

# STAYWELL



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## IPSC Health and Fitness Day

The annual Fun walk, 5k race, and a NEW BIATHALON race, (combined run and bike race), will be held May 15, 2019.

## Common Youth Injuries

Each year in the spring many parents question how to deal with common concerns with spring sports and their children. Many of these concerns are very easy to avoid. As the spring sports season kicks off, some of these tips can help the youth avoid debilitating injuries and pain.

## Chronic Sprains

Years ago a young man came to me because his knee hurt so bad he couldn't walk. The young man had no injury and was very frustrated because he had to sit out of practice, and games. During the exam I couldn't find any tenderness or positive tests. I performed one final test. I took ahold of the patient's knee and ankle and performed the test. The patient grimaced in pain. Assuming the test was positive I asked, "Does that trigger pain in your knee"? The young man's response caught me off guard. He said, "No that killed my ankle"! The tests for the knee were not positive, but the ankle was extremely sore. Enquiring, I discovered that the young man had rolled his ankle six weeks earlier and sought no treatment, but continued to play while favoring the very sore ankle. Playing caused him to turn the foot out and the knee to twist. The forced rotation was too extreme and began to stress the ligaments and tendons around the knee, to the point the young man had to stop playing.

An exam and treatment began for the ankle. After one simple treatment of the ankle, he was able to walk without pain in the knee. For the next couple of days the

ankle was treated and the young man was able to return to full activity without pain.

Failure to properly treat injuries of the foot and ankle affect the entire kinetic chain, feet to the knees, hips, lower back and upper back, and can cause pain in these areas. Repeated ankle sprains are also a common problem that is avoidable. When a ligament is sprained, the neuropathway that affects spatial awareness (proprioception) is also damaged. Proprioception is similar to the instrumentation required to fly a plane in clouds or the dark. Without some simple exercises to correct this loss the ankle will roll easily, when walking, jogging, or turning the head to look another direction. The nerve pathway can no longer keep the foot in its proper stance and chronic ankle sprains are the result. Proper rehab, with a couple of visits can correct the problem. Repeated ankle sprains indicate the need for rehab.



A simple test for this is a single leg balance test while barefoot. Have the person stand on one leg for 10 seconds. Tell the person to close his/her eyes. Many times the person falls. Test the uninjured leg first and the injured leg second. If he/she loses balance, or struggles, the person needs rehab.

## Muscle Imbalance

Years ago a starting varsity basketball player came to see me. He was very concerned, tryouts for basketball would be in two weeks, and he had sore shoulders. He could not lift them above chin level. The moment the player walked into my office it was clear what the problem was. He had severe muscle imbalances. I asked if he had been bench pressing and performing arm strengthening. The young man was shocked I knew that. The player was hunched and imbalanced from performing only these exercises. The young man had become muscle bound. His chest and bicep muscles had become so strong that he couldn't relax and release the tension. For two weeks we worked to stretch the tight muscles and strengthen the weak muscles. He was able to try out and play for the team without issue. If this young man had spent equal

time working his upper back along with the other strengthening, he would not have developed the problem.

When I first began working with the high school soccer teams, I saw a lot of lower back and sacral iliac (SI) joint problems with the girl's team, but not with the boy's team. By the end of the season a vast majority of the varsity girls were having trouble. The problem was, the girls were kicking the ball throughout the season using their right foot. Over time this created a muscle imbalance. The muscles on one side became stronger and tighter and the muscles on the other side became longer and weaker. Eventually this caused compression on the joint and pain developed.

The cure for this had two options:

1. Have the players use their left foot with drills at practice.
2. Develop a warm-up to assist the team to rotate left and right regularly and avoid muscle imbalance.

Once we started this, the only time we saw SI joint problems was when a player collided with another.



This type of injury is common in sports such as weight training, tennis, golf, baseball, soccer, and dance or any sport where one sided rotation can dominate and lead to injuries. To avoid these injuries, encourage kids to become diverse, skilled players and kick

with the opposite foot they usually kick with. Train the kids to swing with the opposite arm that he/she is used to swinging with. Doing this regularly will strengthen and train all muscles equally to avoid becoming muscle bound and eventually stressing the joints.

### Shin Splints

Another common injury is shin splints. Shin splints has many causes, such as wrong shoes, (too stiff or too flexible for foot type), improper form, and muscle imbalances of the calf and shins. The most common cause is overuse too soon.

Bones grow according to stress placed on them. When a new stimulus is provided, cells come in and begin to break down the bone so the new cells can build up the bone and make it stronger than before. This is referred to as splinting. If a heavy work load is placed on the bones during this period it can cause additional breakdown to occur and pain will develop. This process

takes about two weeks, but if the stimulus is greater than the bone or muscles it can lead to stress fractures.

Shin splints are very simple to avoid. When I started with the girls soccer team, almost every young lady developed shin splints to the point they could hardly walk. One girl's legs turned black and



blue from the shin down. To avoid shin splints:

1. Never jog in cleats. Coaches often have kids run laps in cleats. Cleats are not designed for jogging. Cleats are designed for short bursts of work. Jogging in running shoes and changing into cleats to play in a game will often avoid this problem.
2. Don't perform a cold lap jog. The worst thing a coach can do is make a long lap run to warm up. The best warm up is to perform drills and agility activities. Being sport specific does not place stress to the shins like a warm-up lap.
3. Get ready for the season by running before, but not daily. Run every other day to give the bones time to build and repair, rather than continually breaking down.
4. When coaching, recognize this situation, vary the conditioning each day and avoid long repeated runs. Perform ladders, sprints, etc., verses repeated jogging or intense plyometric within the first two weeks. Don't overload the player's bones the first two weeks.
5. Improve running form with better arm swing and avoid jogging on heels.
6. Preventative ice. During the first few weeks of increased activity, ice the legs, feet and ankles to avoid the buildup of inflammation and prevent pain from forming. Soaking in an ice bucket is the best way to do this. It hurts temporarily, but nothing like the debilitating pain that comes from shin splints, arch pain, ankle pain, or knee pain, that can form during the first few weeks of unconditioned training.

If any employees and his/her family members need help, or if there are questions about the injuries in this newsletter or any other sport conditions, please feel free to contact IPSC's sports medicine specialist, Brian Coles, a licensed athletic trainer, who specializes in these conditions.

