

Bony Bankart, Role of arthroscopy

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Pathology

- **Bankart lesion** \rightarrow most common pathological lesion (>80%)
- laxity of capsule (>20%)
- Hill-Sachs lesion (secondary pathological lesion)
- Glenoid rim fx



Sugaya H.e.a. : Glenoid rim morphology in recurrent anterior glenohumeral instability J Bone Joint Surg Am. 2003 May

TABLE I Morphology of the Glenoid Rim in One Hundred Shoulders with Recurrent Anterior Glenohumeral Instability

Morphology of Glenoid Rim	Prevalence	
Bone fragment	50%	3
Large fragment (>20%)	1%	
Medium fragment (5%-20%)	27%	
Small fragment (<5%)	22%	
Erosion or compression fracture	40%	
Normal	10%	
	Morphology of Glenoid Rim Bone fragment Large fragment (>20%) Medium fragment (5%-20%) Small fragment (<5%) Erosion or compression fracture Normal	Morphology of Gienoid RimPrevalenceBone fragment50%Large fragment (>20%)1%Medium fragment (5%-20%)27%Small fragment (<5%)





Normal Glenoid morphology

- typical "pearshape"
- inferior portion circular shape
- constant ratio of lenght and width
- no rim alterations



Burkhart SS. De Beer JF. significance of the inverted-pear glenoid and the humeral engaging Hill-Sachs lesion. Arthroscopy. 16(7):677-94, 2000 Oct.

 Arthroscopic Bankart repairs give results equal to open Bankart repairs (if no significant structural bone deficits)



Patients with significant bone deficits are not candidates for arthroscopic Bankart repair

Glenoid defect

Itoi E- The effect of Glenoid defect on anteroinferior stability of the shoulder after Bankart repair: a cadaveric study J Bone Joint Surg (AM) Jan/ 2000

osseous defect width > 21% of glenoid





Bony Bankart



Glenoid rim deficiency



Classification

Bigliani, 1998

Type I	Displaced avulsion fracture with attached capsule
Type II	Medially displaced fragment malunited to glenoid rim
Type IIIA	Erosion of the inferior glenoid rim of <25%
Type IIIB	Erosion of the inferior glenoid rim of >25%

Bigliani LU, Newton PM, Steinmann SP, Connor PM, McIlveen SJ. Glenoid rim lesions associated with recurrent anterior dislocation of the shoulder. Am J Sports Med. 1998 Fujii Y; Yoneda M; Wakitani S; Hayashida K. Histologic analysis of bony Bankart lesions in recurrent anterior instability of the shoulder. J Shoulder Elbow Surg. 2006; 15(2):218-23

All bony fragments in the bony Bankart lesion seemed to be viable and could be used to treat the fractured glenoid defect



Arthroscopic repair



Sugaya H, Moriishi J, Kanisawa I, Tsuchiya A. Arthroscopic osseous Bankart repair for chronic recurrent traumatic anterior glenohumeral instability. Surgical technique. J Bone Joint Surg Am. 2006 Sep;88 Suppl 1 Pt 2:159-69.

Arthroscopic repair





Arthroscopic repair







65 y. surgeon following falling down No medical illness, N/V normal

















Post-op X-Rays







CT after 6 wks













68 y. male following falling down





MRI





CT Scan







Post-op X-rays







CT after 3 month







CT after 3 month







Summary

- Arthroscopic repair of bony Bankart lesions
 - valuable method
 - good results
 - Low morbidity
- not Suitable in:
 - Glenoid Deficiency
 - Revision Surgery



Thank you for attention