

Information sheet for RLS patients to prepare for a hospital stay or entrance into a nursing home

Prof. Dr. med J. Mathis, Head of the accredited Center of Sleep Medicine at the Inselspital
Medical adviser of the Swiss Restless Legs Patient Association (SRLS); www.restless-legs.ch

Restless legs syndrome (RLS) is a common neurological disorder, which unfortunately is not well known, even within the medical community. Patients with RLS typically complain about an urge to move the legs, often accompanied by discomfort or pain, mainly while at rest and in the evening or at night. The patient can no longer remain sitting or lying for an extended period of time, but must stand up and walk around since each activity relieves the symptoms. In most cases, the whole of the leg is affected by RLS, though not necessarily the feet. RLS affects the calves especially, and later the unpleasant sensations can also ascend up to the thigh, and, in rare cases, into the arms. The symptoms often occur symmetrically or less frequently alternately on either side. The consequences are an inability to fall asleep or stay asleep, and feeling fatigued during the day.

In every hospital stay the patient must expect prolonged bed rest periods, be it after an operation or for long-term investigations, an exacerbating factor for RLS.

1. Inform the treating physician and nursing staff about your problems in case of restricted mobility!

The cause of the disease is still not clearly understood, but is suspected to be a genetic predisposition with a relative dopamine deficit in the spinal cord which is sufficient that the symptoms occur in old age or during pregnancy (i.e. idiopathic RLS). RLS also frequently occurs in patients with iron deficiency, renal failure on dialysis, hormonal derailments and accompanying polyneuropathy (i.e. comorbid RLS). In the comorbid forms, a causative therapy may occasionally be available; in the idiopathic form, only symptomatic treatment is possible. The first choice of treatment is dopamine agonists such as pramipexol, ropinirole and rotigotine, or antiepileptic drugs such as pregabalin or gabapentin. In the second line, benzodiazepines such as clonazepam, other antiepileptic drugs such as carbamazepine, valproic acid, perampanel or lacosamide can be used "off label", while opiates remain as third choice. Most of the patients can be treated by a monotherapy with dopamine agonist or pregabalin. Combinations of dopaminergic substances, antiepileptics and opiates are necessary in severe cases of RLS.

2. Inform the treating physician and nursing staff that the dopaminergic medications, the epileptic or the opiates against your RLS are absolutely needed!

It is advised that the orally administered drugs are taken for as long as possible, i.e. until shortly before the operation and then stopped for as little time as necessary during the perioperative. When using dopamine agonists, it is sometimes difficult to quickly increase the dosage after interruption due to side effects. Today, this perioperative period can easily be bridged with rotigotine skin patches, with which the active drug is absorbed directly through the skin. As an

alternative for peri-, intra- and post-operative therapy, intravenous or percutaneous opiates are available.

As patients will most likely experience post-operative pain, loss of iron and forced rest, an increased incidence of restless legs symptoms should be expected and patients should be treated with parenteral opiate or transdermal rotigotine in advance, as these drugs can also be used if swallowing is not possible.

Patients who have had orthopedic surgery and subsequent postoperative immobilization of a limb are particularly affected by RLS.

A worsening of symptoms can also be caused by use of dopamine antagonists or opiate antagonists.

3. The treating physician and the anesthetist must be informed, in order to avoid all the dopamine antagonist drugs. This particularly applies to all nausea treatments against with the sole exception of Domperidone.

The following substances should not be administered to RLS patients:

1. Neuroleptics (butyrophenones, phenothiazines),
2. Antiemetics with dopamine antagonistic effect (metoclopramide, atosil) with the exception of domperidone
3. Tri- and tetracyclic antidepressants (trimipramin, amitriptyline, etc.)
4. Opiate antagonists (naloxone, etc.)
5. Antihistamine substances can exacerbate RLS in some cases

The following substances are permitted in case of RLS:

1. Dopaminergics (pramipexole, ropinirole, rotigotine patches, etc.)
2. Benzodiazepines (clonazepam, diazepam, etc.)
3. Benzodiazepine agonists (zolpidem etc..)
4. Anticonvulsants (pregabalin, gabapentin, valproic acid...)
5. Opiates such as tilidine, oxycodone, dihydrocodeine, methadone etc.
6. Newer antidepressants (bupropion, reboxetin, duloxetine)

Inhalation anesthetics and barbiturate anesthesia do not pose a risk to RLS patients. In the case of a peridural anesthesia, occasional strong involuntary periodic leg movements have been observed that may even interfere with surgery (e.g. hip surgery). In these cases, epidural morphine should be administered in addition to the administration of local anesthetics.

Information for physicians in Switzerland:

Prof. Dr. J. Mathis
Medical Advisor
Swiss Restless Legs Patient association
Head Sleep-Wake Centre

Prof. Dr. F. Stüber
Director and Head of the Departments of
Anaesthesiology and Paintherapy
Inselspital, 3010 Bern

Tel. 031 632 3054 / Fax: 031 632 9679 / Mail: johannes.mathis@insel.ch