

ask the SPIN DOCTOR

John from Vancouver Island writes, “As a paraplegic, I always thought my lower legs looked pretty good in shorts. They never seemed to get really skinny. Then I got a pretty bad pressure sore and had to spend about a week in bed. During that time, I noticed my calves didn’t seem to be as ‘full’ as they usually are. That’s when I realized that normally, when I’m in my chair, my legs are actually swollen. I’m thinking this can’t be a good thing!” To answer this issue’s question, we scoured the internet and found some excellent answers from multiple credible sources. However, please keep in mind that this should in no way be considered definitive medical advice; as always, please don’t delay visiting your physician with any doubts about your health-related issues.



You’re right—it’s not a good thing. What you’re probably experiencing on a daily basis is edema. It’s a condition that’s pretty common for people with SCI and other neurological conditions. Left unchecked, it usually gets progressively worse, and it can lead to some serious complications. For example, it makes you prone to pressure sores and cellulitis, a potentially serious bacterial infection that leaves your skin swollen, red and painful.

The good news is that edema can be managed and reduced, but we’d strongly suggest taking steps to do this as soon as possible.

Why are people with SCI prone to edema? The simple answer is that when leg muscles contract and flex, they help pump blood back to the heart. When you take away the ability to flex these muscles, blood and other fluids begin to pool in the lower leg. This puts pressure on your skin, which makes it fragile and susceptible to splitting. The same pressure reduces blood flow, which is critical to deliver nutrients and antibodies needed for healing and fighting infection after a skin split or any wound.

All of this helps create a perfect storm: with edema, a scratch or mosquito bite can quickly morph into a pressure sore or cellulitis.

If you notice swelling in your lower legs, particularly with redness and warmth, you need to be evaluated by a physician as soon as possible. While edema and cellulitis are the likely culprits, your doctor will also look for other

dangerous conditions such as a bone fracture or deep vein thrombosis (DVT), which is a dangerous clotting of blood. Additionally, there could be a more serious underlying cause of your edema, including heart failure, renal and liver impairment, chronic venous insufficiency, or a medication side effect. These serious conditions need to be ruled out ASAP.

If, however, your edema is due to paralysis, there are ways to reduce and control it. You should avoid soaking in hot water, and also avoid sunburns on your legs—both of these exacerbate edema. You should also avoid consuming salt as much as possible, as sodium causes fluid retention throughout your body. Fluid retention is also worsened by dehydration, so it’s yet another reason to flush your body with water throughout the day. And there’s no doubt that regular cardiovascular exercise—anything that gets your heart pumping—will reduce edema.

Another great strategy is to elevate your legs above the level of your heart whenever you can—while sleeping, watching TV, or reading. Try putting pillows under your legs whenever you’re able to get into a reclining position.

With stubborn cases of edema, properly fitted and prescribed knee-high compression stockings may be required. You need to put these on in the morning when you have little swelling, and worn throughout the day (but not at night).

Other options for more serious cases include a sequential compression pump or lymphedema pump, which rhythmically compresses your calves to work blood and fluids out of your lower legs, and lymphedema massage, in which a massage therapist manually works your legs to remove pressure.

As for medications, be wary of anything prescribed unless it’s coming from a physiatrist or a physician who is well-informed about SCI. Diuretics like Lasix, which increase urine output, are sometimes prescribed to reduce edema, but these drugs can really wreak havoc on your body’s sodium/potassium balance, which can lead to other serious problems.

In closing, we’ll stress again that any type of swelling in your lower extremities needs to be taken seriously and addressed as soon as possible—and your first step should be to consult your doctor.

Hammacher Schlemmer offers these open-toe zipper compression socks that are easy to put on and remove, even for those with limited grip strength. See hammacher.com for more info.

