Little Leaguer’s Shoulder
Peter N. Chalmers, MD
Division of Shoulder and Elbow Surgery
Department of Orthopaedic Surgery
University of Utah


Is this a torsional injury or a distraction injury?


Radiographic findings


Radiographic classification:
(A) Grade I: lateral widening of the epiphyseal plate
(B) Grade II, widening in all the areas of the epiphyseal plate and demineralization of the metaphysis.
(C) Grade III, a slipped epiphysis.


Is physeal widening a normal adaptive response?

- 79 8-15 yo pitchers
- Physeal widening present in 62% of symptomatic and 55% of asymptomatic

<table>
<thead>
<tr>
<th>Table II</th>
<th>Descriptive statistics for physis width</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Dominant R. physis with</td>
<td>3.13</td>
</tr>
<tr>
<td>Non-dominant R. physis with</td>
<td>2.91</td>
</tr>
<tr>
<td>Dominant L. physis with</td>
<td>2.86</td>
</tr>
<tr>
<td>Non-dominant L. physis with</td>
<td>2.75</td>
</tr>
<tr>
<td>Dominant physis non-wide</td>
<td>2.01</td>
</tr>
<tr>
<td>Non-dominant physis non-wide</td>
<td>2.61</td>
</tr>
</tbody>
</table>

Treatment

- Stop throwing
- Stretching
  - Increase rotational motion
  - Increase GERE
  - Reduce GIRD
- Strengthening
  - Scapular stabilizers
  - Rotator cuff
- Focus on mechanics
- Consider position change

Prognosis

- Return to play: 93-100% (Carson 1998, Heyworth 2016)
- Time to
  - Symptom resolution: 2.6 months (Heyworth 2016)
  - Return to play: 4.2 months (Heyworth 2016)
  - Radiographic resolution: 4.7 months (Yanematsu 2015)
- Recurrence rate: 7%, at ~7 mon (Heyworth 2016)

Thank you!