

Table 12.3 Medications Used to Treat Restless-Leg Syndrome

Medication	Indications	Dosing	Side effects affecting rehab	Other side effects or considerations
Iron-replacement therapy				
Ferrous sulfate	Iron deficiency causing RLS	325 mg given 3 times/day with meals.	Cog: 0 S: 0 A: 0	Take with food to minimize stomach upset. High risk of constipation; take a laxative with iron. Separate administration from products containing calcium, magnesium, or aluminum to ensure that iron is absorbed. Separate from products containing tetracycline to prevent decreased absorption of iron and tetracycline.
Ferrous gluconate	Iron deficiency causing RLS	325 mg given 3 times/day with meals.	Motor: 0 D: ++ Com: 0	
Ferrous fumarate	Iron deficiency causing RLS	200 mg given 3 times daily with meals.	F: 0	
Dopamine precursor				
Carbidopa–levodopa (Sinemet, Sinemet CR, Parcopa)	RLS	½ to 1 of the 25/100 mg tablets taken 30 min to 1 h before bedtime; may increase to maximum dose of 50/200/day.	Cog: +++ S: +++ A: +++ Motor: +++ D: +++ Com: ++ F: ++++	Nausea, vomiting, headache, drowsiness, nightmares. Avoid high-protein meals, which can decrease absorption, near bedtime. Take on an empty stomach. Avoid driving or operating machinery.
Dopamine agonists				
Ropinirole (Requip)	First-line treatment for severe RLS	Start at 0.25 mg once/day 1-3 h before bedtime; may increase to 0.5 mg after 2 days and to 1 mg/day after 7 days. Titrate by 0.5 mg/wk as needed to maximum dose of 4 mg/day.	Cog: +++ S: +++ A: +++ Motor: +++ D: +++ Com: ++ F: +++	Nausea, fainting spells, lightheadedness, sweating, flushing, xerostomia, sleep attacks. Contact physician if sleep attack occurs. Take with or without food with glass of water. Avoid using alcohol and driving or operating machinery. Treat xerostomia with sugarless gum or drinking water.
Pramipexole (Mirapex)	First-line treatment for severe RLS	Start at 0.125 mg once/day 2-3 h before bedtime; may double dose every 4-7 days to maximum dose of 0.5 mg/day.	Cog: +++ S: +++ A: +++ Motor: +++ D: +++ Com: ++ F: +++	Nausea, fainting spells, lightheadedness, sweating, flushing, xerostomia, sleep attacks. Contact physician if sleep attack occurs. Take with or without food with glass of water. Avoid using alcohol and driving or operating machinery. Treat xerostomia with sugarless gum or drinking water.
Anticonvulsants				
Gabapentin (Neurontin)	Used to relax blood vessels and treat symptoms of mild to moderate RLS	Start at 100 mg 3 times/day; may titrate every 3 days to final dose of 300-900 mg/day. Take every 8 h with or without food. Adjust for renal impairment.	Cog: ++ S: ++ A: + Motor: +++ D: 0 Com: ++ F: +++	Somnolence, dizziness, nausea, constipation, peripheral edema, tremor, dizziness, fatigue, ataxia, drowsiness, weight gain, behavioral changes. Contact physician for symptoms of allergy or for worsened mood or suicidal thoughts.
Carbamazepine (Tegretol)	Used to relax blood vessels and treat symptoms of	Start at 200 mg/day; may titrate to 400 mg/day.	Cog: ++ S: ++ A: + Motor: ++ D: ++	Ataxia, blurred vision, drowsiness, agitation, disequilibrium, dizziness, cardiac arrhythmias, congestive heart failure. Avoid using alcohol and driving or operating machinery.

From L. Carl, J. Gallo, and P. Johnson, 2014, *Practical Pharmacology in Rehabilitation: Effect of Medication on Therapy* (Champaign, IL: Human Kinetics).

Medication	Indications	Dosing	Side effects affecting rehab	Other side effects or considerations
	mild to moderate RLS		Com: ++ F: +++	Genetic testing required prior to initiation in Asians (increased risk of AHS).
Benzodiazepines				
Clonazepam (Klonopin)	Insomnia and anxiety associated with RLS	Start at 0.5 mg/day; may increase to maximum dose of 2 mg/day.	Cog: + S: + A: ++ Motor: ++ D: ++ Com: ++ F: ++	Daytime sleepiness, cognitive impairment, nausea, constipation, diarrhea, fainting spells, confusion, depression, headache, dependence. Avoid using alcohol and driving or operating machinery.
Alprazolam (Xanax)	Insomnia and anxiety associated with RLS	Start at 0.25 mg/day; may titrate to maximum dose of 1 mg/day.	Cog: + S: + A: ++ Motor: ++ D: ++ Com: ++ F: ++	Daytime sleepiness, cognitive impairment, nausea, constipation, diarrhea, fainting spells, confusion, depression, headache, dependence. Avoid using alcohol and driving or operating machinery.
Opioids				
Oxycodone (OxyIR, Roxicodone)	Pain associated with severe RLS not relieved by Tylenol or NSAIDs	2.5-10 mg every 4-8 h.	Cog: ++ S: ++ A: 0 Motor: +++ D: ++ Com: ++ F: ++	Constipation, urinary retention, sleepiness, itching, dizziness, xerostomia. Take with food for symptoms of nausea or vomiting. Treat xerostomia with sugarless gum or hard candy or by increasing water intake. Tolerance and potential abuse limit usefulness. Avoid using alcohol and driving or operating machinery.
Oxycodone SR (Oxycontin)	Pain associated with severe RLS not relieved by Tylenol or NSAIDs	10-40 mg every 12 h.	Cog: ++ S: ++ A: 0 Motor: +++ D: ++ Com: ++ F: ++	Constipation, urinary retention, sleepiness, itching, dizziness, xerostomia. Take with food for symptoms of nausea or vomiting. Treat xerostomia with sugarless gum or hard candy or by increasing water intake. Tolerance and potential abuse limit usefulness. Avoid using alcohol and driving or operating machinery.
Methadone (Dolophine)	Pain associated with severe RLS not relieved by Tylenol or NSAIDs	5-30 mg/day.	Cog: ++ S: ++ A: 0 Motor: +++ D: ++ Com: ++ F: ++	Constipation, urinary retention, sleepiness, itching, dizziness, xerostomia. Take with food for symptoms of nausea or vomiting. Treat xerostomia with sugarless gum or hard candy or by increasing water intake. Tolerance and potential abuse limit usefulness. Avoid using alcohol and driving or operating machinery.
Tramadol (Ultram)	Pain associated with severe RLS not relieved by Tylenol or	Start at 50 mg 4 times/day; titrate to maximum dose of 400 mg/day. Sustained release: Start at 100 mg	Cog: ++ S: ++ A: 0 Motor: ++ D: ++ Com: ++	Constipation, urinary retention, sleepiness, itching, dizziness, xerostomia, headache. Take with food for symptoms of nausea or vomiting. Treat xerostomia with sugarless gum or hard candy or by increasing water intake.

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Medication	Indications	Dosing	Side effects affecting rehab	Other side effects or considerations
	NSAIDs	once/day; titrate to maximum dose of 300 mg/day.	F: ++	Tolerance and potential abuse limit usefulness. Avoid using alcohol and driving or operating machinery. Avoid with medications that increase serotonin.

Cog = cognition; S sedation; A = agitation or mania; Motor = discoordination; D = dysphagia; Com = communication; F = falls; NSAID = nonsteroidal anti-inflammatory drug; RLS = restless-leg syndrome; AHS = anticonvulsant hypersensitivity syndrome.

The likelihood rating scale for encountering the side effects is as follows: 0 = Almost no probability of encountering side effects. 0/+ = Slight probability of encountering side effects with higher doses. + = Little likelihood of encountering side effects. +/++ = Low probability of encountering side effects; however, probability increases with increased dosage. ++ = Medium likelihood of encountering side effects. +++ = High likelihood of encountering side effects, particularly with high doses. ++++ = Highest likelihood of encountering side effects; best to avoid in at-risk patients.