CONDITION

Sprains

A sprain is an injury that stretches or tears ligaments around a joint.

WHAT IT IS
Stretched or torn ligament around a joint

BODY SYSTEM
Joints and connective tissues

MAIN SYMPTOMS
Pain, swelling, bruising, reduced movement

WHAT CAUSES IT
Joint twisting, impact, or overextension

HOW IT IS DIAGNOSED
Physical examination; imaging when fracture or severe injury suspected

MAIN TREATMENT
Protection, gradual movement, pain relief, and rehabilitation

CAN IT BE CURED?
Yes - most ligaments heal with rehabilitation

IS IT AN EMERGENCY?
Sometimes - deformity, numbness, or a cold pale limb

LONG-TERM OUTLOOK
Most recover, but severe sprains may cause lasting instability

Overview

A sprain happens when a ligament is stretched beyond its normal range or torn. Ligaments are strong bands of tissue that connect bones and help keep joints stable.

Sprains can affect any joint. The ankle is a common site, but sprains also occur in the knee, wrist, thumb, and other joints. They often happen when a joint twists, bends, or receives an impact.

A sprain is different from a strain. A sprain affects a ligament, while a strain affects a muscle or tendon. Tendons connect muscles to bones. Both injuries can cause similar pain and swelling.

Sprains range from mild stretching to a complete ligament tear. A mild sprain may improve with simple care and gradual movement. A severe sprain can make the joint unstable and may need a brace, supervised rehabilitation, or occasionally surgery.

It is important not to assume every painful, swollen joint is a sprain. Fractures, dislocations, tendon injuries, and cartilage damage can cause similar symptoms.

Symptoms

Symptoms usually begin during or soon after an injury. They may include:

Some people hear or feel a pop when the injury happens. This does not always mean that a ligament has completely torn, but it can occur with a more serious injury.

Symptoms do not always show how severe the damage is. A fracture may still allow some movement, while a sprain can be very painful. Bruising may also appear hours or days later as blood from damaged small vessels moves under the skin.

Clinicians sometimes describe sprains by grade. Grade 1 generally means mild stretching with small ligament injuries. Grade 2 means a partial tear. Grade 3 means a complete tear, often with significant instability. These grades do not predict recovery perfectly, and not every sprain needs formal grading.

- Pain around the joint
- Swelling and tenderness
- Bruising
- Stiffness or reduced movement
- Difficulty using the joint or putting weight on it
- A feeling that the joint is weak or may give way

Causes and risk factors

A sprain occurs when force pushes a joint beyond the range its ligaments can safely control. This may happen during a fall, sudden turn, awkward landing, collision, or direct impact.

Examples include an ankle rolling inward, a thumb bending backward, or a knee twisting while the foot stays planted.

Factors that can make a sprain more likely include:

Some people naturally have more flexible joints. This may affect stability, although flexibility alone does not mean that a sprain will occur.

Sprains are accidental injuries rather than infections or inherited diseases. However, inherited conditions that make connective tissue unusually flexible may increase joint injuries in some

people.

- A previous sprain, especially if strength and balance have not fully recovered
- Sports involving jumping, rapid turns, contact, or uneven ground
- Poorly fitting or unsuitable footwear
- Muscle weakness, fatigue, or reduced balance
- Uneven, slippery, or unstable surfaces
- Returning to activity before an earlier injury has healed

Diagnosis

A healthcare professional will ask how the injury happened, where it hurts, and whether you can use the joint. They will examine swelling, bruising, tenderness, movement, and stability. They may also check circulation and sensation beyond the injured area.

An X-ray does not show most ligament injuries. It may be used to look for a broken bone when there is marked tenderness over a bone, difficulty bearing weight, deformity, or another reason to suspect a fracture.

Ultrasound or magnetic resonance imaging, known as MRI, can show ligaments and other soft tissues. These tests are not routinely needed for every sprain. They may be considered when the diagnosis is unclear, symptoms continue, the joint remains unstable, or a severe ligament or tendon injury is suspected.

Certain injuries need special assessment. For example, pain above the ankle may suggest a "high ankle sprain," involving ligaments between the lower leg bones. These injuries can take longer to heal than a typical ankle sprain.

Treatment and management

Early care aims to protect the joint, reduce discomfort, and maintain safe movement.

For the first few days, it may help to reduce activities that increase pain. A brace, splint, supportive shoe, or crutches may be useful for some injuries. The right support depends on the joint and the severity of the sprain.

A wrapped cold pack may provide short-term pain relief. Do not place ice directly on the skin, and stop if the skin becomes very numb or painful. Compression with an elastic bandage can help control swelling, but it should not cause tingling, numbness, increasing pain, or a change in

skin colour. Raising the injured area may also reduce swelling.

Complete rest for a long period can lead to stiffness and weakness. When it is safe, gradual movement and increasing use of the joint usually support recovery. For a leg injury, this may involve slowly returning to weight-bearing. Pain can guide activity, but severe or steadily increasing pain is a reason to stop and seek advice.

Pain relief may include paracetamol, also called acetaminophen, or an anti-inflammatory medicine such as ibuprofen. These medicines are not suitable for everyone. Follow the product instructions and ask a pharmacist or clinician if you have other health conditions, take other medicines, are pregnant, or are unsure what is safe.

Rehabilitation may include exercises for movement, strength, balance, and joint control. A physiotherapist can guide this process after a serious injury, repeated sprains, or ongoing instability.

Surgery is uncommon for straightforward sprains. It may be considered for certain complete tears, injuries involving several structures, or persistent instability that has not improved with rehabilitation.

Complications

Most sprains heal without major complications. Possible longer-term problems include:

Returning to demanding activity before strength and balance recover can increase the chance of another sprain. Persistent symptoms may also mean that the original injury involved more than a ligament.

Pressure from severe swelling or a bandage that is too tight can affect nerves or circulation. Increasing numbness, weakness, or a cold or pale limb needs prompt assessment.

- Ongoing pain, swelling, or stiffness
- Reduced strength or movement
- Repeated sprains
- A joint that feels unstable or gives way
- Damage to nearby cartilage, tendons, or bone
- Earlier wear of the joint after a severe injury

Prevention

Not every sprain can be prevented. Falls, collisions, and unexpected changes in direction can happen even with good preparation.

You may lower your risk by building strength and balance, increasing activity gradually, and using footwear suited to the activity and surface. Warming up can prepare your muscles and joints for faster or more demanding movement.

After a previous sprain, completing rehabilitation is especially important. Balance and joint-control exercises may reduce repeat ankle sprains. Some people may benefit from taping or a brace during higher-risk activity, based on advice from a physiotherapist or another qualified professional.

Keeping walkways clear and using appropriate lighting can help reduce falls at home. During sport, follow the rules and replace damaged protective equipment or footwear.

Living with it and what to expect

Mild sprains often improve steadily over days to several weeks. More serious sprains may take several weeks or months to recover. Swelling can last after pain begins to settle, especially around the ankle.

Recovery is not always a straight line. The joint may feel more sore or swollen after activity, particularly early on. The overall pattern should gradually improve rather than worsen.

A return to work, exercise, or sport should be based on function as well as time. The joint should have enough movement, strength, balance, and stability for the activity. Returning in stages is usually safer than immediately resuming full intensity.

Most people return to their usual activities. Severe ligament injuries may leave some stiffness or instability, and repeated sprains can become a longer-term problem. Rehabilitation, supportive equipment, or further assessment may help if the joint continues to give way.

Arrange routine follow-up if progress has stopped, swelling keeps returning, or pain and instability interfere with everyday activities.

When to get medical help

Call emergency services or go to an emergency department if:

Seek prompt medical assessment if you cannot put weight on the limb, cannot use the joint, or have marked tenderness directly over a bone. You should also be assessed promptly after a forceful injury, if you heard a crack, or if the joint looks out of place.

Get medical advice if pain or swelling is getting worse rather than better, or if bruising is extensive. Redness, unusual warmth, fever, or drainage from a wound also needs assessment because these features are not typical of an uncomplicated sprain.

Routine follow-up is appropriate when symptoms are not clearly improving after several days, recovery takes longer than expected, or the joint remains stiff, weak, or unstable. Repeated sprains also deserve assessment because targeted rehabilitation may reduce further injuries.

- The joint or limb is visibly deformed
- A bone is visible or there is a deep open wound
- The area beyond the injury is cold, pale, blue, or numb
- You cannot move the fingers or toes beyond the injury
- Severe swelling or pain is increasing rapidly after a major injury

Common questions

How can I tell if it is a sprain or a broken bone?

Symptoms can overlap. Both can cause pain, swelling, bruising, and difficulty using the joint. Deformity, severe tenderness directly over a bone, or being unable to bear weight can increase concern about a fracture, but none of these signs is conclusive by itself. An examination and sometimes an X-ray are needed.

Should I keep a sprain completely still?

Usually not for longer than necessary. Brief protection may reduce pain and prevent further injury, especially with a severe sprain. However, prolonged immobility can cause stiffness and weakness. Gentle movement and gradual use are often introduced as symptoms allow, unless you have been told to keep the joint immobilised.

Is heat or ice better for a sprain?

A cold pack may reduce pain during the early period after injury. Heat may feel soothing later, particularly for stiffness, but it does not repair the ligament. Protect your skin with either treatment and avoid extreme temperatures. Neither heat nor ice should replace assessment when a serious injury is possible.

How long does a sprain take to heal?

A mild sprain may settle within a few weeks. A partial or complete ligament tear can take much longer, sometimes several months. The joint involved, the extent of injury, rehabilitation, previous sprains, and the demands of your activities all affect recovery.

Can I walk on a sprained ankle?

Some people can put weight on a mild ankle sprain as comfort allows, sometimes with support. Do not force walking through severe pain. If you cannot take steps, have strong tenderness over a bone, or the ankle appears deformed, seek prompt assessment.

Why does my joint still feel weak after the pain is gone?

Ligaments help the brain sense joint position as well as provide physical support. After a sprain, strength, balance, and joint control may recover more slowly than pain. Rehabilitation exercises can help. Ongoing giving way or repeated sprains should be assessed.

Sources

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