

Cochrane Corner

Treatment for leg cramps

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Leg cramps are involuntary and usually painful skeletal muscle contractions, which commonly affect calf muscles. Leg cramps typically occur at night and usually last only seconds to minutes. Leg cramps may be idiopathic or related to a definable process or disease such as pregnancy, renal dialysis, or venous insufficiency.

Leg cramps are common and their incidence increases with age. About half of the people attending a general medicine clinic have had leg cramps within one month of their visit, and over two-thirds of people over 50 years of age have experienced leg cramps. Little is known about the causes of leg cramps. Risk factors in-

clude pregnancy, exercise, salt depletion, renal dialysis, electrolyte imbalances, peripheral vascular disease (both venous and arterial), peripheral nerve injury, polyneuropathies, motor neuron disease, muscle diseases, and certain drugs. Other causes of calf pain include trauma, deep venous thrombosis and ruptured Baker's cyst.¹

Table 1. Treatment for leg cramps

	Short-term success	Long-term success	Evidence	Advantages	Disadvantages
Quinine	Reduced nocturnal cramps ¹ Over four weeks Absolute reduction of 2.9 cramps/month	No information	Clinical evidence ¹	Effective	Elevated quinine levels can cause nausea, vomiting, tinnitus and deafness. NNH for tinnitus 50
Quinine + theophylline	Effective NNT two for two weeks	No information	Clinical evidence ¹	Effective	About 10% adverse effects nausea and dizziness
Vitamin E	Probably not effective ¹	No information	Clinical evidence ¹		
Analgesics, antiepileptic drugs and compression hosiery	No information ¹				
Magnesium in pregnant patients	At 22–36 weeks gestation NNT four for three weeks treatment	No information	Cochrane review ²	Effective	?nausea
Calcium in pregnant patients	One RCT found a benefit one did not. NNT about two		Clinical evidence ¹	Possibly effective	Not reported

NNT = numbers needed to treat for one remission; NNH = numbers needed to harm

References

1. Clinical Evidence. Clinical evidence: Musculoskeletal disorders. London. Access to clinical evidence can be obtained at <http://www.clinicalevidence.org/>
2. Cochrane library WWW.Cochrane.org

Members of the Royal New Zealand College of General Practitioners can have access to the full reviews by contacting Cherylyn Pearson at the College in Wellington. For the access codes to the Cochrane library contact cpearson@rnzcgp.org.nz at the College.