What I've Learned About Posterior Instability

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1. Introduction
   a. Posterior shoulder instability is common in young athletes
   b. “Instability” patients may only complain of pain – need to rule out this diagnosis in at-risk athletes
   c. Posterior instability does not equal posterior labral tear and vice versa
   d. Treatment is evolving with arthroscopic stabilization the procedure of choice for most cases

2. Epidemiology
   a. Incidence of posterior dislocation has been more studied but most cases in athletes are subluxations(1) but most cases in athletes are subluxations(2)
   b. Recent reports suggest proportion of posterior instability is increasing(3), but not all posterior labral repairs are result of posterior instability
   c. The few reports we have on posterior instability suggest that it represents 10% of instability spectrum(2)
   d. Improved appreciation of bidirectional instability

3. Risk Factors
   a. Activities: contact/collision sports, bench press
   b. Increased glenoid retroversion (dysplasia)(4, 5)

4. Diagnosis
   a. History of fall onto hand or pain with repetitive posterior force in forward flexed position (listen for pain with bench press or in pass blocking in football linemen)
   b. Increased translation (compared with contralateral) on load-shift exam
   c. If HH goes out the back with simple forward flexion...beware dysplasia and consider bony procedure. This suggests there is no “rim” to translate over
d. Posterior apprehension sign

e. May also have SLAP and anterior symptoms as well

f. MRI/MR arthrogram may show posterior/inferior labral tear

g. Labral tear may not be present (especially in ligamentously lax patients)

h. Assess version/glenoid width with eye for dysplasia

5. Nonoperative management

a. Few options for bracing of in-season athlete

b. Most athletes can play with some amount of discomfort and have surgery during offseason

c. Rehabilitation can result in some improvement in patients especially without labral tear

6. Surgical stabilization

a. Arthroscopic repair is preferred surgical treatment with excellent results reported (6-9)

b. Consider glenoid osteotomy or bony augmentation (10) for severe dysplastic cases

7. Rehabilitation

a. External rotation sling for 6 weeks with avoidance of internal rotation for 6 weeks

b. Delayed pushups or bench press for 12 weeks

8. Take home points

a. If looking for dislocation or subjective “instability” you will miss many – must be ruled OUT in at risk athlete

b. Posterior labral tear does not equal Posterior instability

c. Beware dysplasia and consider bony procedure for severe retroversion or narrow glenoid
References


