

THE BULLET-PROOF ANKLE TAPE RECIPE

An overview of the facts about recurrent ankle sprains

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Part 3

How many of you feel like you have weak ankles and need extra support to orienteer without being anxious about spraining your ankle? How many of us actually have the luxury of a personal trainer or physical therapist following our orienteering events to tape ankles just before the race? Truth is most of us end up taping our own ankles. Where did we learn? Usually by looking over our shoulder at the guy over there: "let's see how he does it"? And just like that, we have become experts in ankle taping. At least we think!

I have had the luxury to work with university football teams for quite a few years and the taping technique I will demonstrate is the same we used for football players. Why such a complicated and heavy-duty technique? Because the risks in orienteering are extremely high and the speed usually fast, giving weak ankles only very little chance of saving themselves.

The purpose

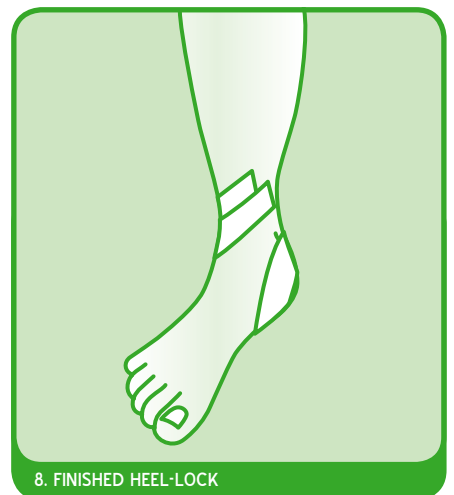
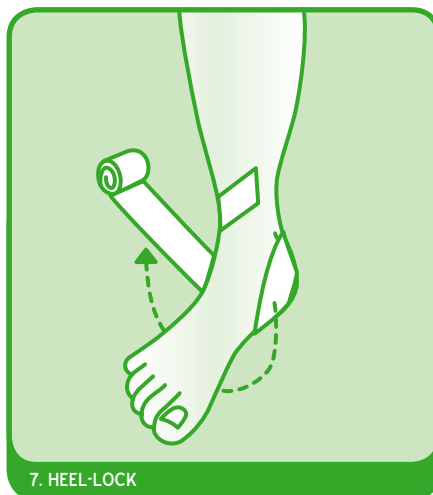
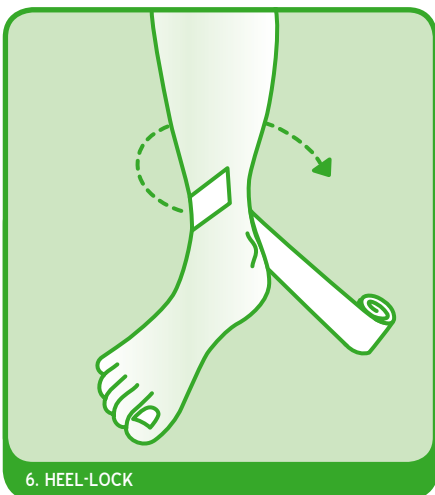
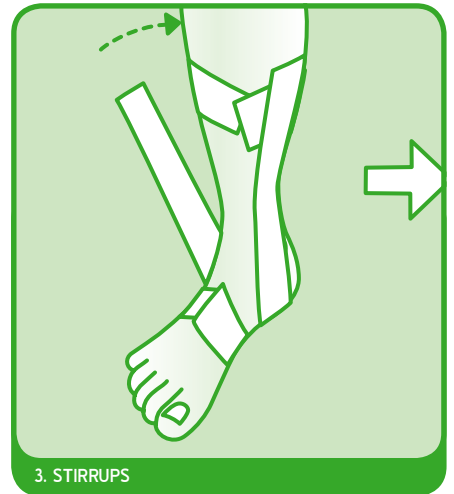
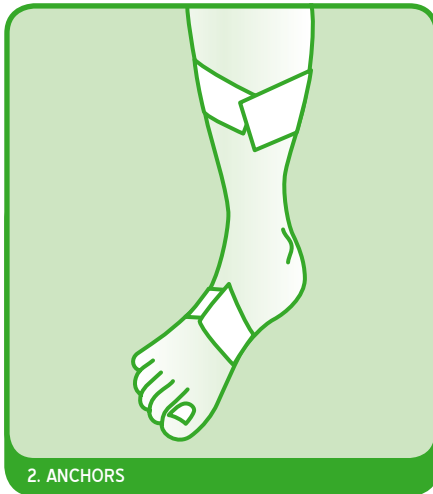
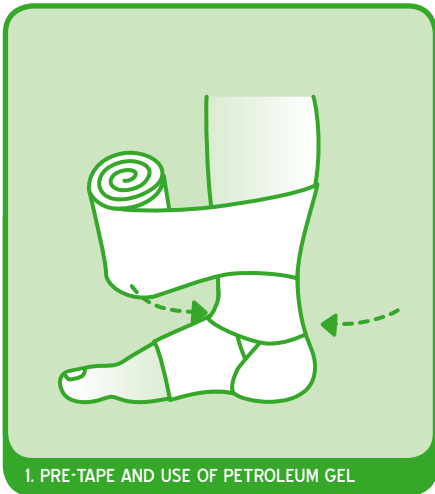
Ankles are very vulnerable, especially when running on uneven ground like in the forest. Ankle sprains are extremely common and most of them tend to be recurrent (to reduce the chances of recurrent sprains, refer to Orienteering Today number???) . If your ankle has lost the quick reactions coming from ligaments (because the ligament is either completely ruptured or very loose), then you become prone to sprains and you have to provide extra support to your ankles. Otherwise you will keep spraining over and over again, and eventually cause some irreversible damage to the joint itself (cartilage, capsule, bone, nerve...). This could potentially lead to what is called OA (osteoarthritis).

But there is hope: you can support your ankle with a special brace (like the Active Ankleá or the ASOá), or with a high top shoe (hiking boots, high top orienteering shoes), or you can simply choose to tape. If you choose to tape, or are still undecided, here are a few things you should know about it beforehand:

- If done properly, a tape job is by far the most effective way to protect your ankle from a sprain (other than watching TV of course).
- A tape job is generally lighter than a brace (may be a decisive factor for an important race).
- To be effective, the entire tape, or at least most of it, has to be directly on the skin (pre-tape like Prowrapá protects your skin, but you still have to stick part of the tape directly on your skin).
- Because of the above, tape tends to damage skin quite a bit, especially during multiday events where your skin does not have enough time to recover (breathing and regenerating).
- Tape does not have much give to it, so it can cut you or give you blisters where the tendons take a lot of expansion during running (Achille's tendon and tibialis anterior mainly). Again, this becomes an even more important problem during multiday events.
- If not done properly, a tape job is as effective as trying to solve an algebra equation by chewing bubble gum!

So how to?

Important note: this is the recipe for the most common ankle sprain, the anterior talofibular ligament (ATFL) (the outside of your ankle). If you have suffered from an injury to the inside of your ankle, you can still use



this tape, but you will have to reverse all the steps that involve a specific side (i.e. outside and inside).

1. First you have to prepare the skin. If you have sensitive skin, use a pre-tape with a sticky spray (figure 1). If not, tape directly on the skin (may I also recommend that you shave your leg beforehand?!). You also want to protect your tendons (Achille's and Tibialis Anterior – see pointing arrows on figure 1) from excessive friction and pressure by using a little bit of petroleum gel (directly on the skin or on a mini pad). Then you can start taping.
2. Put the anchors in place (figure 2). If you are using a pre-tape, make sure that those anchors are directly on the skin, otherwise your tape will not hold. The top anchor should be just below the calf (muscles expand a lot during exercise, so you want to avoid constricting them with the tape), and the bottom one around the middle of your foot (for those of you with a base in anatomy, you want the base of the fifth metatarsal bone as an anchor). Anchors do not have to be tight; simply lay them down on the skin.
3. Now the stirrups. Those will help holding your heel in place and prevent you from rolling over. Start from the top anchor on the inside of your leg and stick it all the way down to your heel. Go under the heel and then pull real hard and stick the top part to the top anchor on the outside of your leg (figure 3).
4. Place another anchor at the top, just below the very first one, but overlap the very first one by about half the width of the tape. (figure 4)
5. Place another stirrup, but make sure you slightly overlap the first one, as 2 strips of tape put exactly one on top of each other are not any more effective than just one.
6. Repeat step 4. If your ankles are really weak, repeat steps 3 and then 4 again for extra support. If not, then move on the step 7. (figure 5 – steps 3 and 4 for weak ankles)
7. Now the heel lock. This is definitely the most complicated step of the entire process, but also the most important one, so hang on! Start about 1 ½ to 2 inches above the ankle bone on the inside of your leg. Go down on a diagonal towards the outside ankle bone, but stay above it (figure 6 – note that in order to make the illustration a little easier to follow, the previous bands have been removed). Wrap around the heel (you will be right on the Achille's tendon at this point) and come out on the inside of the heel (figure 7). Then go under the heel, come out on the outside of

the leg, pull real hard and stick to about mid length of the already existing tape (figure 8). You've done it!

8. The reverse heel lock. As if 7 was not complicated enough, now you have to do another heel lock, but you will completely reverse it, meaning that you will start from the outside this time (figure 9). Follow the exact sequence, but interchange inside and outside. Make sure you pull hard at the end before you stick it.

9. Do another heel lock, as in step 7.

10. Start closing the tape by doing anchors all the way down to the bottom anchor (figure 10). Make sure you overlap all of them by a half width and that you keep them nice and loose. Once again, anchors are only there to support the stirrups and heel locks. Making them too tight will cut your circulation and give you foot cramps.

11. Get up and give it a trial.

Things to remember

- A tape job will loosen up in about 10-20 minutes. So make sure that you make it tight enough so that it is perfect after it has loosened up. Also allow yourself enough time to try out the tape and make any needed alterations before your start time.
- Kept overnight, a tape will decrease your circulation and slow down your recovery from the race. It will also prevent your skin from breathing and regenerating. So ideally, remove it shortly after the race and make a new one the next day.
- When closing it, make sure you do not leave any open spots; those are potential blister sites.
- Avoid folds in the tape and in the pre-tape as much as possible as they also are potential blister sites.
- Plan on using ¾ of a roll to a full roll of tape for each tape job. Preferably use the 1 ¼ inch sports tape.
- If you have any blisters, make sure you cover them up before taping; otherwise, when removing the tape, you will also remove the skin – ouch!
- You can learn how to do a really good job, but nothing replaces a professional!!

Have fun!

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