

Movement disorders, involuntary / tic disorders

(February 2017)

Rationale

Movement disorders are classified as excessive (hyperkinetic) or reduced (bradykinetic) activity. Diagnosis depends primarily on careful observation of the clinical features.

Causal Conditions

(list not exhaustive)

- Hyperkinetic
 - a. Tics
 - Primary (sporadic and inherited)
 - a. Tourette syndrome
 - b. Huntington disease
 - Secondary
 - a. Infections (e.g., encephalitis, Creutzfeldt-Jakob)
 - b. Drugs (e.g., stimulants, levodopa)
 - b. Dystonia
 - Primary (sporadic and inherited)
 - Dystonia plus syndromes (e.g., medication)
 - c. Stereotypies (typically with mental retardation or autism)
 - d. Chorea/Athetosis/Ballism
 - e. Essential tremor

- f. Myoclonus
- Bradykinetic
 - a. Parkinson disease
 - b. Wilson disease
 - c. Huntington disease
- Tremor
 - a. Resting (e.g., Parkinson, severe essential)
 - b. Intention (e.g., cerebellar disease, multiple sclerosis)
 - c. Postural/Action (e.g., enhanced physiologic, essential)

Key Objectives

Given a patient with a movement disorder, the candidate will diagnose the cause, severity and complications, and will initiate an appropriate management plan.

Enabling Objectives

Given a patient with a movement disorder, the candidate will

- list and interpret critical clinical findings, including
 - a. describing the abnormal movement accurately after careful observation (at rest and in action) to differentiate between various types and causes of movement disorders;
 - b. performing a history and physical examination to look for reversible causes (e.g., medications, Wilson disease);
 - c. identifying key physical findings characteristic of Parkinson disease (e.g., rigidity, akinesia);
- list and interpret critical investigations including
 - a. testing for Wilson disease, if indicated;
 - b. imaging studies or other tests, as appropriate;
- construct an effective initial management plan, including
 - a. initiating medications for common conditions (e.g., essential tremor);

- b. recognizing side effects of medication and modifying as necessary (e.g., dystonia, "on/off" phenomenon);
- c. determining if the patient requires specialized care for diagnosis or management (e.g., genetic testing);
- d. counselling about the psychosocial impact of the disorder.