



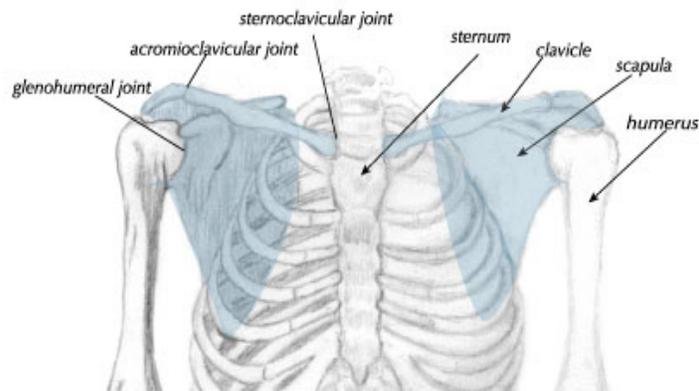
Surgical & Non-Surgical Care. Sports Medicine. Physical Therapy.

Volume 8, Issue 9, April 2017

EXAMINATION OF THE SPINE AND EXTREMITIES: THE SHOULDER (Part 3)

Beginning in January of 2016, we began a series of newsletters examining the spine and the extremities one joint/region at a time. Beginning with the foot and working our way upward, the "Examination of the Spine and Extremities Series" is designed to provide a brief overview of the anatomy of each respective joint, an underlying review of its motion and dynamics, and likewise provide an explanation of some of the more common pathologies experienced in that particular joint.

- Bones:** Clavicle, Scapula, and Humerus
- Ligaments:** Sternoclavicular jt (3)
Acromioclavicular jt (3)
Glenohumeral jt (3)
- Muscles:** Pec Major, Pec Minor, Lat. Dorsi, Deltoid (3), Biceps, Rotator Cuff (4) Triceps



The Experts' Opinion of Year-Round Baseball

The Three Main Causes of Shoulder and Elbow injury according to Dr. James Andrews, renown Shoulder and Elbow Orthopedic Surgeon:

1. Year round baseball
2. Playing in more than one league at the same time where 'counts' don't count
3. The "red line" of 80-85mph. Beyond that, the adolescent UCL begins to fray/tear

The advice of John Smoltz, renowned pitcher for the Atlanta Braves, during his Induction Speech to the Baseball Hall of Fame in 2015.

"I want to encourage the families and parents that are out there to understand that this is not normal to have a surgery at 14 and 15 years old, that you have time, that baseball's not a year-round sport, that you have an opportunity to be athletic and play other sports."

Journal of Sports Health:

"for most sports, there is no evidence that intense training and specialization before [age 13 or 14] are necessary to achieve elite status. Risks of early sports specialization include higher rates of injury...and quitting sports at a young age."

ON-SITE ORTHOPEDIC CLINICS EACH WEEK

- No Charge
- Open to patients of all ages
- Appointments (918) 346-7800

Collinsville Public Schools
Monday/Wednesday
2:00pm—3:30pm

Coweta Public Schools
Wednesday
2:45pm—3:30pm

Edison Preparatory School
Monday/Thursday
2:45pm—3:30pm

Glenpool Public Schools
Tuesday
2:45pm—3:30pm

Kellyville Public Schools
Wednesday
Noon—12:45pm

Regent Preparatory School
Wednesday
Noon—12:45pm

Rejoice Christian School
Monday/Wednesday
2:00pm—3:30pm

Victory Christian School
Tuesday
2:45pm—3:30pm

Wagoner Public Schools
Wednesday
2:45pm—3:30pm

*Hosted by CSO Athletic Trainers and Physician Assistants.

Central States Orthopedics Physicians

- | | | | | |
|--------------------------|-----------------------|-----------------------|------------------------|----------------------|
| R. Clio Robertson, MD | David K. Wong, MD | Ronald S. LaButti, DO | Kathleen M. Sisler, MD | Casey L. Smith, MD |
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| Randall L. Hendricks, MD | Jeffrey R. Morris, DO | Brent C. Nossaman, DO | Debbie A. Gladd, DO | |

Risk-Prone Pitching Activity

In 2014, a research study published the results of a national survey asking 754 youth baseball pitchers and their parents how often they performed the following pitching practices which have been documented to increased the risk for injury. Below are some of the key results:

Risk-Prone Pitching Activities and Injuries in Youth Baseball: Findings from a National Sample

- *45% pitched in a league without pitch counts or limits
- *43.5% pitched at least once on consecutive days
 - = 4x greater risk of arm fatigue
 - = 2.5x greater risk of arm pain
- *19% pitched more than 1 game in the same day
 - = 89% greater risk of arm pain
- *30.4% pitched on multiple teams in overlapping seasons
 - = 3x greater risk of arm fatigue
 - = 1.85x greater risk of arm pain
- *13.2% reported pitching for more than 8 months per year.
- *1 out of 10 pitchers also play the catcher position
- *Reported pitching with arm tiredness
 - 6.6% Often**
 - 59% Sometimes*
 - 29.4% Never
 - **7.88 times greater risk for injury
 - *3.71 times greater risk for injury
- *Reported pitching with arm pain
 - 4.2% Often**
 - 32% Sometimes*
 - 59.6% Never
 - **7.5% greater risk for injury
 - *5.4% greater risk for injury

Other Recommendations to Reduce Injury Risk

1. Appropriate Preseason Strength & Conditioning

-Thrower's Ten Exercises

2. Maximum Pitch Counts per game by age:

8-10 yrs:	52
11-12 yrs:	68
13-14 yrs:	76
15-16 yrs:	91
17-18 yrs:	106

3. Appropriate Rest after Throwing

8-10 Years of Age

<i>21 Pitches</i>	<i>34 Pitches</i>	<i>43 Pitches</i>	<i>51 Pitches</i>
1 Day	2 Days	3 Days	4 Days

11-12 Years of Age

<i>27 Pitches</i>	<i>35 Pitches</i>	<i>55 Pitches</i>	<i>58 Pitches</i>
1 Day	2 Days	3 Days	4 Days

13-14 Years of Age

<i>30 Pitches</i>	<i>36 Pitches</i>	<i>56 Pitches</i>	<i>70 Pitches</i>
1 Day	2 Days	3 Days	4 Days

15-18 Years of Age

<i>30 Pitches</i>	<i>36 Pitches</i>	<i>56 Pitches</i>	<i>70 Pitches</i>
1 Day	2 Days	3 Days	4 Days

For this information, as well as addition information regarding Pitch Counts, Pitch Types, and Injury Prevention for the Throwing Athlete, visit our website at:

www.csosortho.com

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For our entire newsletter disclaimer, visit the Sports Medicine Newsletter page on our website: <http://www.csosortho.com/sports-medicine-monthly.html>

Main Clinic

6585 S. Yale Ave., Ste. 200
Tulsa, Oklahoma 74136
918-481-2767

Bixby Clinic

12800 S. Memorial, Ste. D
Bixby, Oklahoma 74008
918-394-2767

South Tulsa Clinic

9716 S. Riverside Dr., Ste. 110
Tulsa, Oklahoma 74137
918-528-3300

Owasso Clinic

13616 E. 103rd St. N., Ste. B
Owasso, Oklahoma 74055
918-272-4488

Downtown Clinic

802 S. Jackson, Ste. 405
Tulsa, Oklahoma 74127
918-583-4400

Hillcrest South Medical Plaza

8803 S. 101st E. Ave, Ste. 300
Tulsa, OK 74133
918-994-6277