Muscles cramps in the leg are common, painful and can be very frustrating for both the patient and the physician. Most often they occur in the calf but can also be present in the thigh and the arch of the foot. For some reason they present during the night and awaken the person from sleep. Sometimes they are just a nuisance, but other times they can be extremely disturbing and cause severe pain.

An evidence-based review of medical studies found that muscle cramps in the legs were more common in older adults, women, during pregnancy, and at night. If the person has peripheral vascular disease (decreased blood flow to the lower legs) or arthritis, there is a greater tendency to experience them. Diabetes and thyroid disease have also been implicated and need to be evaluated.

Most of the time there is no known cause for these nighttime leg cramps. Increased physical activity at the end of the day can do it. Sometimes there is a disturbance in the electrolytes (minerals) in the blood. Potassium, calcium and sodium are most often involved. Levels may need to be checked. Some drugs like diuretics ("water pills") may lower potassium and cause leg cramps. The statin drugs (Lipitor, Crestor, Zocor, etc.) that are used to lower cholesterol have also been associated with an increased incidence of leg cramps.

During an episode of leg cramps, stretching the muscles is often helpful. Massage, and either heat or ice can help reduce the pain. If the cramps persist, a hot bath or shower might be helpful. Dehydration can play a role, so it is important to drink plenty of liquids. Some find that alcohol or caffeine may exacerbate the symptoms. If so, they should be avoided. Sometimes, just stretching the muscles before bedtime can make a real difference. Many of these suggestions are unproven "home remedies." In one study, when 191 patients who were controlled on medications stopped taking the medications and tried only stretching to reduce the cramps, it was found to be of little benefit.

The current evidence for managing leg cramps is based on only a few well-designed studies with a limited number of patients. Quinine (Quinaam) has been the long-term "go to" drug. However, the FDA has warned against the off-label use of this drug for leg cramps, and recently made their warning even stronger. Randomized trials have shown that it can significantly reduce leg cramps by 25-30 percent. It can cause a bitter taste in the mouth, headaches and ringing in the ears. The real concern, however, is that 1 to 2 percent of patients will experience significant disorders of the bone marrow. Although the side effects are rare, it is felt that the severity, when they do occur, is generally not worth the risk. Although the medication may no longer be available, those who found that quinine helped with their leg cramps and was safe for them can still get it by drinking tonic water.

In a small study it was found that gabapentin, a newer drug that is used to treat neuropathy (nerve pain), markedly diminished the frequency and severity of muscle cramps within two weeks and the therapeutic effect persisted. Unfortunately, this small study has not been followed by a larger, randomized, controlled study. The class of drugs called calcium channel blockers has also been found helpful. They are used very commonly for headaches, high blood pressure, and various heart problems. Overall, they are known to be a safe class of drugs. Diltiazem is one of these drugs that has been studied for leg cramps. It
significantly reduces the frequency of cramps. However, when they do occur, they are just as painful as without the drug. Interestingly, another drug in this class (nifedipine) has been shown to increase the frequency of leg cramps.

A non-prescription remedy can also be tried. Vitamin B-complex (fursultiamine 50mg, hydroxocobalamin 250mg, piridoxal phosphate 30mg, and riboflavin 5mg) given three times daily was associated with an 86 percent reduction in frequency of leg cramps with less intensity and duration of the cramps when they did occur. B vitamins are water soluble and it is difficult to take too many of them.

The latest FDA recommendation that quinine not be used for leg cramps has left a major void in the treatment for this common condition. Until more research is completed, the above recommendations remain the latest in the treatment of the very uncomfortable and often nearly disabling nocturnal leg cramps.

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