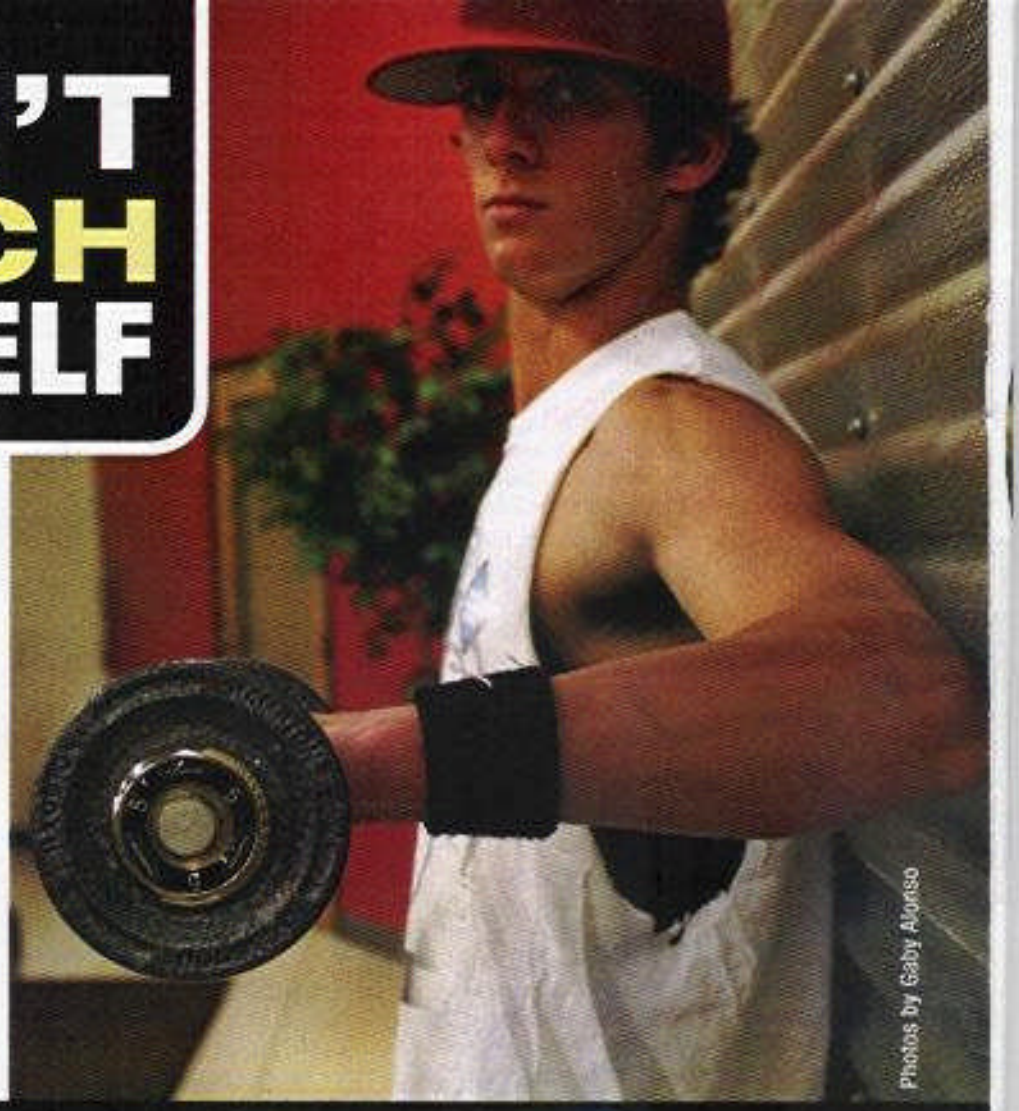
DON'T BENCH YOURSELF



Photos by Gaby Alonso

Like any sport there is a risk of injury from overuse. Baseball is very repetitive and also very explosive. Put those two components together and it's very easy to create excessive "mechanical wear" or an overuse syndrome. Players run the bases counter-clockwise and usually throw with the same arm and bat in the same direction. These repetitive patterns can create weakness and eventually injury. In this article we'll review three common overuse syndromes, their treatment and then provide a solution to help prevent those injuries. By John Platero

SHOULDER IMPINGEMENT

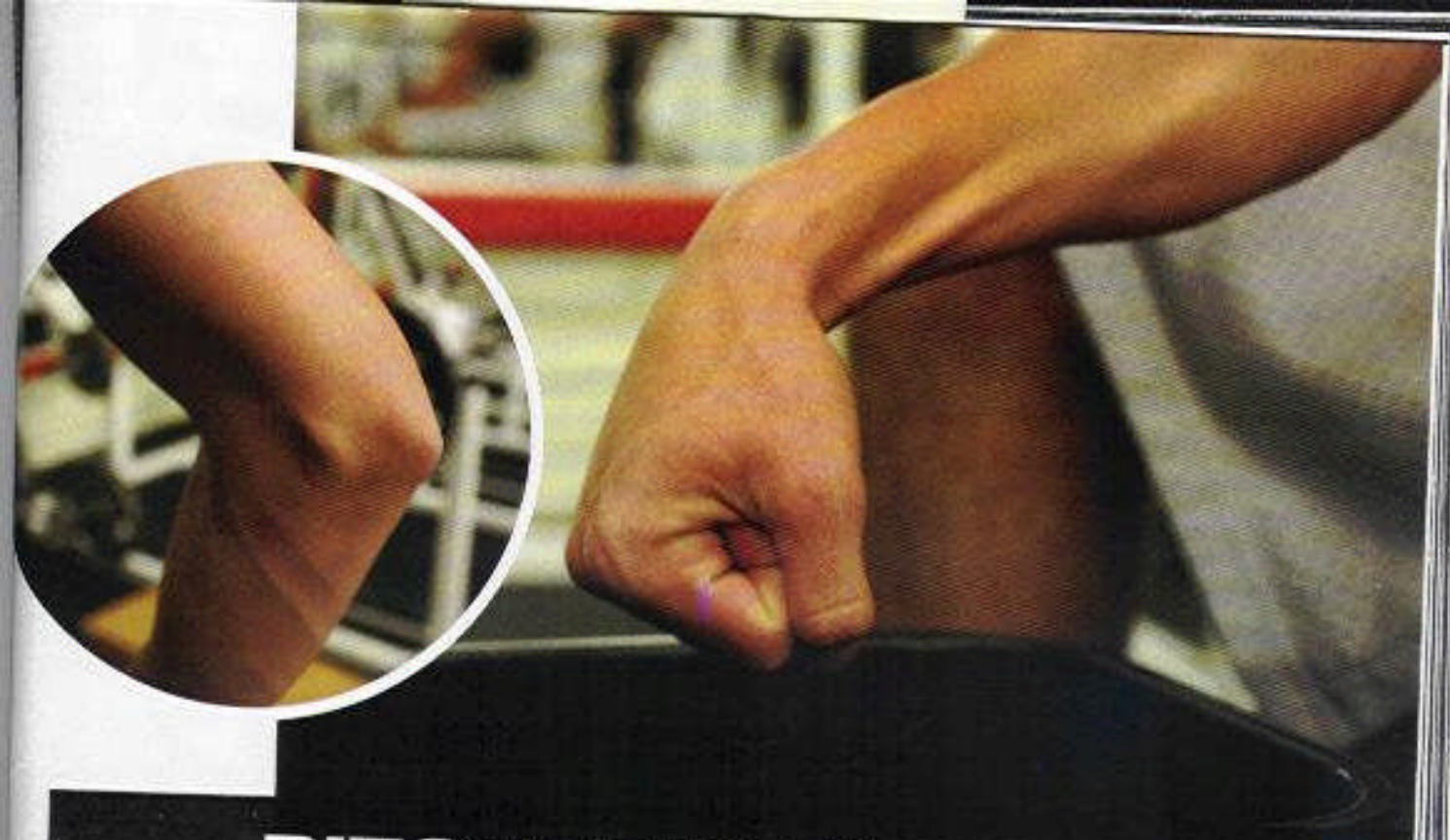
The shoulder joint is the most mobile joint of the body and is structurally insecure. The extreme range of motion, high angular velocities and torque that occur in throwing a baseball can lead to stretching and migration of the humeral head causing an impingement of the rotator cuff against the acromion and the coracoacromial ligament. This is sometimes called rotator cuff tendonitis. Although you might be able to use your arm at your side, there will be pain when you lift your arm above shoulder. The pain is on the top of the shoulder.

TREATMENT

When it first becomes painful always start with P.R.I.C.E. (Protect, Rest, Ice, Compression, Elevation) Do this about two or three times a day for a few days. Take some time off. Rest is the best remedy.

PREVENTION

1. External rotation. With your back, shoulder and arm against a wall, position your arm at shoulder height with the elbow bent to 90 degrees. Using a five pound dumbbell, slowly allow the dumbbell to drop until it's parallel to the ground. Now return to the top.
2. Pendulum exercises. Stand with a slight lean forward and a three to five pound dumbbell in your hand. Slowly swing the dumbbell clockwise, counter-clockwise, forward, backward and side to side.



PITCHER'S ELBOW

When a player throws a baseball, the final release of the ball involves an explosive downward motion of the wrist and fingers. The muscles used in this final action are called the flexor pronator group. This group of muscles lie on the inner portion of the forearm to the inner side of the elbow onto the medial epicondyle. With all the tremendous stress of repetitive throwing, a small rip or tear in the muscle origin close to the attachment of the bone could eventually occur.

TREATMENT

For adults, if there is pain, stop throwing for at least 10 days so the area can start to heal. Don't throw hard for at least three weeks. Throw easy with a high arc or lob in the air. Increasing the rest time will increase the chances of healing. For kids, stop throwing altogether until the pain or tenderness is completely gone. When throwing again, wear a long sleeve jersey to keep the area warm and then ice for 10-20 minutes after a game. To ice, I like to use a car tire that I've cut in half. The athlete can just lay their arm inside the tire.

PREVENTION

Strength training exercise should focus on the opposite side of the forearm. This will give the front side of the forearm time to rest.

1. Wrist extension with pronation exercises. Fill a bucket with popcorn seeds or uncooked rice. With the arm at your side, submerse the hand with a closed fist and pronate the hand (pull it upwards). Progress to extending the fingers. You can substitute sand for the popcorn or rice as you get stronger.
2. Wrist flexors with supination exercises. Use the same bucket and the same progression, supinate the wrist (pull it downwards)
3. Circumduction exercises. With the same bucket and progression, move the wrist in circles, figure eights, and the alphabet. Progress to the open hand and sand.
4. Reverse curls. Use an E-Z curl bar and curl with a pronated grip (palms facing towards your thighs at the start, or facing downward at the top). Perform it slowly for two or three sets of 10-15 repetitions
5. Triceps extension. Grab a bar from a high cable with a pronated grip. With elbows locked at your side, extend your elbows.

HAMSTRING STRAINS

In many athletes the quadraceps can be one and half times stronger than their hamstrings. Athletes with a higher strength ratio between those two muscles are most likely to pull their hamstrings. The muscle rips when the muscle is fully stretched. This normally occurs in sprinters or anyone who is exploding out of the gate. Running the bases qualifies. Pulls can also happen if an athlete is not properly warmed up or is tight. Athletes that don't normally fully extend the knee such as cyclists, hockey players, skiers and ice skaters don't normally have this problem.

TREATMENT

P.R.I.C.E. should happen immediately. The less fluid that accumulates, the faster the injury can heal. Ice for an hour three times a day. After the first day, start heat treatment twice a day. There are different grades of tears: I, II and III. A severe hamstring pull could take three-four weeks to heal, and that is if the tear is in the muscle belly. If the tear is at the insertion on the bone, it could take twice as long to heal.

PREVENTION

If the hamstrings are tight, static stretching is important. Hold the stretches for 20-30 seconds each.

Stretches:

1. From a standing position, bend over and touch the floor with the palms or your hands. If you can't reach the floor, slightly bend the knees, bend over and then slowly straighten the knees.
2. If there are no pelvic issues, perform the yoga position called the "plow." Lie on your back. Keeping your legs straight, bring the legs over your face and head so that your toes will be touching the ground above your head.
3. Place your straight leg on a table at approximately hip height. Keeping your back straight, reach out slowly with both hands.

Exercises:

1. Leg curls. Perform seated, standing or prone leg curls. Perform them one leg at a time. Two to three sets of 8-15 repetitions per exercise.
2. Hip extension. Using a 45-degree hip extension bench or a Roman Chair, perform hip extension. Do two to three sets of 10-15 repetitions per exercise. Do both legs together and then one leg at a time.