Operative Stabilization of Traumatic Posterior Instability

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Introduction

- Traumatic posterior instability
  - Forceful blow to Add, IR UE
  - 2-5% incidence of all shldr instb.
  - No bidirectional, MDI included
Literature
The Journal of Bone and Joint Surgery

American Volume

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Treatment of Recurrent Posterior Dislocations of the Shoulder by Glenoplasty

Report of Three Cases

BY COMMANDER DAN J. SCOTT, JR.*, Medical Corps, United States Navy

From the United States Naval Hospital, Portsmouth, Virginia
Purpose

Evaluate the results of operative stabilization in patients with traumatic posterior shoulder instability.
Methods (inclusion)

- Active duty personnel (18-35 yrs)
- Symptomatic, recurrent posterior shoulder instability with traumatic etiology
- Failed > 6 mos. nonop. therapy
Methods (exclusion)

- No concomitant fx, neurological deficits or multi-directional instability
Results

• July 1996 - Oct 1999 15 pts had operative posterior stabilization
  – 4 arthroscopic
  – 11 open (posterior approach)
Results

• Avg follow-up = 34 months (range 10-34)
• Avg duration between injury and surgery = 28 months (range 1 –124)
Results

• Etiology
  – Contact injury in 12 (80%)
  – Non contact in 3 (20%)
• Dominant shldr in 8 (53%)
Post-op Results

- SANE = 80.3
- WOSI = 1549.6
- Rowe = 83.5
Results – Outcome measures

Satisfaction Outcome

Excellent | Good | Fair | Poor

A'scopic
Open
# Mechanisms of Injury

<table>
<thead>
<tr>
<th>Mechanism</th>
<th>Count</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sports Injuries</td>
<td>9</td>
</tr>
<tr>
<td>Military Training</td>
<td>3</td>
</tr>
<tr>
<td>Fall, non-sports</td>
<td>2</td>
</tr>
<tr>
<td>Non contact</td>
<td>1</td>
</tr>
</tbody>
</table>
Results - Group II

- Arthroscopic evaluation in beach chair position
- Hill-Sachs in all 10
  - chondral - 4
  - osteochondral – 6
- No capsular tears > 10 mm
- No HAGL lesions
Results - Group II

- SLAP lesions
  - 2 type II
  - 1 type III

- No. of tacks for repair
  - 2 in 9 pts
  - 3 in 1 pt
Results - F/U

- Avg = 36 mos (16-56)
  - Group I = 37 mos (16-56)
  - Group II = 35 mos (17-56)
Results - Failures

• Group I (nonop)
  – 9 of 12 (75%) failed
  – 6 of 9 req’d open Bankart

• Group II (operative)
  – 1 of 9 (11.1%) failed (p < 0.002)
## Results – Outcome measures

<table>
<thead>
<tr>
<th></th>
<th>Group I</th>
<th>Group II</th>
</tr>
</thead>
<tbody>
<tr>
<td>SANE</td>
<td>57 (46-92)</td>
<td>88 (60-100)</td>
</tr>
<tr>
<td>L’Insalata</td>
<td>73 (46-92)</td>
<td>94 (65-98)</td>
</tr>
</tbody>
</table>
Conclusion

• Operative stabilization, either arthroscopic or open, of traumatic posterior shoulder instability is a safe and effective treatment,
• that allows restoration of shoulder instability and return to sporting activities and function in the vast majority of cases.
Thank you