

# Restless legs syndrome

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## 1 Restless legs syndrome is the most common movement disorder, characterized by an irresistible, often uncomfortable, urge to move the legs when at rest

Restless legs syndrome affects 5%–10% of the population, most commonly in women older than 35 years of age. Of all people seeking medical care, 2%–3% will have restless legs syndrome that affects their sleep, daytime productivity, cognition or mood, and will require treatment.<sup>1</sup> Restless legs syndrome may be primary (age at onset usually < 45 yr) or secondary to a medical condition (e.g., iron deficiency, renal disease) that presents later.<sup>1</sup> Although the syndrome may be intermittent (< 2 times/wk in the past year with ≥ 5 lifetime events), most cases are chronic (> 2 times/wk in the past year).<sup>1</sup>

## 2 The diagnosis of restless legs syndrome is clinical

The syndrome is diagnosed based on specific criteria,<sup>1</sup> using the mnemonic “URGES”: Urge to move the limbs, usually associated with paresthesias or dysesthesias; Rest brings out symptoms or worsens them; Getting up and moving leads to at least partial relief; Evenings are when symptoms worsen; and Secondary causes must be excluded (e.g., myalgia, venous stasis, leg edema, arthritis, cramps, positional discomfort, neuropathy or drug-induced akathisia).<sup>1</sup>

## 3 Secondary causes of restless legs syndrome and exacerbating factors should be recognized and treated

This includes managing renal impairment,<sup>2</sup> treating serum ferritin below 50 µg/L,<sup>3</sup> eliminating antidopaminergic drugs, addressing sleep hygiene, and reducing caffeine and alcohol intake. About two-thirds of patients resort to alternative treatments.<sup>2</sup> Regular physical activity and cognitive behavioural therapy may improve mood, anxiety and sleep, but require high-quality randomized controlled trials to confirm their efficacy.<sup>2</sup>

## 4 Restless legs syndrome is not associated with an increased risk of developing a neurodegenerative disorder, such as Parkinson disease

Although dopamine deficiency is implicated in restless legs syndrome, it involves areas outside the nigrostriatal pathway affected in Parkinson disease.<sup>3</sup> The risk of restless legs syndrome in Parkinson disease increases with disease and treatment duration, independent of antiparkinsonian drug dosages.<sup>4</sup>

## 5 Treatment may be required for life

The best evidence exists for use of dopaminergic and anticonvulsant agents in treating primary restless legs syndrome (Appendix 1, at [www.cmaj.ca/lookup/suppl/doi:10.1503/cmaj.160527/-/DC1](http://www.cmaj.ca/lookup/suppl/doi:10.1503/cmaj.160527/-/DC1)), with dopamine agonists favoured.<sup>5</sup> Augmentation, which consists of symptoms that occur earlier in the day with worsening severity, involvement of other body parts or shortened medication effect, may appear with chronic dopaminergic therapy and can be managed by splitting the dose, taking the medication earlier or switching to a longer-acting dopamine agonist or patch.<sup>3</sup>

## References

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