Summary
There is conflicting evidence available regarding the use of Quinine to treat nocturnal leg cramps. Quinine 300mg taken orally at night is licensed for the treatment and prevention of nocturnal leg cramps in adults and the elderly, when cramps cause regular disruption of sleep. If Quinine is used to treat nocturnal leg cramps the advice outlined below should be taken into consideration.

Information
There is conflicting evidence on the use of quinine for nocturnal cramps. Quinine (usually as quinine sulphate) has traditionally been used for nocturnal cramps. There has been concern over its efficacy and potential for adverse effects, especially in the elderly. The Food and Drug Administration (FDA) in the US ruled that quinine products should no longer be used for the management of nocturnal cramps. A similar ban has been imposed in Australia. In the UK, the Medicines and Healthcare products Regulatory Agency (MHRA) and the Commission on Human Medicines (CHM) Drug Safety Update in 2010 advised against routine use of quinine for nocturnal leg cramps. This Drug Safety Update outlined the following:

- Quinine is not a routine treatment for nocturnal leg cramps, and should

May 2012

Question: There is conflicting advice regarding the use of Quinine for the treatment of leg cramps. Why is this?
only be used when cramps regularly disrupt sleep.  

- Before use of quinine for nocturnal leg cramps, the risks should be carefully considered relative to the potential benefits.  

- After a trial of at least 4 weeks, treatment should be stopped if there is no benefit. If treatment continues, the benefits should be assessed around every 3 months.  

- Patients should be warned not to exceed the recommended dose. Serious side effects including irreversible blindness and death may occur with overdose.  

- Thrombocytopenia is a rare but potentially life-threatening adverse reaction associated with quinine. Patients should be instructed to stop treatment and consult a physician if signs of thrombocytopenia occur, such as unexplained petechiae, bruising, or bleeding.  

- Quinine should not be prescribed or given to patients who have previously experienced any adverse reaction to quinine, including that found in beverages.

However, in contrast, a later Cochrane review found moderate quality evidence to suggest that when quinine was used to treat muscle cramps for up to 60 days, the incidence of serious adverse effects was not significantly different than with placebo. The review identified 23 trials with a total of 1586 participants. However, the review concluded that further research is required on the optimal dose and duration of use, and also on alternative treatments.

**Medicines linked with Nocturnal Leg Cramps**

A study conducted by Garrison et al found that treatment for legs cramps was substantially more likely in the year following introduction of inhaled long acting β2-agonists, potassium-sparing diuretics, or thiazide-like diuretics. In contrast, statin and loop diuretic associations were small.
Alternative therapies

Various pharmacologic treatments have been studied for nocturnal leg cramps, including quinine, magnesium, calcium channel blockers, sympathetic inhibitors, vitamin E, vitamin B complex, and antiepileptic medications.⁶

References


