labral tear
- Torn posterior labrum
- Antromedial humeral head defect

Reverse of Bankart
سبحانك اللهم و بحمدك نشهد ان لا اله الا انت نستغفرك و نتوب اليك

Thank you

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