PROCEDURE

Wrapping a sprained ankle

Wrapping a sprained ankle uses an elastic bandage to provide compression, limit swelling, and add light support.

PURPOSE
Reduce swelling and provide light ankle support

PROCEDURE TYPE
Therapeutic, bedside application of an elastic compression bandage

WHERE IT IS DONE
Outpatient clinic, at the bedside, or at home

ANAESTHESIA
None

HOW LONG IT TAKES
About 3 to 5 minutes

PREPARATION
No fasting; remove footwear and check skin and circulation

RECOVERY
Same day; drive only when you can control the vehicle safely

MAIN RISKS
Excess pressure, reduced circulation, skin irritation, delayed fracture assessment

RESULTS
Support is immediate; recovery is assessed over days to weeks

Overview

Wrapping a sprained ankle means applying an elastic compression bandage around your foot and ankle. The bandage may help limit swelling and provide light support while injured ligaments heal. Ligaments are strong bands of tissue that connect bones.

A wrap does not make the ankle rigid, and it does not repair a torn ligament. It is usually one part of treatment alongside protection, elevation, gradual movement, and rehabilitation exercises.

The wrap should feel firm but comfortable. It should not cause increasing pain, tingling, numbness, or changes in the colour or temperature of your foot.

An ankle injury is not always a sprain. A fracture, dislocation, tendon injury, or high ankle sprain

may require different treatment. An assessment may be needed before you rely on a simple wrap.

Why the procedure is performed

An elastic wrap may be used after a mild or moderate ankle sprain to:

Compression can help manage swelling, but evidence that a bandage alone speeds ligament healing is limited. Regaining movement, strength, and balance is also important.

- Limit swelling during the first few days
- Provide light support and a sense of stability
- Make it more comfortable to begin gentle movement
- Protect the ankle while you arrange further assessment or rehabilitation

Who should and should not have it

Wrapping may be reasonable when a healthcare professional has assessed the injury as an ankle sprain and advised compression. It may also be used as short-term first aid while you seek care, provided the ankle is not deformed and circulation remains normal.

A simple elastic wrap should not replace medical assessment when you cannot take steps, have marked tenderness directly over a bone, or heard a crack during the injury. These findings can occur with a fracture, although they do not prove that one is present.

Wrapping may need to be avoided, delayed, or modified if you have:

A clinician may recommend a brace, walking boot, splint, or cast instead if more support or immobilisation is needed.

- An obvious deformity, open wound, or bone showing through the skin
- A foot that is cold, pale, blue, numb, or unusually weak
- Known poor arterial circulation in the leg or foot
- Reduced sensation, such as from some forms of neuropathy
- Significant skin damage, infection, or an allergy to the bandage material
- Severe or rapidly worsening pain or swelling

How to prepare

Follow the treating facility's own instructions first, because they take priority over general information.

No fasting, sedation, or medication changes are normally needed. Remove your shoe, sock, anklet, and toe jewellery. Sit or lie somewhere stable with your ankle supported.

Check the skin for wounds, blisters, rash, or marked bruising. Look at the colour of your foot and note whether it feels warm and whether you can feel touch normally. If circulation or sensation already seems abnormal, seek medical advice instead of applying firm compression.

Use a clean elastic bandage wide enough to cover the ankle without forming narrow, tight bands. Keep the foot in a neutral position, roughly at a right angle to the lower leg, if this is comfortable.

What happens during the procedure

The bandage is usually started around the ball of the foot, with the toes left visible. Each turn overlaps about half of the previous layer so that pressure is spread evenly.

The bandage then crosses over the top of the foot, passes around the ankle, and continues in a figure-eight pattern. This pattern covers both the foot and ankle without concentrating pressure in one place. The wrap usually finishes several centimetres above the ankle.

The end is secured with its fastener or tape. Metal clips should not press into your skin.

The wrap should be snug, not tight. You should still be able to move your toes. After it is applied, check that your toes remain their normal colour and temperature and that you have no new tingling or numbness.

Bandages can loosen as swelling falls. They can also become too tight if swelling increases. Reapply the wrap if it bunches, slips, or creates a tight ridge.

Recovery and what to expect afterward

Some aching is expected from the sprain, but wrapping should not make the pain worse. Remove or loosen the bandage promptly if pain increases or if you develop tingling, numbness, coldness, or a colour change in the foot.

You can eat and drink normally. Wrapping does not involve anaesthesia or sedation.

During activity, protect the ankle and increase weight-bearing gradually. If walking causes sharp pain or marked limping, reduce the activity and seek advice about crutches, a brace, or

further assessment. Elevating the ankle when resting may help swelling. Gentle ankle movement is often encouraged once it is comfortable, followed by strength and balance exercises.

Unless your healthcare team says otherwise, an elastic compression bandage is commonly removed for sleep and reapplied in the morning. Instructions may differ for a fitted brace, splint, or boot.

Wrapping itself does not prevent driving, but the injury may. Do not drive until you can walk comfortably enough to enter and leave the vehicle and can operate all controls, including an emergency stop, without hesitation or significant pain. Check any instructions from your insurer and local licensing authority.

Your return to work depends on walking, standing, lifting, climbing, and driving demands. Desk work may be possible sooner than physical work. Temporary changes to duties may be helpful.

Risks and possible complications

Most problems result from a wrap being too tight, uneven, or left unchecked.

Possible risks include:

Another risk is assuming that every ankle injury is a sprain. A bandage can make the ankle feel supported while a fracture or more serious ligament injury remains untreated.

Check the wrap regularly, particularly as swelling changes. Keep it clean and dry. Do not place objects under it to scratch the skin.

- Reduced circulation to the foot
- Pressure-related skin damage or blisters
- Numbness or tingling from pressure on a nerve
- Skin irritation from the bandage or adhesive
- Increased swelling below a tight section
- Stiffness if wrapping replaces appropriate movement and rehabilitation

Results and follow up

You should notice the support immediately. Swelling may still increase during the first day or two after an injury, so the bandage may need adjustment.

There is no test result from wrapping. Progress is judged by changes in pain, swelling,

movement, walking, and ankle stability. Many sprains improve gradually, but the time needed depends on the extent and location of the ligament injury.

Routine follow-up may involve checking your walking, ankle movement, strength, and balance. A physiotherapist may provide exercises and guide your return to sport or physical work.

If the ankle is not steadily improving, keeps giving way, or remains difficult to walk on, arrange a review. Further examination or imaging may be needed.

Alternatives

You do not have to use an elastic bandage in every case. Alternatives include:

The best option reflects the injury, your comfort, the amount of support needed, and whether a fracture or unstable injury has been excluded.

- No wrap: Elevation, protection, and gradual movement avoid pressure and skin problems, but provide less compression and support.
- Ankle brace: A lace-up or semi-rigid brace gives more consistent support and is easier to remove and reapply, but can be bulkier and more expensive.
- Sports tape: Taping can provide targeted support, but it requires skill, loses tension, and may irritate the skin.
- Walking boot: A boot limits movement more effectively for selected severe sprains, but it is bulky and may contribute to stiffness if used longer than needed.
- Splint or cast: These provide stronger immobilisation for some fractures or severe injuries, but restrict movement and require clinical fitting and follow-up.
- Rehabilitation without external support: Exercise addresses movement, strength, and balance, but may not control early swelling or provide the same sense of stability.

When to call your healthcare team

Remove the wrap and seek emergency care if your foot remains cold, pale, blue, or numb after the bandage is removed or loosened. Also seek emergency help for an obvious deformity, bone through the skin, uncontrolled bleeding, or severe and rapidly worsening pain.

Contact a healthcare professional promptly if:

Routine follow-up is appropriate for advice about exercises, return to activity, or changing from a wrap to a brace. These concerns are different from the urgent circulation and deformity

warning signs above.

- You cannot put weight on the foot or take several steps
- Pain is focused directly over an ankle or foot bone
- Swelling or bruising is extensive or continues to worsen
- The ankle repeatedly gives way
- A wound becomes red, hot, swollen, or starts draining
- You have reduced sensation or known circulation problems
- Pain and function are not steadily improving

Common questions

Will I be asleep?

No. Wrapping an ankle does not require anaesthesia or sedation. You remain awake and can tell the person applying it if the pressure feels uncomfortable.

Can I drive home?

Only if the injury allows you to control the vehicle safely. Do not drive if pain, swelling, a brace, or reduced movement prevents a quick and forceful emergency stop.

How painful is it?

Applying the wrap should not be painful, although moving an injured ankle may be uncomfortable. Increasing pain after wrapping usually means the bandage needs to be loosened or removed.

When will I know if it worked?

Support is noticeable immediately. Its effect on swelling and comfort becomes clearer over the next several hours. Improvement in the sprain itself is assessed over days to weeks.

How long should I keep it wrapped?

Compression is generally used during the early period when swelling is most troublesome. The exact duration should reflect your injury and the instructions you were given. Reassess the wrap whenever swelling changes.

Can I sleep with it on?

Unless specifically instructed otherwise, elastic bandages are commonly removed for sleep. A fitted brace, splint, or boot may have different instructions.

Sources

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- Martin RL, Davenport TE, Fraser JJ, et al. Ankle Stability and Movement Coordination Impairments: Lateral Ankle Ligament Sprains Revision 2021 . Journal of Orthopaedic & Sports Physical Therapy . 2021;51(4):CPG1-CPG80.
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- American College of Radiology. ACR Appropriateness Criteria: Acute Trauma to the Ankle . ACR.