PARKINSON'S DISEASE

Fact Sheet for Nurses

Parkinson's disease is a progressive, incurable neurological disorder associated with a loss of dopamine-generating cells in the brain that results in a complex array of symptoms. It is primarily associated with progressive loss of motor control, but there are many more non-motor symptoms. Parkinson's impacts an estimated one million people in the United States.

Critical Clinical Care Considerations

- To avoid serious side effects, Parkinson's patients need their medications on time, every time — do not skip or postpone doses.
- Do not substitute Parkinson's medications or stop levodopa therapy abruptly. Doing so may cause a life-threatening condition called neuroleptic malignant syndrome (NMS).
- Write down the exact times of day medications are to be administered so that doses are given on the same schedule the patient follows at home.
- Resume medications immediately following procedures, unless vomiting or severely incapacitated.
- If an antipsychotic is necessary, use pimavanserin (Nuplazid), quetiapine (Seroquel) or clozapine (Clozaril). DO NOT use haloperidol (Haldol).
- Be alert for symptoms of dysphagia (trouble swallowing) and risk of pneumonia.
 Consult with SLP is recommended.
- Ambulate as soon as medically safe. Patients may require assistance.
 Consult with PT is recommended.

Medications That May Be Contraindicated in Parkinson's Disease

MEDICAL PURPOSE	SAFE MEDICATIONS	MEDICATIONS TO AVOID	
Antipsychotics	pimavanserin (Nuplazid, FDA approved to treat Parkinson's disease psychosis) quetiapine (Seroquel) clozapine (Clozaril)	avoid all other typical and atypical antipsychotics	
Pain Medication	most are safe to use, but narcotic medications may cause confusion/psychosis and constipation	if patient is taking MAO-B inhibitor such as selegiline or rasagiline (Azilect), avoid: meperidine (Demerol)	
Anesthesia	request a consult with the anesthesiologist, surgeon and Parkinson's doctor to determine best anesthesia given your Parkinson's symptoms and medications	if patient is taking MAO-B inhibitor such as selegiline or rasagiline (Azilect), avoid: meperidine (Demerol) tramadol (Rybix, Ryzolt, Ultram) droperidol (Inapsine) methadone (Dolophine, Methadose) propoxyphene (Darvon, PP-Cap) cyclobenzaprine (Amrix, Fexmid, Flexeril) halothane (Fluothane)	
Nausea/GI Drugs	domperidone (Motilium) trimethobenzamide (Tigan) ondansetron (Zofran) dolasetron (Anzemet) granisetron (Kytril)	prochlormethazine (Compazine) metoclopramide (Reglan) promethazine (Phenergan) droperidol (Inapsine)	
Antidepressants	fluoxetine (Prozac) sertraline (Zoloft) paroxetine (Paxil) citalopram (Celexa) escitalopram (Lexapro) venlafaxine (Effexor)	amoxapine (Asendin)	

The Parkinson's Foundation Aware In Care campaign aims to help people with Parkinson's get the best care possible during a hospital stay. For more information please visit Parkinson.org/AwareInCare or call 1-800-4PD-INFO (473-4636).



Common Symptoms of Parkinson's Disease

Motor

- Bradykinesia (slowness of movement)
- Decreased ability to swallow (dysphagia) and drooling
- Freezing—being stuck in place when attempting to walk
- · Lack of facial expression
- Low voice volume or muffled speech
- · Stiffness/rigidity of the arms, legs or trunk
- Stooped posture
- · Tremor or shaking at rest
- Trouble with balance and falls

Non-Motor

- Anxiety
- Cognitive decline and dementia
- Constipation
- Depression
- · Hallucinations and psychosis
- Impulse control disorders
- Orthostatic hypotension
- Pain
- Sexual dysfunction
- Sleep disturbances
- Urinary dysfunction

Typical Parkinson's Medications

L-DOPA	DOPAMINE AGONISTS
carbidopa/levodopa (Sinemet or Sinemet CR)	ropinirole (Requip)
carbidopa/levodopa oral disintegrating (Parcopa)	pramipexole (Mirapex)
carbidopa/levodopa/entacapone (Stalevo)	rotigotine (Neupro)
carbidopa/levodopa extended-release capsules (Rytary)	apomorphine (Apokyn)
carbidopa/levodopa enteral solution (Duopa)	

MAO-B INHIBITORS	ANTI-CHOLINERGICS	COMT INHIBITORS	OTHER
rasagiline (Azilect) selegiline (I-deprenyl, Eldepryl) selegiline HCL oral disintegrating (Zelapar)	trihexyphenidyl (formerly Artane) benztropine (Cogentin) ethopropazine (Parsitan)	entacapone (Comtan) tolcapone (Tasmar) carbidopa/levodopa/ entacapone (Stalevo) *has L-DOPA in formulation	amantadine (Symadine, Symmetrel) extended-release amantadine (Gocovri, Osmolex ER)

Special Alert: Drugs such as benzodiazepines, muscle relaxants, bladder control medications and other medications used for sleep and pain may lead to confusion, hallucinations and other symptoms.

Consequences of Untimely Medication Administration: As PD medications wear off motor symptoms return which can impact a patient's ability to function. PD patients are at risk for:

- Falls due to rigidity, postural instability, freezing and bradykinesia
- · Aspiration pneumonia due to dysphagia from impairment in the muscles needed for swallowing
- Incontinence due to rigidity and bradykinesia which impairs the ability to get to the bathroom
- Skin breakdown due to the inability to change position freely
- Emotional distress due to feelings of helplessness, frustration, anxiety, fear, depression, embarrassment

If the patient has deep brain stimulation device (DBS) or uses Duopa Therapy consult the Deep Brain Stimulation (DBS) Precautions post card, Duopa Therapy Precautions post card, and the Special Considerations pages within the Hospital Action Plan.