

Muscular Dystrophy Association Motor Neuron Disease Clinic

At
The University of Utah
Department of Neurology

MANAGING CRAMPS AND FASCICULATIONS

What Are Muscle Cramps?

Muscle cramps are painful contractions of muscles, sometimes called “Charley Horses”. Interestingly, the origin of the term Charley Horse is obscure. Some attribute it to a race horse that was lame, while others attribute it to a baseball player.

The muscle pain from a cramp can be mild or severe. People automatically stretch out the muscle that is cramping, which relieves the pain. The pain may be fleeting or linger on for some time.

Cramps can occur during muscle activity, at which time the muscle can be stretched out and the pain is aborted. Cramps can occur during the night and awaken the person. It is presumed that the muscle is shortened during sleep. These cramps may be severe, requiring the patient to get out of bed and stretch the muscle.

Causes of Cramps

We do not know why muscle cramps occur. Muscle cramps occur in anyone, more in some than in others. They are more common in overworked muscles and in the elderly. They are also frequent during pregnancy.

Cramps are more common when there has been damage to the nerves going to muscles. This is presumably why cramps are more common in patients who have ALS because there is diffuse damage to lower motor neurons.

Preventing Cramps

Cramps can be treated in two ways. When cramps are brought on by muscle activity, the cramps can be aborted by reducing the level of muscle contraction as the cramp begins.

For cramps that occur frequently with activity or at night, the best treatment is with a medication called quinine sulfate.

Quinine Sulfate

Quinine sulfate comes as 260 mg tablets and 325 mg capsules. We usually recommend 325mg capsules. The drug is designed to prevent cramps, so it is best taken before they occur. For example, if cramps occur at night, quinine sulfate should be taken at bedtime. If cramps occur during the day, quinine sulfate should be taken in the morning. It must be taken every day to be most effective.

Quinine sulfate is well tolerated when taken two to three times a day. Occasionally, there may be a metallic taste or ringing in the ears. If this happens, the dose can be decreased. The medication has a bitter taste, and tablets should not be crushed when

taken by mouth. Capsules should not be emptied, but tablets can be crushed when the medication is taken through a feeding tube.

Role of Potassium or Calcium

Low levels of potassium or calcium may be associated with cramps, but in our experience potassium or calcium supplements are less effective than quinine sulfate.

What Causes Fasciculations?

Fasciculations are twitches of small portions of a muscle. They can be felt in muscles more often than seen. They are usually observed when a person is quiet.

It is important to realize that fasciculations occur in everyone. The more a person looks for fasciculations, the more they find.

Fasciculations are more common when nerves are damaged. They may be frequent in patients with ALS because there is diffuse nerve damage.

Fasciculations are not harmful. In ALS they may occur more frequently at some times and may diminish at other times.

Preventing Fasciculations

Unfortunately, there is no effective medication to prevent fasciculations. We emphasize that fasciculations are not harmful

If you have any questions please contact Barbara Miano at (801) 585-6052.