

Dystonia and Parkinson's disease

What is Dystonia?

- A movement disorder or symptom characterized by involuntary muscle contraction that may be sustained (tonic), spasmodic (tonic), patterned, or repetitive.
- Contractions frequently cause twisting or repetitive movements or abnormal and sometime painful postures or positions

Classification of Dystonia

- By etiology
 - Primary
 - Secondary
- By distribution of affected body regions
- By age of onset

Classification by distribution

- Focal
- Segmental
- Multifocal
- Generalized
- Hemidystonia

Focal Dystonia

- Cervical dystonia (spasmodic torticollis)
- Blepharospasm
- Spasmodic dysphonia
- Limb dystonia

Dystonia associated with PD

Cervical Dystonia (neck)

Limb Dystonia (foot, arm)

Pisa Syndrome (trunk lateral flexion)

Camptocormia (trunk anterior flexion)

Blepharospasm (eye)

Oromandibular dystonia (mouth)

Dystonia associated with PD

- Dystonia associated with PD medications (acute)
 - Wearing off of Sinemet (toe curling, foot dystonia)
 - Too much sinemet (oromandibular dystonia, blepharospasm)
- Dystonia associated with PD condition (Chronic)
 - Neck (anterocollis)
 - Back (pisa syndrome, camptocormia)
 - Limb (foot, hand)

Treatment of dystonia associated with PD

- Adjustment of PD medications
 - Early morning dystonia: add PD medication at bedtime
 - Wearing off. Shorten dosing interval, add agonists, COMT inhibitors
 - Dystonia associated with dyskinesia. Lower PD medications, add Amantadine
 - Try Baclofen, Artane but watch for side effects
- Chemodenervation (Botox, Myobloc injection)
 - May be effective in some cases but the benefit wears off in a few months. Need repeated injection.
- Deep brain stimulation (DBS)
 - May improve posture
 - Some patients develop blepharospasm after DBS.