

Overuse in Overdrive: Don't overdo it!

OSF HealthCare Newsroom

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PRINT SCRIPT

Not all sports injuries are directly related to contact or force. Many injuries, like overuse, happen over time and are often due to not being properly prepared.

Overuse injuries are repetitive microtraumas from using the same parts of the body, often while overtraining. Microtrauma can be identified as smaller tears in muscle fibers, stress on a tendon, or bone bruising. The most common early symptoms of overuse injuries are pain and inflammation.

“Stretch and make sure you’re ramping up into activities slowly,” Keith Corpus, MD, orthopedic sports medicine surgeon with OSF HealthCare and Great Plains Orthopaedics says. “When I’m talking to my post-operation patients or patients with overuse injuries, we have to focus on building back slowly.”

Dr. Corpus says overuse injuries worsen exponentially over time, and if you don’t allow yourself to rest, you can end up with long-lasting health problems.

“A lot of the injuries turn into chronic problems that are hard to get better. A lot of them are not surgical. For example, bad tennis elbow. 99% of tennis elbow gets better without surgery,” Dr. Corpus explains. “Anytime you have a chronic patellar tendinitis or quad tendinitis, if that tendon is getting weakened in some way, it leads it to increased risk of rupture. If you let these things go unresolved, they can build to bigger and bigger problems.”

One common contributor to overuse injuries that Dr. Corpus sees in patients is from weightlifting. He says minor soreness from lifting weights is not something to be worried about but allowing your muscles to heal *after* a workout is paramount.

“You shouldn’t go back to that activity until the soreness you developed from the first go-around has resolved. If you keep going at it, it’s just going to build inflammation in that muscle group and you’re going to get into the cycle that’s hard to break out of,” Dr. Corpus says. “Certainly, go back to it, go lower weight, lower reps than you think you should, and go fewer sets than you think you should.”

Dr. Corpus says if you are sore the next day, take an anti-inflammatory pill, apply ice to the soreness, stretch, and do a different physical activity to keep your muscles working.

“Go for a walk or light jog. Keep using the muscles, just in a different way. If you want to go back and do lifting again on that same muscle group two days later and you’re still sore, skip that day. Go to something else and don’t go back to that muscle group until it’s resolved.”

If you’ve experienced an overuse injury that won’t go away, a visit with a sports medicine doctor may be needed. You can find resources and providers here: <https://www.greatplainsortho.org/>

What are the most common types of overuse injuries?

Type of overuse injury	Symptoms	Possible cause
Jumper's knee (patellar tendonitis)	Tenderness right below the kneecap on the tendon	The patellar tendon in the knee joint is repeatedly pulled on, causing inflammation and pain, especially during jumping activities.
Little Leaguers' elbow or shoulder	Pain in the elbow or shoulder area, especially during activity	Repetitive overhead throwing maneuvers done inefficiently that cause damage and inflammation to the growth plates of the bones in the arm (or as a result of a fracture).
Osteochondritis dissecans	Joint pain and swelling.	A piece of cartilage in the knee, elbow, or ankle joint that separates from the joint surface. Theories suggest that it may run in families or be caused by a metabolic problem.
Sever's disease	Heel pain with limping, especially during running and jumping activities	Repetitive running or jumping activities causes the Achilles tendon to pull on the growth plate of the heel bone.
Shin splints	Pain and tenderness over the shin area	Excessive running, running on hard surfaces like concrete and incorrect shoe wear can cause shin splints.
Sinding-Larsen-Johansson disease	Knee pain, especially after jumping activities	This condition is caused by excessive traction from the patella tendon on the lower pole of the kneecap.
Spondylolisthesis	Back pain	This condition is caused by overloading the lower back in extension. X-rays show that a part of one vertebra in the lower back slips forward on the vertebrae below it. It's commonly seen in football linemen, gymnasts, and ice skaters.
Spondylolysis	Back pain	This condition is caused by overloading the lower back in extension. It's commonly seen in football linemen, gymnasts, and ice skaters. A stress fracture of one of the vertebrae is seen on X-ray.

Treatment of an overuse injury

If your child is overdoing it, the goal of treatment is to control the pain, promote healing, prevent complications, and restore normal use of the injured area.

Initial treatment for overuse injuries includes R.I.C.E. (rest, ice, compression, and elevation).

Talk with your child's healthcare provider if the injured area has a prolonged, visible deformity. Or if severe pain keeps your child from using their arm, leg, wrist, ankle, foot, or knee.

Other treatment choices may include:

- Medicine
- Activity restrictions
- Splint or cast
- Crutches or wheelchair
- Physical therapy (to manage pain, identify impairments that may have led to injury and treat to reduce complications)
- Surgery. Your child may need surgery if the injury happens again, they have pain that doesn't get better, or a muscle, tendon, or ligament is badly torn.

Dr. Corpus says he and his team see Little League Elbow or Little League Shoulder often. The repetitive, overhead throwing can lead to soreness, fatigue, and loss of control. The take home message is to rest.

“When we have kids come in with little league shoulder, the main treatment is shutting them down from throwing a baseball. They are able to live their life, but we have them stop throwing for usually at least a month. Then once everything has calmed down, we start a very gentle and slow return to a throwing program and ease back into things. At the same time, we also focus on mobility, strengthening, and mechanics of the throwing motion to make sure we aren't putting undo stress across the shoulder,” Dr. Corpus says.