Restless Leg Syndrome (RLS)

Definition:
The irresistible urge to move legs and arms (less common) in order to relieve an uncomfortable sensation that has been described as:
- Aching
- Burning
- Crawling (“ants, bugs, or worms crawling over their legs”)
- Creeping
- Electric shock *
- Itching
- Pulling
- Tingling

This condition usually occurs at night or when seated for a prolonged period (i.e. movie theatre, airplane, during a meeting, etc.)

Impact
Sleep can be disrupted which can lead to excessive daytime sleepiness and its sequelae. Daily interactions (i.e. business meetings, social gatherings, etc.) may also be negatively impacted.

Diagnosis
- This is a clinical diagnosis. A sleep study is NOT indicated for this condition
- History and physical examination findings
  - Uncomfortable sensation in the legs with a clear need or urge to move the legs
  - The symptoms are worse at night
  - The symptoms come on with rest
  - The symptoms are relieved with movement

Causes/Worsens RLS Symptoms
- Alcohol
- Caffeine
- Familial (onset usually < 45 years old)
- Hypoglycemia
- Idiopathic
- Iron Deficiency **

Medications (especially those with dopamine antagonistic mechanism of action)
- Antidepressants- Tri-cyclic antidepressants (TCAs), Selective Serotonin Reuptake Inhibitors (SSRIs)
- Antiemetics- especially prochlorperazine (Compazine), metoclopramide (Reglan)
- Antipsychotics – haloperidol (Haldol)

* Exclude radiculopathy and other pain syndromes
** If iron deficiency is present treatment and identification of etiology should be explored.
*** Always exclude and/or correct iron deficiency before considering other pharmacologic therapies
NMCP Sleep Medicine Referral Guidelines

- Antihistamines- especially diphenhydramine (Benadryl)
- Calcium channel blockers
- Lithium
- Neuroleptics- phenytoin (Dilantin)

Pregnancy (usually due to iron deficiency)

Tobacco

**Treatment**
- Non-pharmacologic
  - Gentle stretching exercises
  - Massage
  - Warm baths
  - Quit smoking
  - Decrease caffeine intake
- Iron replacement (goal: Ferritin >50) ***
- Dopamine agonist [pramipexole (Mirapex) or ropinirole (Requip)]
- Gabapentin (Neurontin)
- Benzodiazepines (try to avoid)

Referred for additional sleep medicine subspecialty evaluation only when:
- Another sleep disorder is suspected
- Patient fails therapy

**References**
http://www.nhlbi.nih.gov/health/health-topics/topics/rls/causes.html
http://www.hopkinsmedicine.org/neurology_neurosurgery/specialty_areas/restless-legs-syndrome/what-is-rls/
http://www.sleepfoundation.org/article/sleep-related-problems/restless-legs-syndrome-rls-and-sleep

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