

PD in the ER /Hospital

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PD Overview

- Prevalence of PD is approximately 1.6% in people over 65 YO, rising to 3% in people over 80 YO
- Number of individuals affected by PD is expected to double in the next several decades
- Increased life expectancy and rapidly increasing aging population accounts for this

PD: Hospitalization

- Progressive disability in PD, in conjunction with other comorbid conditions is associated with increased number of ER visits and inpatient services
- Parkinson patients and their caregivers need to be informed about how to ensure they receive good PD management while in the ER/hospital

PD: Hospitalization /ER Visits

- Be aware trips to the ER for management of increased dyskinesia or prolonged “off” periods are best avoided
- These episodes will eventually resolve spontaneously and it is better to stay at home in a calm, safe environment

PD: Hospitalization

- Frequency of hospitalization is 7-28%/year
- PD patients are 1.4 times more likely to be hospitalized
- Length of hospital stay is generally 2-14 days longer than non-PD patients
- 50% of PD admissions involve advanced PD patients

Causes of Hospitalization in PD

- Direct disease related
 - Motor complications
 - Psychiatric symptoms
 - Autonomic dysfunction
 - Side effects of anti-PD meds
- Indirect disease related: trauma & pneumonia/infection
- Non-PD Related

Reducing the Chance of PD Hospitalization

- Fall prevention measures
- Verifying medication schedule is followed and addressing any medication side effects-80% compliance resulted in 49% fewer ER visits and 30% less hospitalization
- Recognizing/preventing early symptoms of infection
- Monitoring the patient's home situation

Reducing the Chance of PD Hospitalization

- Fall prevention
 - Physical therapy & assistive devices
- Infection prevention
 - Pneumonia-swallowing studies evaluate dysphagia
 - Urinary-manage bladder dysfunction
- PD medication issues (motor fluctuations, dyskinesia, adverse effects)

Targeting these problems helps to avoid hospitalizations and improves quality of life.

PD: Hospitalization

- Timely recognition and proper management of PD-specific hospitalization-related problems is very important for a positive patient experience
- Many health professionals do not have extensive expertise in PD management
- Having this information can prevent hospitalization-related problems

PD: Hospitalization

- The neurologist/PCP who takes care of you and manages PD medications may not have privileges at the hospital where you are admitted
- There is also a nursing shortages &/or cuts in staffing

PD: Hospitalization/Surgery Required

Elective Pre-operative Planning in PD

- Can general anesthesia be avoided?
- Can you take an early morning dose of carbidopa/levodopa in the early morning?
- Ask if it is possible to be 1st on the morning surgery list to avoid long periods without medication

Elective Pre-Operative Planning in PD

- Bring your medications with you in original bottles and their schedule
- Stop MAO-b inhibitors (selegiline, rasagiline, safinamide) 2 weeks before elective surgery due to possible interaction with opiate analgesics

Post-operative Medication in PD

- Minimize pain medication to avoid confusion
- Dopamine blocking medications are frequently administered postoperatively for management of delirium, nausea & GI motility problems
 - These meds can have significant negative consequences on PD motor symptoms

Post-operative Medication in PD

- Dopamine blocking medications induce PD symptoms
 - For postop nausea-avoid metoclopramide, Compazine, prochlorperazine
 - If confused-avoid conventional antipsychotics (haloperidol, risperidone, olanzapine); quetiapine, pimavanserin are better choices

Common Problems During Hospitalization in PD population

- Aspiration pneumonia
 - Impaired respiratory function, chest wall rigidity & dysphagia
- Urinary tract infections
 - Autonomic dysfunction, cognitive/mobility impairments predispose
- Gastrointestinal complications
 - Dysphagia, gastric dysmotility/bowel obstruction

Common Problems During Hospitalization in PD population

- Postural hypotension
- Agitation/confusion/hallucinations
 - Can occur in absence of dementia
 - Reported in up to 80% of PD patients postoperatively
 - Delirium usually multifactorial-med changes, infections, impaired sleep-wake cycles, effects of anesthesia, preexisting cognitive impairment
- Pressure ulcers

Common Problems During PD Hospitalization

- Sleep disorders
- Nonadherence to medication schedules
- Antidopaminergic medications prescribed
 - Metoclopramide
 - Antipsychotics

Falls in PD in the Hospital

- PD patients are already at risk for falls and many factors can increase the risk in the hospital
 - Care related (poor lighting, slippery floors)
 - Patient related (visual/cognitive/motor impairment)
 - Medication related (sleep aids, benzodiazepines, narcotics, antihistamines increase fall risk)

Improved Care in PD Patient Hospitalized

- Continue PD medications on home schedule
- Educate staff/providers regarding disease and how patient is affected
 - Speech problems can affect intercom use
 - Hand dexterity may affect eating/hygiene
 - Bed turns, transfer, walking assistance may be required

Improved Care in Hospitalized PD Patient

- Fall prevention
- Monitor for any sign of infection
- Sufficient nutritional intake
- Adequate fluid intake

Improved Care in Hospitalized PD Patient

- Maintain normal bedtime schedule and avoid daytime naps
- Limit amount of light and noise at night
- Be aware some medications are not well tolerated in PD

Improved Care in Hospitalized PD Patient

- Avoid general anesthesia if possible and use local anesthesia if this is an option
- Postoperatively use lung expansion measures
- Early mobilization
- Physical therapy
- Deep venous thrombosis prevention measures

Improved Care in Hospitalized DBS/PD Patient

- Bring control device
- Ensure medical team knows of DBS
- Diagnostic ultrasounds are ok
- DBS system off during surgeries
- MRI compatibility improving-precautions necessary

Hospital Discharge Planning in PD

- Hospital social worker can provide links to community health resources
- Sufficient support in the home environment upon discharge
- Patient may require skilled or nursing care
- Caregiver respite needs
- Rehabilitation therapy

Key Points: PD/hospitalization

- Avoid hospitalization
 - Fall prevention-compliant with PT & use of canes/walkers
 - Reduce risk of infections
 - If choking, be evaluated
 - Manage urinary symptoms
- Stop MAO-b inhibitors 2 weeks before elective surgery

Key Points: PD/hospitalization

- Pack a Ready Bag
 - Medication lists-including timing
 - Living will, Power of attorney
 - Bring branded medications
 - Bring DBS control
 - Bring hearing aids and eyeglasses

Key Points: PD/hospitalization

- Facilitate Communication with medical team
- Arrange to have records sent to your PCP/neurologist
- Case manager involvement
- Consider help or home therapy