

PERIODIC LIMB MOVEMENT DISORDER



Periodic Limb Movement Disorder (PLMD) is a movement disorder that occurs during sleep. It is characterised by repetitive limb movements that only happen when you are asleep and occur repeatedly every 10 to 60 seconds. These movements usually involve the legs; however, the arms may also be involved in severe cases. If you have PLMD, or sleep with someone who has PLMD, you may recognise these movements as flexing of the toe or foot, bending of the ankle or knee or twitching of the hip. They occur in periods lasting anywhere from a few minutes to several hours. The PLMD patient is often identified by the bed-partner's complaints of being kicked. The bed-covers may be in disarray in the morning. The movements are mainly seen in the first third of the night, during what is called non-REM sleep. Abnormal limb movements result in daytime tiredness by causing periods of wakefulness during the night (called arousals) and disrupting the brain's sleep-patterns. The abnormal movements also prevent the brain from transitioning into stages of deep sleep, causing the sufferer to wake feeling tired and unrefreshed. PLMD is also often disruptive for the sufferer's bed partner. Some people may experience hundreds of such movements per night. For others PLMD may not cause any problems and no treatment is required. Although controversial, some researchers believe PLMD is associated with increased risk of cardiovascular disease.

How common is PLMD? PLMD is seen equally in both men and women and occurs more commonly with advancing age. It affects only 2% of the population of ages less than 30, 5% of ages 30 to 50, and 25% of ages 50-60. Up to 44% of the population of age 65 or older may have PLMD. PLMD can occur in conjunction with other sleep-disorders, such as narcolepsy, obstructive sleep apnea, or REM-behaviour disorders. As many as 80% of people with RLS also have PLMD and as they may have trouble both falling asleep and staying asleep, they usually suffer from fatigue or sleepiness during the day.

How is PLMD diagnosed? PLMD can be identified with an overnight sleep study, or polysomnogram. Leads are attached to your legs while your sleep is measured. This is done at a Sleep Disorders Laboratory. Sometimes recording of leg movements over a longer period (1-2 weeks) may be done with a portable monitor worn around the ankle.

What causes PLMD? The exact cause of PLMD is still unknown. Scientists believe that the underlying mechanisms probably involve abnormal nerve transmission in parts of the nervous system that influence sensation, although studies have not revealed any consistent abnormalities.

How is PLMD treated? If PLMD is causing disrupted sleep and daytime symptoms, it may be necessary to treat the disorder. The same drugs that are used to treat RLS may be used eg: dopaminergic medications, calcium channel blockers (Pregabalin and Gabapentin), opioids (such as codeine) and benzodiazepines (eg: Clonazepam, diazepam). These medications treat the symptoms of PLMD, and not the underlying cause. Consequently, they must be taken every evening before bed, otherwise the symptoms will return. Controlling caffeine intake, alcohol, and smoking may also help.

Sources of help and information - If you are concerned about PLMD, you should consult your family doctor. Referral from your family doctor will be necessary before you can consult a specialist physician.

DISCLAIMER - Information provided in this fact sheet is general in content and should not be seen as a substitute for professional medical advice. Concerns over sleep or other medical conditions should be discussed with your family doctor.