

BASEBALL

ANSWERS TO THE MOST FREQUENTLY ASKED QUESTIONS FROM COACHES & PARENTS REGARDING PITCHING & INJURIES:

STRULOWITZ AND GARGIULO PHYSICAL THERAPY

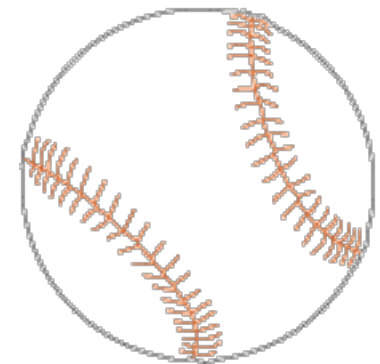
SPRING 2005

1. How many pitches should my child be allowed to throw?

Guidelines from the American Sports Medicine Institute suggest:

SUGGESTED PITCH COUNTS:

<i>AGE</i>	<i>MAX PITCHES/GAME</i>	<i>MAX GAMES/WEEK</i>
8-10	52	2
11-12	68	2
13-14	76	2
15-16	91	2
17-18	106	2



SUGGESTED RECOVERY DAYS:

<i>AGE</i>	<i>1 DAY REST AFTER</i>	<i>2 DAYS AFTER</i>	<i>3 DAYS AFTER</i>	<i>4 DAYS AFTER</i>
8-10	21 PITCHES	34	43	51
11-12	27 PITCHES	35	55	58
13-14	30 PITCHES	36	56	70
15-16	25 PITCHES	38	62	77
17-18	27 PITCHES	45	62	89

2. How old should my child be before learning the curveball?

Guidelines from the USA Baseball Medical & Safety Advisory Committee suggest:

RECOMMENDED AGE FOR LEARNING VARIOUS PITCHES:

Fastball: 8 yrs old----- Slider: 16 yrs. old----- Change-up: 10 yrs. old-----Forkball: 16 yrs. old

Curveball: 14 yrs. old----- Knuckleball: 15 yrs. old

3. What is Little League Elbow?

Youngsters involved in pitching commonly develop medial elbow pain. During the acceleration phase of the throwing motion, the elbow is subjected to valgus stress, which applies tensile stress to the inner elbow. Repetitive tensile stress (pitching) causes the growth plate that attaches the medial epicondyle to the body of the humerus to break down. This is called medial apophysitis or “little league elbow”. It is an overuse injury, and is best managed by rest, limiting the number of pitches thrown, and ice.

QUESTIONS AND CONCERNS

4. What is Tommy John Surgery?

This is a surgical procedure to reconstruct a torn UCL (a ligament on the inner aspect of the elbow). The elbow goes through its full ROM and is stressed near its physiological limit during the act of throwing. The UCL is the major structure to resist the valgus overload on the elbow during the acceleration and follow through phases of the pitching motion.

The comeback path from this surgery is not an easy one. A typical schedule would look like this:

4 Months: Initiate a short toss throwing program

6 Months: Begin pitching on flat ground

7 months: Begin pitching from the mound

9 months: Begin competitive pitching

12 months: Expected return to previous level of play

24 months: Documented return of previous velocity & control



5. My child complains of shoulder pain. Can a pitcher's mechanics cause shoulder pain?

Shoulder injuries occur as a result of years of overuse and repetition. An

acute rotator cuff tear is unusual in a pitcher. The underlying cause of shoulder pain is frequently impingement which occurs in abduction and excessive rotation –the position the shoulder is in during the late cocking, early acceleration phase of pitching. In this position, the rotator cuff tendons rub against the glenoid rim and labrum which can result in undersurface fraying of the cuff. Causes of internal impingement may include hyper-angulation of the arm, excessive external rotation, sidearm throwing, poor ball position in the pitcher's hand, over-rotation, and throwing across the body.

6. When should I take my child to a doctor?

The Nirschel Pain Phase Scale of Athletic Overuse Injuries attempts to define the point at which painful symptoms require medical attention. Stiffness or mild soreness after activity, or before activity that is relieved by warm-up, and lasts no longer than 24-48 hours, usually does not require medical attention. More intense pain which causes the athlete to alter performance of the activity and affect some activities of daily living, should receive medical attention. Remember, it is best to identify problems early and treat them.

7. What exercises would be recommended for a pitcher?

Each case needs to be individually evaluated, however a general exercise

program specific to throwing athletes has been developed on the following page.



Strulowitz and Gargiulo Physical Therapy
1 Nardone Place
Jersey City, NJ 07306
201-792-3840
201-792-7948 (fax)

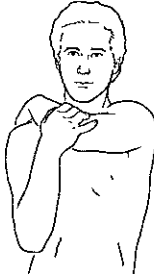


www.sgpnr.com

Created by Susan Schneider, PT

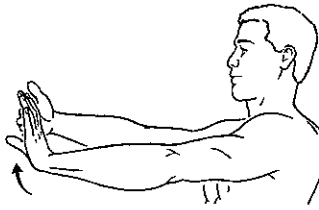
SHOULDER - 72 ROM: Posterior Capsule Stretch

Gently pull on **right** forward elbow with other hand until stretch is felt in shoulder. Hold 10 seconds.



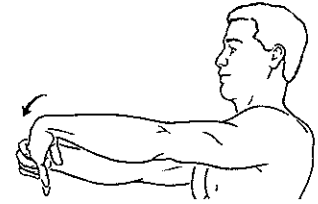
Repeat 5 times per set.
Do 1 sets per session.
Do 3 sessions per day.

HAND - 13 Wrist Flexor Stretch



Keeping elbow straight, grasp **right** hand and slowly bend wrist back until stretch is felt. Hold 10 seconds. Relax.
Repeat 5 times per set. Do 1 sets per session.
Do 3 sessions per day.

HAND - 14 Wrist Extensor Stretch



Keeping elbow straight, grasp **right** hand and slowly bend wrist forward until stretch is felt. Hold 10 seconds. Relax.
Repeat 5 times per set. Do 1 sets per session.
Do 3 sessions per day.

HAND - 19 Forearm Supination Stretch

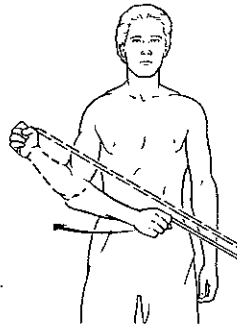
With **right** hand in handshake position, grasp and slowly turn to palm up until stretch is felt. Hold 10 seconds. Relax.



Repeat 5 times per set.
Do 1 sets per session.
Do 3 sessions per day.

SHOULDER - 43 Strengthening: Resisted External Rotation

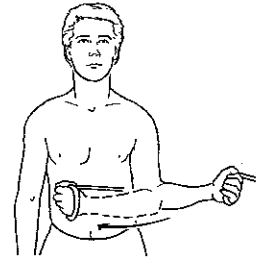
Hold tubing in **right** hand, elbow at side and forearm across body. Rotate forearm out.



Repeat 10 times per set.
Do 3 sets per session.
Do 1 sessions per day.

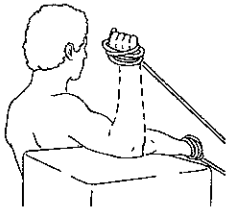
SHOULDER - 44 Strengthening: Resisted Internal Rotation

Hold tubing in **right** hand, elbow at side and forearm out. Rotate forearm in across body.



Repeat 10 times per set.
Do 3 sets per session.
Do 1 sessions per day.

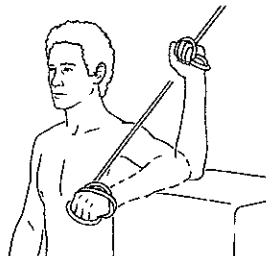
SHOULDER - 78 Strengthening:
External Rotation – in 90° of Abduction



Facing anchor, tubing around **right** hand, elbow bent 90°, forearm forward, pull forearm back, keeping elbow bent.
Repeat 10 times per set. Do 3 sets per session.
Do 1 sessions per day.

SHOULDER - 79 Strengthening:
Internal Rotation – in 90° of Abduction

Anchor behind, tubing around **right** hand, elbow bent 90°, forearm up, pull forearm forward, keeping elbow bent.



Repeat 10 times per set.
Do 3 sets per session.
Do 1 sessions per day.

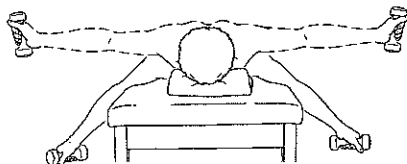
SHOULDER - 75 Strengthening:
Scaption – with External Rotation

Holding _____ pound weight, raise **right** arm diagonally from hip to above head. Keep elbow straight, thumb up.



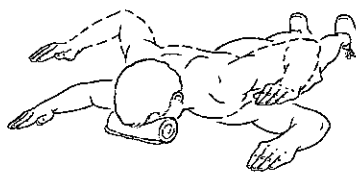
Repeat 10 times per set.
Do 3 sets per session.
Do 1 sessions per day.

SHOULDER - 76 Strengthening:
Horizontal Abduction – with External Rotation (Prone)



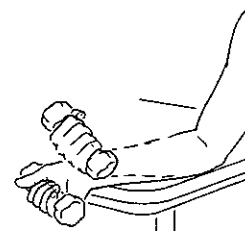
Holding _____ pound weights, raise arms out from sides, pinching shoulder blades. Keep elbows straight, thumbs up.
Repeat 10 times per set. Do 3 sets per session.
Do 1 sessions per day.

SHOULDER - 107 Scapular Retraction: Abduction (Prone)



Lie with upper arms straight out from sides, elbows bent to 90°. Pinch shoulder blades together and raise arms a few inches from floor.
Repeat 10 times per set. Do 3 sets per session.
Do 1 sessions per day.

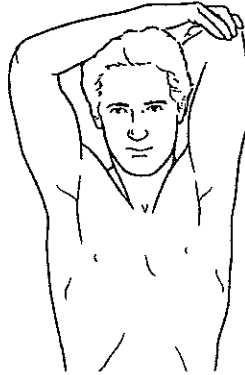
HAND - 63 Wrist Flexion: Resisted



With **right** palm up, _____ pound weight in hand, bend wrist up. Return slowly.
Repeat 10 times per set. Do 3 sets per session.
Do 1 sessions per day.

SHOULDER - 71 ROM: Inferior Capsule Stretch

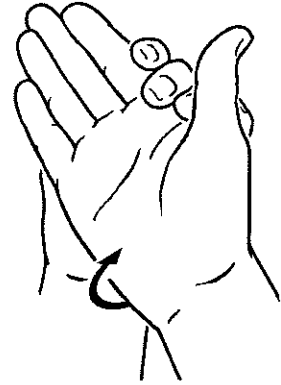
Gently pull on right raised elbow with other hand until stretch is felt in shoulder.
Hold 10 seconds.



Repeat 5 times per set.
Do 1 sets per session.
Do 3 sessions per day.

HAND - 19 Forearm Supination Stretch

With right hand in handshake position, grasp and slowly turn to palm up until stretch is felt. Hold 10 seconds.
Relax.



Repeat 5 times per set.
Do 1 sets per session.
Do 3 sessions per day.

**Strulowitz & Gargiulo
Physical Therapy & Rehab**

1 NARDONE PLACE
JERSEY CITY, NJ 07306
201-792-3840
Fax: 201-792-7948
www.sgptr.com

*Visit our website for staffing updates,
directions, and information on common
injuries.*

