



## DRUG TREATMENTS FOR SYMPTOMS OF MUSCLE CRAMPS

This fact sheet may help you understand which drugs are the best choices for treating symptoms of muscle cramps.

Neurologists from the American Academy of Neurology are doctors who identify and treat diseases of the brain and nervous system. The following evidence-based information\* is provided by experts who carefully reviewed all available scientific studies on drugs for treating muscle cramps.

There are several drugs available to treat symptoms of muscle cramps. However, more research is needed on their safety and effectiveness. If you have muscle cramps, it is important to see your doctor to find out the cause.

Muscle cramps due to menstruation (monthly periods) or to kidney or muscle diseases are not discussed here.

### What is a muscle cramp?

A muscle cramp is a contraction (tightening) of the muscle. This contraction often is painful and can be caused by movement. The contraction also is involuntary. This means the muscle tightens without the person's control. The cramping causes the muscle to feel hard. The muscle often seems to be bulging. The cramps can affect one muscle or a group of muscles. Muscle cramps differ from muscle twitches. Twitches are slight movements in a small area of a muscle.

Many people experience muscle cramps. For some, the cramps happen often and are very severe. For these people, muscle cramps can be disabling.

Muscle cramps have many causes. The main causes are dehydration (not enough fluid in the body), heavy exercise, or muscle fatigue or tiredness. Other causes include alcoholism, drug use, pregnancy, or poor nutrition. However, the cause is not always known.

In some cases, muscle cramps are a sign of a more serious problem. Talk with your doctor to find out more about possible causes.

### What drugs help treat muscle cramps?

There are several drugs available to treat symptoms of muscle cramps. There is weak evidence that naftidrofuryl, diltiazem, and vitamin B complex may help treat these symptoms. However, as of February 2010, naftidrofuryl is not available in the United States.

There are no serious side effects of these drugs. Studies reported some mild side effects, such as lightheadedness, nausea (upset stomach), and diarrhea. Mild indigestion from naftidrofuryl use also has been reported. Research shows magnesium supplements and gabapentin likely are not helpful treatments.

Strong evidence shows that the quinine drug family helps to treat symptoms of muscle cramps. However, quinine poses a risk of serious side effects. These include blood and kidney problems. These risks are serious but uncommon. Milder risks include headache, sweating, blurred vision, and ringing of the ears.

In December 2006, the US Food and Drug Administration (FDA) issued a news release on risks of quinine use. The release warns against using quinine for leg cramps. The release also reports that 93 deaths since 1969 occurred from quinine use. To learn more, go to [www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/2006/ucm108799.htm](http://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/2006/ucm108799.htm).

Due to these risks, quinine generally should be avoided. Doctors should prescribe this drug only in special cases. Quinine should be considered only when cramp symptoms are very disabling and other drugs have not helped. Also, people considering quinine should be informed of possible risks. Anyone taking quinine should be monitored for serious side effects.

More research is needed on the safety and effectiveness of all these drug treatments. Such studies also should focus on how muscle cramps affect a person's quality of life.

### Are there therapies that help with muscle cramps?

Some health experts recommend stretching muscles to relieve cramping. However, there is not enough evidence to show if therapies such as stretching are helpful. Future studies of muscle cramps should look at how useful such therapies are.

This statement is provided as an educational service of the American Academy of Neurology. It is based on an assessment of current scientific and clinical information. It is not intended to include all possible proper methods of care for a particular neurologic problem or all legitimate criteria for choosing to use a specific procedure. Neither is it intended to exclude any reasonable alternative methodologies. The AAN recognizes that specific patient care decisions are the prerogative of the patient and the physician caring for the patient, based on all of the circumstances involved.

\*After the experts review all of the published research studies, they describe the strength of the evidence supporting each recommendation:

*Strong* evidence = more than one high-quality scientific study

*Good* evidence = at least one high-quality scientific study or two or more studies of a lesser quality

*Weak* evidence = the studies, while supportive, are weak in design or strength of the findings

*Not enough* evidence = either different studies have come to conflicting results or there are no studies of reasonable quality

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