A leg cramp is a sudden, involuntary, painful muscle contraction, usually in the posterior calf, but sometimes involving the foot or thigh. Most leg cramps occur at night when at rest but some people experience daytime cramps, especially if there is a neuromuscular or systemic cause.

**Most cases of nocturnal leg cramps are thought to be idiopathic. Due to its potential toxicity, quinine is not recommended for routine treatment and should not be used unless cramps cause regular disruption to sleep.**

**Self-care advice for managing idiopathic leg cramps includes**:

* Reassuring the person that idiopathic leg cramps are common; they have no underlying cause and can resolve spontaneously.
* Do stretching exercises of the affected muscle(s) three times a day. If beneficial, continue indefinitely at an acceptable frequency.
* When sleeping try to stop toes from pointing downwards and avoid tight or heavy bed covers.
* Consider paracetamol or ibuprofen if muscle(s) remain tender after a cramp.

**A trial of quinine may be considered if:**

* Treatable causes of cramp have been excluded.
* Leg cramps are very painful and frequent
* Cramps affect the person’s quality of life (e.g. regularly disrupt sleep)
* Self-care measures (e.g. stretching) have failed.
* There are no conditions or [drug interactions](https://bnf.nice.org.uk/interactions/quinine/) which would increase the risk.

**Advice for prescribers if quinine treatment is thought to be appropriate**

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| --- |
| * Prescribe 200-300mg (at bedtime) **initially for no more than 4 weeks.** |
| * Ask the person to monitor any benefit using a sleep and cramp diary. |
| * **If no benefit is seen after 4 weeks, stop treatment.** |
| * If beneficial, continue for 3 months, then **aim to stop treatment to reassess ongoing need**. If further treatment is required, review every 3 months, and **consider a trial discontinuation often referred to as a ‘Quinine Holiday’**. |
| * Advise the person not to exceed the recommended dose as serious adverse effects may occur. **If signs of thrombocytopenia occur during treatment (for example, unexplained petechiae, bruising or bleeding), they should seek medical advice.** |
| * Optimise Rx currently recommends **the use of quinine sulphate 300mg as a more cost-effective option than quinine bisulphate 300mg** where the use of quinine is deemed appropriate**.** |

Prescribers are reminded that **contraindications** to the use of quinine include

* Previous adverse reaction to quinine including quinine containing products such as tonic water.
* People with a history of:
* Haemolysis or haemoglobinuria
* Optic neuritis
* Tinnitus
* Myasthenia gravis (quinine can cause severe respiratory distress and dysphagia in this group)
* Pregnant women should not be prescribed quinine to treat leg cramps.
* Breastfeeding women should not receive quinine unless the benefits outweigh the risks.

Prescribe **with caution** in

* Older people
* Cardiac disease; risk factors for QT prolongation (including medicines); atrial fibrillation, conduction defects, heart block – quinine can exacerbate conduction defects.
* Electrolyte disturbance
* Glucose-6-phosphate dehydrogenase deficiency – the risk of haemolytic anaemia may be increased when taking quinine.

References

[Nocturnal leg cramps | Treatment summaries | BNF | NICE](https://gbr01.safelinks.protection.outlook.com/?url=https%3A%2F%2Fbnf.nice.org.uk%2Ftreatment-summaries%2Fnocturnal-leg-cramps%2F&data=05%7C02%7Cnicola.schaffel%40nhs.net%7C6a4c983af36f447dcc5908dc732fec44%7C37c354b285b047f5b22207b48d774ee3%7C0%7C0%7C638511896866978484%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzIiLCJBTiI6Ik1haWwiLCJXVCI6Mn0%3D%7C0%7C%7C%7C&sdata=LnWrNmwqfvJQYdprpdSSQxcaBqCL0g2oer2beO%2FBJRA%3D&reserved=0)

[NICE CKS Leg cramps](https://cks.nice.org.uk/topics/leg-cramps/)