RESTLESS LEGS SYNDROME (RLS) AND ATAXIA
FOR THE CLINICAL NEUROLOGIST

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Restless Legs Syndrome (RLS)
Definition: Restless leg syndrome (RLS) is a common sensorimotor disorder which causes leg discomfort, an urge to move the legs and relief with carrying out the movements. RLS causes significant distress and impairs the quality of life of the afflicted patients, but remains under-diagnosed and undertreated.

Epidemiology: Prevalence of RLS in different parts of the world
Clinical criteria for diagnosis of RLS
Differential Diagnosis of RLS:
- Primary RLS : Genetics
- Secondary RLS: Iron deficiency, Renal failure, Pregnancy, Parkinson's disease, Neuropathy and Medications that may aggravate RLS

Role of Iron in RLS and the research evidence to support it
Association between Periodic Leg Mvmts of Sleep (PLMS) and RLS
• PLMS are episodic, repetitive and highly stereotyped limb mvmts (0.5-10 sec in duration) that occur during sleep separated by intervals of 5-90 seconds. PLMS in > 80% of patients with RLS who undergo polysomnography but most people with PLMS do not have RLS. On polysomnography, PLMS are abnormal when >15/hour.

Work-up of RLS patient
Management of RLS patient
Initial management: non-pharmacologic approaches, iron replacement if ferritin is low, avoid dopaminergic meds if possible, use α2δ ligands (Gabapentin enacarbil ; pregabalin; gabapentin), etc.

Augmentation and Rebound
Augmentation: Occurrence of symptoms earlier in the day, increase of symptom severity and/or involvement of other limbs.
Rebound: Recurrence of symptoms early in the morning or late night.

Strategies for Management of patients with more advanced RLS, and patients with augmentation and Rebound.

Suggested Reading:

Ataxia denotes a syndrome of gait imbalance and incoordination with limbs, and dysarthric speech which usually results from the disorder of the cerebellum or its connections.

Classifications of Ataxias:
A) Genetic Ataxias:
   Autosomal dominant,
   autosomal recessive,
   X-linked and
   mitochondrial

B) Non-Genetic Ataxias:
   Structural/Degenerative
   Toxic/Metabolic
   Autoimmune/Inflammatory/Paraneoplastic
   Infectious
   Drug Induced

I intend to highlight treatable ataxias and the most common ataxias in each of the categories.

Highlight on Acute Ataxias (which may represent neurologic emergencies)
Clinical approach to a patient with Ataxia
   A practical algorithm for testing ranging from screening lab tests, imaging to genetic testing.

Treatment and Management of Ataxias

Suggested Reading: