

Drug Information Table

Dopamine-replacement Drugs – levodopa/carbidopa (Sinemet)

THERAPEUTIC USE	<ul style="list-style-type: none">• Relieves symptoms of Parkinson's disease
ADVERSE DRUG REACTIONS	<ul style="list-style-type: none">• Nausea, vomiting• Darkening of urine and sweat• Orthostatic (postural) hypotension• Dyskinesias, tremors, twitching, and other movements• Symptoms of psychosis, hallucinations, paranoia – rare• On-off episodes (random times throughout day where Parkinson's disease symptoms potentiate)
INTERVENTIONS	<ul style="list-style-type: none">• Observe client's urine and sweat for a change in color• Monitor client for this postural hypotension and prevent falling• Administer amantadine (Symmetrel) as ordered to decrease dyskinesias• Give dose four times (instead of three times) daily if symptoms present a couple hours before next dose• Decrease levodopa/carbidopa dosage• Administer 2nd-generation antipsychotics, such as quetiapine (Seroquel) to relieve psychotic symptoms if needed• Use controlled-release Sinemet (if previously using immediate-release tablets)• Administer dopamine agonist (e.g., pramipexole [Mirapex])• Administer COMT inhibitor (e.g., entacapone [Comtan])• Administer MAO-B inhibitor (e.g., selegiline [Eldepryl])
ADMINISTRATION	<ul style="list-style-type: none">• Begin administration with low doses to reduce adverse effects• Advise client that it can take up to 6 months for full response to levodopa/carbidopa to occur• Monitor for loss of drug effect and the "on-off" phenomenon and report these to provider• Immediate-release tablets begin working within 30 min, then begin to wear off• Extended-release tablets work over 4 to 6 hr but can take up to 2 hr to begin working in the morning
CLIENT INSTRUCTIONS	<ul style="list-style-type: none">• Advise client to take drug with food if necessary but to avoid high-protein foods, which decrease absorption• Warn client that darkening of urine and sweat can occur• Instruct client to move slowly to sitting/standing position• Instruct client to inform provider if dyskinesias develop• Avoid high-protein foods, which decrease absorption• Instruct client to notify provider if these symptoms occur
CONTRAINDICATIONS	<ul style="list-style-type: none">• Angle closure glaucoma• History of melanoma• Psychosis, suicidal thoughts

PRECAUTIONS

- Older adults
- Existing renal, hepatic, respiratory, or endocrine disorders
- Wide-angle glaucoma
- Peptic ulcer disease
- Depression, bipolar disorder

INTERACTIONS

- Traditional (1st-generation) antipsychotics and preparations with vitamin B6 decrease levodopa/carbidopa action
 - MAOI antidepressants within 2 weeks can cause hypertensive crisis
 - High-protein meals decrease levodopa/carbidopa action
 - Anticholinergic drugs increase response to levodopa/carbidopa
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