

Nocturnal leg cramps

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For many of us, it is an all-too-familiar scenario: You're sleeping peacefully when a painful sensation suddenly pierces your leg, jolting you awake. If you've been an unwilling host to this nighttime visitor, you have plenty of company. Studies show that about 70% of adults older than 50 experience nocturnal leg cramps.

What are nocturnal leg cramps?

These cramps are sudden, involuntary contractions of the calf muscles that occur during the night or while at rest. Occasionally, muscles in the soles of the feet also become cramped. The sensation can last a few seconds or up to 10 minutes, but the soreness may linger. The cramps can affect persons in any age-group, but they tend to occur in middle-aged and older populations.

Nocturnal leg cramps should not be confused with restless legs syndrome, a crawling sensation that is relieved by walking or moving around. Although uncomfortable, restless legs syndrome typically does not involve cramping or pain.

What are the causes?

No one knows for sure what causes nocturnal leg cramps. In many cases, there doesn't seem to be any specific trigger. However, sometimes the cramps are caused by overexertion of the muscles, structural disorders (eg, flat feet), standing on concrete, prolonged sitting, inappropriate leg positions while sedentary, or dehydration. Less common causes include diabetes, Parkinson's disease, hypoglycemia, anemia, thyroid and endocrine disorders, and use of some medications.

What can I do to prevent these cramps?

To stave off future episodes of nocturnal leg cramps, consider the following tips:

- Drink six to eight glasses of water daily. Doing so will help prevent dehydration, which may play a role in the cramping.
- Stretch calves regularly throughout the day and at night. (See box below for more information.)
- Ride a stationary bicycle for a few minutes before bedtime. This activity can help prevent cramps from developing during the night, especially if you do not get a lot of exercise during the day.
- Keep blankets loose at the foot of the bed to prevent your toes and feet from pointing downward while you sleep.
- Do aquatic exercises regularly during the week to help stretch and condition your muscles.
- Wear proper foot gear.

How can I make them go away?

When cramping occurs, try these steps:

- Walk on or jiggle the affected leg and then elevate it.
- Straighten the leg and flex your foot toward your knee. Grab your toes and pull them upward toward your knee. You should feel your calf muscles stretching.
- Take a hot shower or warm bath, or apply an ice massage to the cramped muscle.

Persistent or severe leg cramps often are treated with medication. Quinine sulfate is considered the most effective drug, but it can have unpredictable adverse effects and should be used with caution. (In 1995, the US Food and Drug Administration banned the sale of all quinine-based over-the-counter preparations.) Alternative medications include diphenhydramine hydrochloride, vitamin E, simple muscle relaxants (such as meprobamate [Equanil, Miltown]), verapamil hydrochloride (Calan, Isoptin, Verelan), chloroquine phosphate (Aralen Phosphate), and hydroxychloroquine sulfate (Plaquenil Sulfate).

Stretch your way to better sleep

Nocturnal muscle cramps can often be prevented by doing leg-stretching exercises, such as the one outlined below.

1. Stand 30 inches from the wall.
2. While keeping your heels on the floor, lean forward, put your hands on the wall, and slowly move your hands up the wall as far as you can reach comfortably.
3. Hold the stretched position for 30 seconds. Release.
4. Repeat steps 1 through 3 two more times.
5. For best results, practice this exercise in the morning, before your evening meal, and before going to bed each night.