

About Parkinson's Disease

Parkinson's disease is a progressive, incurable neurological disorder associated with a loss of dopamine-generating cells in the brain. It is primarily associated with progressive loss of motor control, but it results in a complex array of symptoms, including many 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.
- 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.
- Do not substitute Parkinson's medications or stop levodopa therapy abruptly.
- Resume medications immediately following procedures, unless vomiting or severely incapacitated.
- If an antipsychotic is necessary, use pimavanserin (Nuplazid), quetiapine (Seroquel) or clozapine (Clozaril).
- Be alert for symptoms of dysphagia (trouble swallowing) and risk of pneumonia.
- Ambulate as soon as medically safe. Patients may require assistance.

Common Symptoms of Parkinson's Disease

Motor

- Shaking or tremor at rest
- Bradykinesia or freezing (being stuck in place when attempting to walk)
- Low voice volume or muffled speech
- Lack of facial expression
- Stiffness or rigidity of the arms, legs or trunk
- Trouble with balance and falls
- Stooped posture
- Decreased ability to swallow (dysphagia) and drooling

Non-Motor

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

Typical Parkinson's Medications

L-DOPA	Dopamine Agonist	MAO-B Inhibitors	Anticholinergics	COMT Inhibitors	Other
carbidopa/levodopa (Sinemet or Sinemet CR)	ropinirole (Requip)	rasagiline (Azilect)	trihexyphenidyl (formerly Artane)	entacapone (Comtan)	amantadine (Symadine, Symmetrel)
carbidopa/levodopa oral disintegrating (Parcopa)	pramipexole (Mirapex)	selegiline (l-deprenyl, Eldepryl)	benztropine (Cogentin)	tolcapone (Tasmar)	
carbidopa/levodopa/entacapone (Stalevo)	rotigotine (Neupro)	selegiline HCL oral disintegrating (Zelapar)	ethopropazine (Parsitan)	carbidopa/levodopa/entacapone (Stalevo) <i>*has L-DOPA in formulation</i>	
carbidopa/levodopa extended-release capsules (Rytary)	apomorphine (Apokyn)				
carbidopa/levodopa enteral solution (Duopa)					

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)	prochlorperazine (Compazine), metoclopramide (Reglan), promethazine (Phenergan), droperidol (Inapsine)
Antidepressants	fluoxetine (Prozac), sertraline (Zoloft), paroxetine (Paxil), citalopram (Celexa), escitalopram (Lexapro), venlafaxine (Effexor)	amoxapine (Asendin)

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.

Share This With Your Doctor

If you have a Deep Brain Stimulation device (DBS):

MRI Warning

- MRI should not be performed unless the hospital has MRI experience imaging a DBS device safely.
- MRI should never be performed if the pacemaker is placed anywhere other than the chest or abdomen.
- Under certain conditions, some DBS devices are safe for full-body MRI and do not need to be turned off. In other cases, devices should be turned to 0.0 volts and MRI should not be used to image structures of the body lower than the head, as dangerous heating of the lead could occur.
- Always check with your DBS team before having an MRI to make sure the procedure will be safe for you.

EKG and EEG Warning

- Turn off the DBS device before conducting EKG or EEG.
- Diathermy should be avoided.



The Parkinson's Foundation's **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).