

Restless Legs Syndrome

Restless legs syndrome causes uncomfortable feelings in your legs. As a result, you have an urge to move your legs which gives temporary relief. Symptoms come on when resting and are worse at the end of the day. No treatment may be needed if symptoms are mild. Medication can ease symptoms if the condition is distressing.



What is restless legs syndrome?

Restless legs syndrome (RLS) is sometimes called Willis-Ekbom disease after the doctors who first described it. It is a condition where you have an urge to move your legs. This is usually caused by an uncomfortable or unpleasant feeling in the legs.

Restless legs syndrome symptoms

Many people with RLS find it difficult to describe the feeling that they get in their legs. Around 30 – 50% of people describe the feelings as painful.

Most describe:

- A crawling sensation, or an electric feeling.

- An ache similar to toothache.
- The sensation of water running down their leg.
- Fidgety, jumpy or twitchy legs, or just generally feeling uncomfortable.
- A sensation of insects moving in the legs.

Some people describe a deep painful feeling in their legs. The unpleasant feelings make you have an urge to move. Typically, when the unpleasant feelings occur they occur every 10–60 seconds and so you become quite restless.

Typically, the symptoms:

- Develop when you are resting – particularly when you are sitting down or lying in bed. They tend to be worse if you are in a confined space such as in a cinema seat.
- Are usually worse in the evening or at night. In many people they only occur in the evening, especially when trying to get to sleep. The symptoms can make it difficult to get to sleep. This can have a knock-on effect of causing poor sleep, and tiredness the next day.
- Are usually eased briefly by moving, walking, massaging or stretching the legs. However, the symptoms tend to return shortly after resting again.
- Usually affect both legs. Occasionally, the arms are affected too, or another part of the body, but the legs are affected first and more severely than other body parts.

What causes restless legs syndrome?

The cause is not known in most cases

This is called primary or idiopathic RLS. (Idiopathic means of unknown cause.) Symptoms tend to become slowly worse over the years.

It is thought that the cause may be a slight lack of, or imbalance of, some brain chemicals (neurotransmitters), especially one called dopamine. It is not known why this should occur. There may be some genetic factor, as primary RLS runs in some families.

Secondary causes

Symptoms of secondary RLS can develop as a complication of certain other conditions. For example:

- Pregnancy. About 1 in 5 pregnant women develop restless legs syndrome in pregnancy (especially in the later part of pregnancy). Symptoms often go away after a woman has given birth, but women who have RLS during pregnancy are four times as likely to develop RLS later in life than the general population.
- Lack of iron (iron deficiency) – which can cause anaemia. If this is the cause then the symptoms of RLS usually go if you take iron tablets.
- As a side-effect of some medicines. For example, it occurs in some people who take antidepressants, antipsychotic medicines, beta-blockers, lithium, prochlorperazine or metoclopramide.
- As a symptom of some other conditions – for example, severe kidney disease, Parkinson's disease, diabetes, and underactive thyroid gland.

How common is restless legs syndrome?

In the UK, about 5 – 10 adults in 100 have some degree of RLS – in northern Europe it is more like 2 to 4 per 100. It can affect anyone and can first develop at any age. It is more common as you become older, however. Women are affected twice as much as men. Restless legs syndrome can occur in children, but is much less common.

Restless leg syndrome diagnosis

A doctor will usually make the diagnosis of RLS from the typical symptoms. There is no test to prove the diagnosis and any examination or tests done are usually with the aim of excluding other conditions, rather than confirming RLS. A doctor may do some tests to rule out a secondary cause. For example, you would normally have a blood test to check for a lack of iron and to rule out kidney disease. In some cases further tests may be needed if the diagnosis is not clear.

How to ease restless leg syndrome at home



Most cases of restless leg syndrome are primary RLS. If the symptoms are troublesome then one or more of the following remedies for restless legs may be advised.

- Simple distractions, such as reading or watching TV, may give relief if symptoms are mild.
- A review of your medication. Some medicines can make RLS worse, so discuss any regular medication you take with your doctor. It may be that changing medication could help, and if you are lacking in iron then you can replace it with iron supplements.
- Sleep hygiene to help improve your sleep patterns. This means:
 - Try to get into a regular bedtime routine of going to bed and getting up at the same time each day.
 - Do not nap - especially in the evenings.
 - Take some exercise during the day (but not near bedtime).
 - Avoid drinks that contain caffeine (a stimulant) before bedtime.
 - Try to relax before going to bed. A relaxing warm bath may help.
- A trial without caffeine or alcohol altogether. (Caffeine or alcohol may make symptoms worse or trigger them.) Reduce or cut out any drinks that contain caffeine, such as tea, coffee and cola. Also limit, or cut out, alcohol. Try this for a couple of weeks or so to see if symptoms improve. If symptoms do improve, you could then experiment to see what level of caffeine or alcohol causes symptoms. For example, you may not need to cut these things out completely but just take less than you were used to.

- RLS triggers vary from person to person and other factors that may occasionally aggravate the symptoms of RLS include salt or chocolate.
- Moderate regular exercise is thought possibly to be beneficial. Results from studies are inconclusive.
- During an episode of uncomfortable restless legs, it may help to walk about. Massaging the legs or stretching them may also help.
- Relaxation exercises or other distractions such as reading may help.

Restless legs syndrome treatment



If symptoms are mild or infrequent then no treatment may be needed or wanted. Many people are reassured that they have primary RLS and not something more serious. (Some people with RLS fear that they have a serious neurological disorder.)

Treatment for secondary RLS is to treat the underlying cause, such as iron deficiency, etc. A change of medication may be advised if a side-effect from a medicine is thought to be responsible. However, most people with RLS have primary RLS.

If symptoms are not helped much by the suggestions made above, then your doctor may suggest medication for restless legs syndrome.

Iron supplements

Keeping iron levels in the body well above the minimal normal level seems to help some people with RLS. So even if your iron levels are normal, if the level is in the lower end of the normal range you may be advised to take extra iron. Too much iron can cause problems too, so your iron level may be monitored.

There is not enough evidence to know if other supplements, such as magnesium, help for RLS. Too much of any vitamin or mineral can cause as many problems as too little, so discuss any extra supplements with your doctor before trying them.

Dopamine agonists

These are a group of medicines commonly used to treat RLS. There are various types and brands. Dopamine agonists in effect top up a low level of dopamine which is thought to be lacking in people with RLS. Dopamine agonist medicines used to treat RLS include pramipexole, ropinirole and rotigotine. There is a good chance that symptoms will go or greatly reduce in severity if you take one of these medicines.

As with any medication, the benefit of treatment has to be weighed against the possible side-effects of treatment. The most common side-effects of these medicines are feeling sick (nausea), light-headedness, tiredness and difficulty with sleep. However, many people do not experience any side-effects, or they are mild, and the side-effects often go away with continued use. Another possible side-effects is problems with impulse control, possibly leading to excessive gambling, binge eating, compulsive shopping or hypersexuality. Patients and their relatives should be warned about this so that they can look out for such a change in behaviour.

These treatments cannot be used for a very long time. This is because they tend to stop working after a while and you need ever-increasing doses. Also after a time on dopamine agonists, symptoms can suddenly become much worse. If this is the case, you will need to stop or change your medication.

Alpha-2-delta ligands

This is another group of recommended medicines (although they do not have a licence for this condition). The two possible options are gabapentin and pregabalin. These are less likely to have the problem above of needing ever-increasing doses and symptoms becoming worse after a time. However they can

also cause side-effects, so the pros and cons of treatment have to be weighed up.

Other medicines

Sometimes strong painkillers, and benzodiazepines are used. One may be tried if other treatments have not helped. These become addictive if used for long periods of time, so short courses or occasional use are best.

What is the outlook?

About 9 in 10 people with RLS also have sudden jerks (involuntary movements) of their legs when they are asleep. This is called periodic limb movements of sleep (PLMS). These movements can wake you up (and/or your partner). Some jerks may also occur when you are awake but resting.

The severity of symptoms can vary from a mild restlessness of the legs on some evenings, to a distressing problem that occurs every evening and night, which regularly disturbs sleep. Many people fall somewhere in between these extremes. If you have moderate or severe symptoms it may lead to lack of sleep (insomnia), anxiety and depression.

In addition to the unpleasant symptoms when they occur, many people with RLS become persistently tired. This is due to the symptoms of restlessness and/or PLMS that can cause regular disturbed nights' sleep. This can have a knock-on effect of causing daytime tiredness due to lack of sleep.

The outlook (prognosis) for RLS varies. In some people, the problem gradually becomes worse. In some people symptoms stay the same, improve of their own accord, or there are long periods of time with no symptoms. If RLS is due to another condition (secondary RLS) then it will often improve once the cause has been treated. One study found that over a 15 year period, approximately one-third of people had worse symptoms, one-quarter had symptoms which improved or went away and for the rest, the symptoms were stable.

RLS is not life-threatening - it does not cause death, but it can affect quality of life. In some people it can cause a lot of distress. There is no cure for RLS, but usually medicines can help symptoms if they are interfering with your quality of life.