

Visited 04/17/2020

**Coronavirus (COVID-19)**

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MENU

Health

<https://www.hopkinsmedicine.org/health> Overuse Injuries

[Sports Injuries \(https://www.hopkinsmedicine.org/health/sports-injuries\)](https://www.hopkinsmedicine.org/health/sports-injuries)

An increasing number of boys and girls are playing recreational and organized sports. As a result, there is a rise in the number of overuse injuries seen among children and adolescents. The majority of sports and overuse injuries are due to minor trauma involving soft tissue injuries that affect the bone, muscles, ligaments, and/or tendons.

What are the most common types of overuse injuries?

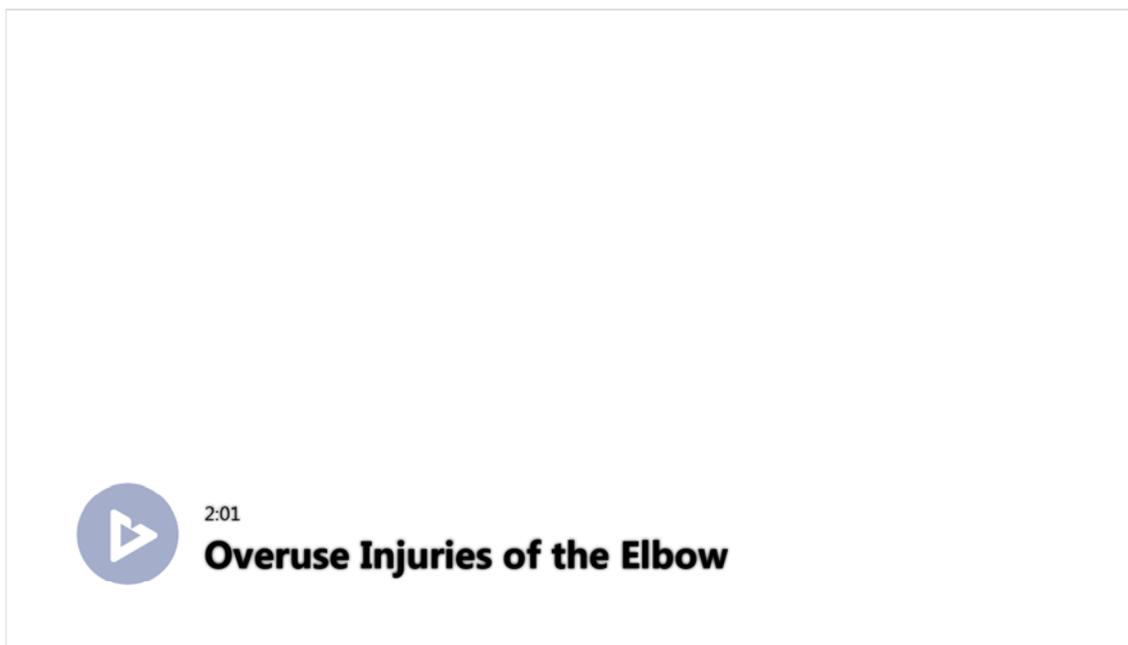
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Type of overuse injury	Symptoms	Possible cause
Jumper's knee (patellar tendonitis)	Tenderness right below the knee or the upper shin area	The patellar tendon in the knee joint is repeatedly pulled on, causing inflammation and pain, especially during jumping activities.
Little Leaguers' elbow or shoulder	Pain in the elbow or shoulder area, especially after activity	Repetitive overhead throwing maneuvers that cause damage and inflammation to the growth plates of the bones in the arm (or as a result of a fracture).
Osteochondritis dissecans	Knee pain and swelling. This condition can also cause elbow pain similar to Little Leaguers' elbow.	Joint pain and swelling, most commonly occurring in the knee, elbow and ankle. Theories suggest that it may run in families or be caused by a metabolic problem.
Sever's disease	Heel pain with limping, especially after running activities	Repetitive running or jumping activities causes the Achilles tendon to pull on the heel bone.
Shin splints	Pain and tenderness over the shin area	Excessive running, running on hard surfaces (concrete), and improper shoe wear often cause shin splints.
Sinding-Larsen-Johansson disease	Knee pain, especially after jumping activities	This disease is caused by a fracture of the kneecap due to repetitive extension on the patellar tendon in the knee (the tendon pulls away from the bone).
Spondylolisthesis	Back pain	This condition is caused by excessive flexion and extension of the low back. X-rays show that a part of 1 vertebra in the low back slips forward on the vertebrae below it. It is commonly seen in football linemen, gymnasts, and ice skaters.
Spondylolysis	Back pain	This condition is caused by excessive flexion and extension of the lower back. It is commonly seen in football linemen, gymnasts, and ice skaters. A stress fracture of 1 of the vertebrae is seen on X-ray.

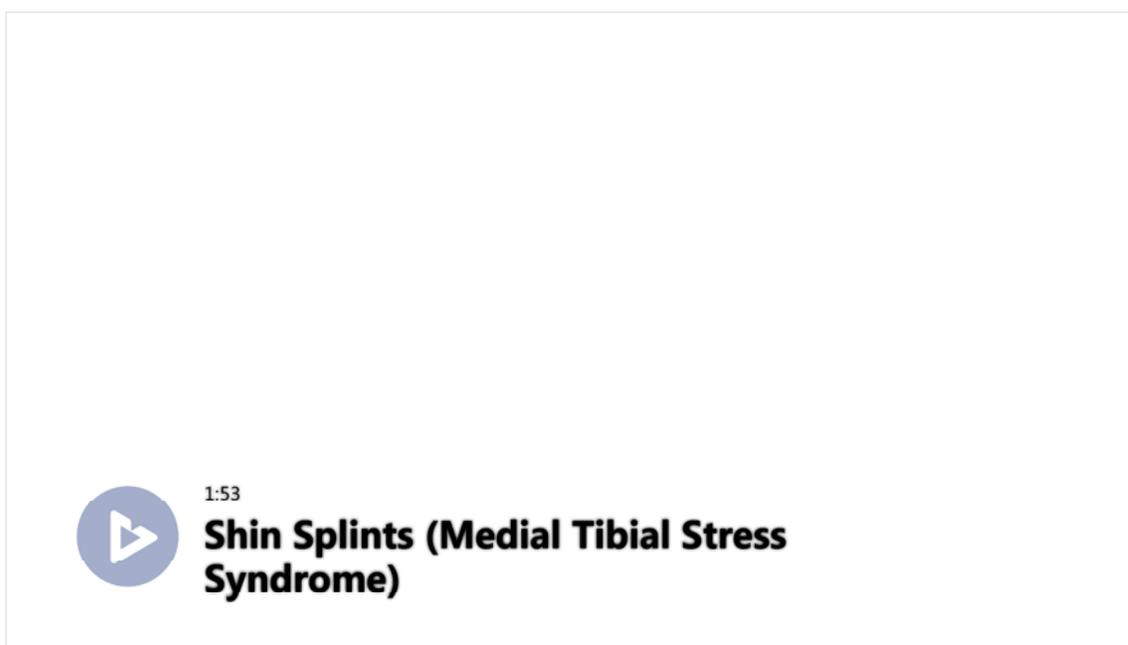
Overuse injuries can also lead to stress fractures. Stress fractures are weak spots or small cracks in the bone caused by continuous overuse. Stress fractures often occur in the foot after training for basketball, running, and other sports. There usually is no swelling, but pain and tenderness often increase during movement.

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Elbow



Shin Splints



Spondylolisthesis

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1:55

Spondylolisthesis

Spondylosis



2:17

Spondylosis

Treatment of an overuse injury

Specific treatment for an overuse injury will be determined by your child's doctor based on:

- Your child's age, overall health, and medical history

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- Extent of the condition
- Type of condition
- Your child's tolerance for specific medications, procedures, or therapies
- Expectations for the course of the condition
- Your opinion or preference

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).

Be sure to consult your child's doctor if there is a prolonged, visible deformity of the affected area, or if severe pain prevents use of the arm, leg, wrist, ankle, or knee.

Other treatment options may include:

- Medications
- Activity restrictions
- Splint or cast
- Crutches or wheelchair
- Physical therapy (to stretch and strengthen the injured muscles, ligaments, and tendons)
- Surgery (especially if the injury is reoccurring, there is persistent pain, or if a muscle, tendon, or ligament is badly torn)

Long-term outlook for children with overuse injuries

Overuse injuries heal quite quickly in children. It is important that the child adhere to the activity restrictions and/or stretching and strengthening rehabilitation programs to prevent reinjury.

Most sports injuries are due to either traumatic injury or overuse of muscles or joints. Many sports injuries can

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be prevented with proper conditioning and training, wearing appropriate protective gear, and using proper equipment.

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