



AMERICAN JOURNAL OF PHARMTECH RESEARCH

Journal home page: <http://www.ajptr.com/>

A Review On Clinical Features and Management of Restless Legs Syndrome

J. Ravindra*, L. Yogambica, G. Vamshika, CH. Roshini Goud, G. Sai Sruthi

Pullareddy Institute Of Pharmacy

ABSTRACT

Restless legs syndrome is a nervous system disorder that causes overpowering urge to move your legs. It's a sleep disorder it usually happens or gets worse while we are at rest. RLS is a lifelong condition with no cure, but medication can help to manage symptoms. Patients with RLS may report sensation such as almost irresistible urge to move the legs that are not painful. It generally worsens with age and disrupts sleep. RLS can lead to significant physical and emotional disability. Symptoms of RLS include unusual feeling in their legs (like itching, crawling, pulling, aching, throbbing or pins and needles.) and powerful urge to move their legs to make sensation go away. Lifestyle changes are sufficient to overcome RLS. Mild to moderate or severe symptoms of RLS can be treated with pharmacological drugs.¹

Keywords: RLS, Throbbing.

*Corresponding Author Email: yogambica2001@gmail.com

Received 1 January 2022, Accepted 30 January 2022

Please cite this article as: Ravindra J *et al.*, A Review On Clinical Features and Management of Restless Legs Syndrome . American Journal of PharmTech Research 2022.

INTRODUCTION

RLS is also known as, “Willis-Ekbom disease”. RLS is a nervous system disorder with unknown cause. This condition can also happen in other areas like chest, arms and head. The feeling usually happens on both sides of body and rarely on one side or they might start on one side and move to the other. It may get worse if left untreated²

Signs and Symptoms:³

Strange itching, tingling, crawling, pulling, aching, throbbing sensations occurring deep within legs, these sensation may also occur in arms.

A compelling urge to move limbs to relieve these sensations.

Restlessness – floor pacing, tossing & turning in bed, rubbing the legs.

Other Symptoms: Sleep disturbances and day time sleepiness.

Risk Factors⁶

- Heredity
- Parkinson’s disease
- Pregnancy.⁵
- Periodic limb movement disorder (PLMD).

TYPES:

There are two main types of RLS

- 1.Primary or Idiopathic RLS
2. Secondary RLS

Primary or Idiopathic RLS:

It is the most common type and has following characteristics

- It can start at childhood.
- It may be due to genetic cause.
- It generally begins before the age of 40.
- Once primary RLS starts, it tends to be lifelong.

Symptoms may be sporadic, or gradually worsen and become more prevalent over time. In mild cases, the person may have no symptoms for a long time.

Secondary RLS:

A secondary disorder is caused by another disease or condition.

Secondary RLS usually starts after the age of 45years, and it does not tend to be hereditary. This type of RLS is distinctly different:

- Sudden onset.

- More severe symptoms.
- Symptoms do not usually worsen over time.

Diseases and symptoms that can trigger secondary RLS include:

- Diabetes
- Rheumatoid Arthritis
- Pregnancy
- Kidney failure
- Parkinson's disease
- Neuropathy
- Some medications like selective serotonin reuptake inhibitors (SSRIs) and antidepressants may trigger RLS by affecting the activity of dopamine.

Causes:⁴

- Actually there is no particular cause for RLS but it can sometimes be caused due to imbalance of dopamine.
- Long term use of medications like antiemetics and antidepressant drugs can worsen the situation.
- Hormonal changes or pregnancy can enhance the symptoms.
- Lifestyle: Lack of sleep, other sleep disorders like apnea can trigger symptoms or make them worse, alcohol, tobacco and caffeine intake may worsen the symptoms.
- Chronic diseases like Parkinson's, Kidney diseases, Iron deficiency anaemia.

Complications:

RLS does not lead to any major or severe complications but may lead to insomnia due to lack of sleep, impairment in quality of life resulting in depression.

Diagnosis:⁷

Family history

Polysomnography (sleep testing) - to diagnose sleep disturbance and determine the periodic limb movements.

Tests to identify underlying diseases like Anemia and Metabolic disorders.

- Blood cell count
- Hemoglobin
- Ferritin test
- TSH levels

Needle Electromyography and Nerve conduction studies are performed to check nerve problems like Neuropathy.

Treatment¹²

PHARMACOLOGICAL TREATMENT:⁸

Dopamine Agonists:

Drugs include PRAMIPEXOLE (Mirapex)(9), ROTIGOTINE (Neupro) and ROPINIROLE (Requip)¹⁰. These are the most often first medicines used to treat RLS. Dopaminergic agents: **SINEMET** – a combination of LEVODOPA and CARBIDOPA increase level of dopamine in brain and may improve leg sensation in RLS.

Benzodiazepines: ALPRAZOLAM (Xanax), CLONAZEPAM (Klonopin) & TERRAZEPAM (Restonil) are sedatives. They do not relieve symptoms but they help you to sleep through the symptoms.

Opiates: HYDROCODONE, METHADONE, CODEINE, OXYCODONE are used to relieve painful symptoms of RLS.

Anticonvulsants: GABAPENTIN may help relieve symptoms of RLS as well as chronic pain.¹¹

Alpha 2 delta agonist: DIPYRIDAMOLE antiplatelet drug that reduces motor and sensory symptoms of RLS and increases sleep duration.

NONPHARMACOLOGICAL TREATMENT:¹³

- Good sleep routine.¹⁵
- Take iron supplements, folic acid, magnesium & vitamin B12.
- Try a cool shower or soak in warm bath before bedtime.
- Experimenting with heating pad or ice pack on legs can relieve symptoms.
- **Massage:** Rubbing your muscles especially calves, may help ease your pain and symptoms. Massaging right before bed may be helpful.
- **Exercise:** Stretching exercise before bed, don't exercise too hard at day or night as too vigorous exercise can make RLS symptoms worse.¹⁴
- **Stress-relief:** Relax and calm your anxiety by deep breathing, yoga and meditation.
- **Electrical stimulation:** Sometimes stimulating your feet and toes with vibrations or electrical impulses can give relief from RLS symptoms.
- **Lifestyle changes:**
- Avoid or limit alcohol, caffeine and nicotine.
- Stretch your legs beginning and end of the day.

- Avoid daytime naps.
- Soak legs in warm water before bed time.
- Regular iron level testing and blood test should be done.
- Maintain regular sleep schedule.

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