Nursing Care of Patients with Movement Disorders

Catholic Health
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Types of Movement Disorders

- Parkinson’s disease
- Huntington’s disease
- Dystonia
- Tremors
- Myoclonus
- Psychogenic movement disorders
General Symptoms of Movement Disorders – Parkinson’s & Huntington’s Disease

- Tremor
- Rigidity
- Braykinesia
- Chorea
- Spasticity
- Rigidity
- Sleep disturbances
- Urinary incontinence
- Dysphagia
- Gait/balance issues

- Pain
- Paresthesia, numbness, burning
- Seborrhea, sialorrhea, rhinorrhea
- Orthostatic hypotension
- Depression
- Fatigue
- Dementia
Parkinson’s Disease

- Pathophysiology
- Primary Symptoms
Parkinson’s Disease – Nursing Concerns

Non motor Symptoms

- Dysphagia
- Urinary symptoms
  - Urgency
  - Frequency
  - Nocturia
- Incontinence

Motor Symptoms

- Tremor
- Rigidity
- Bradykinesia
- Gait disorder
- Postural instability
Management of Symptoms in Movement Disorders – Nonmotor Dysphagia

- Dysphagia is common in PD but under diagnosed.
- VFS gold standard for diagnosis
- Causes:
  - Lingual tremor
  - Impaired pharyngeal peristalsis
  - Restricted opening of the upper esophageal sphincter
Management of Symptoms in Movement Disorders – Nonmotor Dysphagia

- Nursing Swallow screen
- Assess for weight loss history, heartburn
- Positioning
  - Encourage patient to keep chin parallel to floor
- Energy conservation techniques
- Patient/family education
  - Increased H2O intake & limit dairy products to decrease mucus
- Nutrition, ST, OT referral
  - Aspiration precautions
  - Altered diet texture
Management of Symptoms in Movement Disorders – Non-motor Urinary Incontinence

- Toileting programs
- Fluid balance
- Urology referral
Management of Symptoms in Movement Disorders – Non-motor Urinary Incontinence

Medications

- Peripheral anticholinergics
  - Oxybutynin (Ditropan)
  - Tolterodine (Detrol)
  - Solifenacin (VESIcare)
- Alpha-blockers
  - terazosin (Hytrin)
  - doxazosin (Cardura)
- Botulinum toxin injections
Management of Symptoms in Movement Disorders – Motor Symptoms

Gait instability

- Gait issues
  - TUG test (time up and go test)
  - Utilize arms of chairs to push up to rising
  - Recognize patients have difficulty with initiating first step of gait & may freeze
  - Slow movement is normal
  - Recognize patient takes many small steps to turn and navigate with ambulation
  - Be mindful of risk of orthostatic hypotension in this population
    - Increased risk with position changes, eating, and exposure to extreme weather
  - Stooped posture changes center of gravity
  - PT/OT
  - Music Therapy
  - Patient/family education
Management of Symptoms in Movement Disorders – Motor Symptoms

Gait instability

• Tremor
  • Present in 80% of patients, symmetrical and occurs at rest
  • Precipitated by anxiety, stress and contralateral hand
  • Worsens with distracting the patient with mental tasks
  • Mainly managed with medications
  • Weighted utensils for eating

• Rigidity
  • Present in about 90-99% of patients
  • Unilateral or bilateral
  • Cogwheel
  • Difficulty turning over in bed
  • Mainly managed with medication
  • PT, OT for maintaining ROM
  • Music therapy
Best Practice for Hospitalized Patients with PD

- When hospitalizing a patient, do not change PD medication schedule.
- If meds need to be held for testing they should be resumed ASAP unless patient is vomiting or severely incapacitated.
- Do not mix MAO-B inhibitors with meperidine.
- Do not stop carbidopa/levodopa or amantadine abruptly, as this can lead to neuroleptic malignant-like syndrome.
- If the patient becomes confused, consider urinary or lung infections, pain medications, or benzodiazepines as a potential cause.
  - [http://toolkit.parkinson.org/node/70](http://toolkit.parkinson.org/node/70)
DaTSCAN® is a commercially available test
Identifies patients with presynaptic parkinsonism.
This test cannot differentiate between PD and other forms of presynaptic parkinsonism
Emerging trends for Parkinson’s Disease Management

- Incorporation of the Nintendo Wii® or other movement-dependent game (X-Box®, Kinect®) into an exercise regimen can improve mood and functional mobility
- Tia chi & yoga assists in balance, bone density improves breath support & control
- Nano and microparticle encapsulation
- Light therapy was found effective in reducing daytime sleepiness in patients with PD sleep disorders
  - 2014 American Academy of Neurology Meeting in Philadelphia
Parkinson’s Disease Resources

- Prescription assistance programs:
  - Melvin Weinstein Parkinson’s Foundation
  - Application for assistance at link below, as well as a comprehensive list of specific medications and how to get assistance
  - http://www.mwpf.org/index.html

- TogetherRX
  Promise to offer 40-60 percent savings on this list on a certain list of medications. There are some PD medications on this list.

- NeedyMeds
  Compiles assistance programs by state
Parkinson’s Disease Resources for Patients

- **Aware in Care**
  - Program to assist in appropriate care being provided to hospitalized PD patients
  - Contains an action plan and materials patients can use to assure they receive appropriate care
  - [http://www.awareincare.org/](http://www.awareincare.org/)

- **National Parkinson Foundation Western New York**
  - 300 International Drive Suite 224
  - Williamsville, NY 14221
  - United States
  - (716) 449-3795
  - lsoos@niagara.edu