

# MEDICATIONS AND PARKINSON'S DISEASE

Cathi A. Thomas R.N., M.S.

Medications to relieve or decrease symptoms of Parkinson's disease are an important and necessary part of care. For some people this may be the first time they have used one or more medications on a daily schedule. This module will describe some of the principles of drug therapy for Parkinson's disease.

Fortunately there are several types of medications available to treat the various symptoms of Parkinson's disease. Since each type may have a different action, individuals will often take medications in combination. This can get somewhat complicated, but an understanding of the therapies selected specifically for you will help ensure the best relief of symptoms. Become familiar with the names of your medications, the dosages and the times they are to be taken, the symptoms being treated, and the possible side effects. Additional modules will discuss each type of medication used.

It is important to realize that medications will be frequently monitored and adjusted to meet one's changing needs. Parkinson's symptoms are highly variable from person to person and require an "individualized approach" when prescribing medications. If several persons were to compare their medication schedules, it is likely that no two would be exactly alike.

Responses to medication, like symptoms, vary greatly between people. Each individual can experience a variation in control of their symptoms over the course of a single day. Communicating clearly to your health-care provider about your "targets of therapy" is essential for optimizing your daily schedule and getting the most out of your medications. Targets of therapy are the symptoms you want to control in order to function better in daily activities.

When speaking with your health care provider, describe your symptoms as well as the time of day and during what activities they occur. Many people use a diary similar to the one attached to this module. Ideally, all symptoms are controlled; realistically, there will be periods when medication is not as effective.

## **TOO MUCH, TOO LITTLE**

The concept of “too much, too little” acknowledges the dilemma of managing medication in Parkinson’s disease. Some individuals may take too little medication, resulting in a failure to mask or decrease their Parkinson symptoms, while other individuals may take too much medication, resulting in adverse effects, such as dyskinesia.

The goal is to prescribe medications so that the most relief can occur with the fewest adverse effects. Obtaining a therapeutic balance involves finding the smallest dose possible to mask most symptoms and have minimal side effects. This is not always possible, and, at times, tradeoffs become necessary.

# COMMUNICATING WITH YOUR HEALTH CARE PROVIDER

Cathi A.Thomas R.N., M.S.

In general, people with Parkinson's disease visit their health care provider three to four times a year. It can be a challenge for the patient to identify targets of therapy, to describe responses to medication, and to report adverse effects all within the limited time of an office visit. Often patients must communicate their progress and concerns in between visits, usually by telephone. This module will assist you in determining when you should consult your health care provider and how to do so efficiently .

## MEDICATION SCHEDULE

- Always have a current list of all your medications (not just Parkinson's medication) available. The list should include names, dosages, and the times you take them.

### Example:

	<u>7am</u>	<u>11am</u>	<u>4pm</u>
Sinemet 25/100	1	1	1/2
Eldepryl 5mg.	1	1	
Digoxin .25mg	1		
Multivitamin	1		

- Keep a record of each medication you have used to treat your Parkinson's disease. Note name, dose, how long you took it, and why you stopped taking it. This prevents drugs that have not worked in the past from being tried again. Many patients begin using a notebook or binder to maintain long-term records.

## REPORTING SYMPTOMS AND OR ADVERSE EFFECTS

- When reporting symptoms of Parkinson's disease and/or adverse effects, it is important to understand the difference

between the two. For example, tremor is a Parkinson's *symptom*, dyskinesia is an adverse *effect*. They are different; each requires its own interventions.

- Identify a "pattern" of change before contacting your health care provider. For example, if on a particular day, your medication wears off at 11 am, it is not necessary to call your health care provider immediately. Determine if this is a one-time occurrence, or does it repeat itself the next day or the day after that? Information about "patterns" that develop is extremely valuable to your health care provider.
- Utilize a diary to record mobility, symptoms and adverse effects. To establish a pattern of activity, more than one 24-hour diary should be completed. It's possible to avoid fatigue from completing the diary by skipping a day in between. For example, record your information on Sunday, Tuesday, and Thursday.
- Always record and report adverse effects (side effects) when they first appear. A slight adjustment in medication will usually correct the problem.

## PATIENT DIARY

**INSTRUCTIONS:** *Circle the appropriate description for each hour during the day being monitored.*

MED: = Write in any medications taken in that hour.

ON = Good Motor Function

ON WITH DYSKINESIAS = Able to move but troubled by involuntary or unintentional movements.

OFF = Able to move only slowly or not at all.

Midnight - 1 AM	MED:	ASLEEP	ON	ON WITH DYSKINESIAS	OFF	OFF WITH TREMOR
1 AM - 2 AM	MED:	ASLEEP	ON	ON WITH DYSKINESIAS	OFF	OFF WITH TREMOR
2 AM - 3 AM	MED:	ASLEEP	ON	ON WITH DYSKINESIAS	OFF	OFF WITH TREMOR
3 AM - 4 AM	MED:	ASLEEP	ON	ON WITH DYSKINESIAS	OFF	OFF WITH TREMOR
4 AM - 5 AM	MED:	ASLEEP	ON	ON WITH DYSKINESIAS	OFF	OFF WITH TREMOR
5 AM - 6 AM	MED:	ASLEEP	ON	ON WITH DYSKINESIAS	OFF	OFF WITH TREMOR
6 AM - 7 AM	MED:	ASLEEP	ON	ON WITH DYSKINESIAS	OFF	OFF WITH TREMOR
7 AM - 8 AM	MED:	ASLEEP	ON	ON WITH DYSKINESIAS	OFF	OFF WITH TREMOR
8 AM - 9 AM	MED:	ASLEEP	ON	ON WITH DYSKINESIAS	OFF	OFF WITH TREMOR
9 AM - 10 AM	MED:	ASLEEP	ON	ON WITH DYSKINESIAS	OFF	OFF WITH TREMOR
10 AM - 11 AM	MED:	ASLEEP	ON	ON WITH DYSKINESIAS	OFF	OFF WITH TREMOR
11 AM - NOON	MED:	ASLEEP	ON	ON WITH DYSKINESIAS	OFF	OFF WITH TREMOR
NOON - 1 PM	MED:	ASLEEP	ON	ON WITH DYSKINESIAS	OFF	OFF WITH TREMOR
1 PM - 2 PM	MED:	ASLEEP	ON	ON WITH DYSKINESIAS	OFF	OFF WITH TREMOR
2 PM - 3 PM	MED:	ASLEEP	ON	ON WITH DYSKINESIAS	OFF	OFF WITH TREMOR
3 PM - 4 PM	MED:	ASLEEP	ON	ON WITH DYSKINESIAS	OFF	OFF WITH TREMOR
4 PM - 5 PM	MED:	ASLEEP	ON	ON WITH DYSKINESIAS	OFF	OFF WITH TREMOR
5 PM - 6 PM	MED:	ASLEEP	ON	ON WITH DYSKINESIAS	OFF	OFF WITH TREMOR
6 PM - 7 PM	MED:	ASLEEP	ON	ON WITH DYSKINESIAS	OFF	OFF WITH TREMOR
7 PM - 8 PM	MED:	ASLEEP	ON	ON WITH DYSKINESIAS	OFF	OFF WITH TREMOR
8 PM - 9 PM	MED:	ASLEEP	ON	ON WITH DYSKINESIAS	OFF	OFF WITH TREMOR
9 PM - 10 PM	MED:	ASLEEP	ON	ON WITH DYSKINESIAS	OFF	OFF WITH TREMOR
10 PM - 11 PM	MED:	ASLEEP	ON	ON WITH DYSKINESIAS	OFF	OFF WITH TREMOR
11 PM - Midnight	MED:	ASLEEP	ON	ON WITH DYSKINESIAS	OFF	OFF WITH TREMOR

**TAKE-HOME MEDICATION SCHEDULE**

**PATIENT:** \_\_\_\_\_

**DATE:** \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_

**TIMES:**

**MEDICATION:**

**DOSE:**

MEDICATION:	DOSE:											

**SPECIAL INSTRUCTIONS:**

# LEVODOPA

## LEVODOPA

This medication provides relief of Parkinson symptoms. In the brain, the drug is converted to *dopamine*, the neurotransmitter that is deficient in Parkinson's disease. The initial use and dosage of levodopa depends on a person's age, the extent to which a person's symptoms affect his or her mobility, activities of daily living, mood, cognition, and employment. Frequent adjustment in dose and strength may be made over the years.

## SINEMET<sup>®</sup>, ATAMET (levodopa/carbidopa)

The primary drug used to relieve Parkinson's symptoms is a combination of *levodopa* and *carbidopa*. Carbidopa allows levodopa to enter the brain with fewer side effects than levodopa alone.

**Dosages Supplied:** The dose is expressed as a fraction with the top number representing the mg (amount) of carbidopa, the bottom number the mg (amount) of levodopa. The tablets are scored -- slightly cut -- so they can easily be broken in half. Strengths are 10/100, 25/100, 25/250.

## SINEMET CR

A controlled-release or long-acting form of Sinemet<sup>®</sup>. Strengths are 25/100, and 50/200.

**Range Daily Dose:** Daily dose is highly variable from person to person. Dose is determined by observing relief of symptoms through the day without adverse effects.

**Side Effects:** Side effects may occur when medication is first started or at any time during the use of the drug. Report all side effects to your physician or health care provider.

- *Nausea* can occur when medication is started or dosage is increased. It is often relieved if medication is taken with crackers or a light snack. Nausea usually subsides within a few weeks. If nausea persists, or is severe, notify your health care provider.
- *Skin rash* is rare and usually indicates allergy to the dye used in the tablet.

- **Hypotension** (decreased blood pressure) is lightheadedness when standing or changing position.
- **Dyskinesia** (involuntary movements) is an indicator that too much dopamine is available in the brain. Dyskinesia consists of involuntary movements which may occur in the face, limbs, neck, and/or trunk. Dyskinesia most often occurs at peak dose (when the medication is most effective) but may occur at other times in the dosing schedule. The presence of dyskinesia requires reducing the amount of drug taken or redistributing the timing of doses.
- **Confusion**, if drug-related, will stop when drug is decreased or eliminated.
- **Hallucinations** are rare but if they occur, are usually visual.
- **Dystonias** are painful cramps.
- “**Wearing off**” **effect** is a shortened duration of the effectiveness of each pill.
- “**On-Off**”**effect** is a rapid change between “on” state (with dyskinesia) and “off” state.
- **Sleepiness** is an increase in daytime drowsiness following the start of new medications or dose changes.
- **Insomnia** is difficulty falling asleep or difficulty staying asleep following the start of new medications or dose changes.
- **Dry mouth** is a noticeable decrease in saliva, sometime accompanied by increased thirst.

#### **Special Considerations:**

- Take levodopa/carbidopa (Sinemet<sup>®</sup>) one-half hour to one hour before meals or two hours after meals.
- Take it with an entire glass of water or juice
- Sinemet<sup>®</sup> is taken at frequent intervals throughout the day based on dose response. It is helpful to use special wristwatches or pill boxes with multiple alarm settings available at many department stores.
- **Never** abruptly stop Sinemet<sup>®</sup> without consulting your health care provider.

# DOPAMINE AGONISTS

## DOPAMINE AGONISTS

These drugs mimic the effects of dopamine by stimulating dopamine receptors directly. Most commonly used in combination with Sinemet (levodopa/carbidopa), agonists are generally started when additional help is needed to control Parkinson's symptoms. They may smooth out the fluctuations of mobility that occur over time. Agonists may also be used as initial therapy to delay the need for Sinemet. They are started at low doses and increased gradually over several weeks before therapeutic results are achieved.

## PARLODEL (bromocriptine mesylate)

This agonist, the first approved in the United States, acts directly on D<sub>2</sub> (dopamine) receptors.

**Dosages Supplied:** Tablet 2.5 mg, capsule 5 mg

**Side Effects:** This list will include the more common adverse effects. As with all medications, any new problem or side effect should be reported to your health care provider.

- **Hypotension** (decreased blood pressure) is lightheadedness or dizziness when standing or changing position. To avoid this common side effect, this drug is started *gradually* and dosage changes are usually small. Initially, the first doses may be prescribed at bedtime when an individual is likely to be lying flat. Patients are encouraged to drink plenty of fluids (6-8 glasses of water).
- **Confusion**, if drug-related, will stop when the drug is decreased or discontinued.
- **Hallucinations** are the experience of visual disturbances and require a decrease in medication dose.
- **Dystonias** are painful muscle cramps attributable to beginning the medication or changes in its dose.
- **Ergotism** is tingling, burning and discoloration of the extremities (usually the hands and feet).
- **Headache** may occur after the start of medication or changes in dosage.

## Special Considerations:

- Be patient, it may take several weeks to notice effectiveness.

- Start at a low dose and go upward/downward slowly (small changes).
- If dizziness, lightheadedness, or headache is a problem, blood pressure may be too low. Supine and standing blood pressures should be evaluated for several days in a row.

### **PERMAX (pergolide mesylate)**

This dopamine agonist is the second and only other agonist currently approved for use in the United States and works on D1 and D2 (dopamine) receptors.

**Dosages Supplied:** Tablets are scored so that they can easily be broken in half. Strengths are .05 mg, .25 mg, and 1.0 mg

**Side Effects:** This list will include the more common adverse effects. As with all medications, any new problem or side effect should be reported to your health care provider.

- **Hypotension** (decreased blood pressure) is lightheadedness or dizziness when standing or changing position. To avoid this common side effect, this drug is started *gradually* and dosage changes are usually small. Initially, the drug may be prescribed at bedtime when a person is likely to be lying flat. Patients are encouraged to drink plenty of fluids (6-8 glasses of water per day).
- **Confusion**, if drug-related, will stop when drug is decreased or eliminated.
- **Palpitations** are rapid beats described as "throbbing" or "fluttering" of the heart. They may be accompanied by a feeling of anxiety or panic.
- **Dyskinesias** (involuntary movements) indicate that too much dopamine is available in the brain. Dyskinesias are involuntary movements which may occur in the face, limbs, neck, and trunk. Dyskinesia usually warrants a dose decrease or a change in timing of doses.
- **Hallucinations**, the experience of visual disturbances, will require a decrease in dose.
- **Dystonias** are painful muscle cramps attributable to beginning the medication or changes in its dose.

## **MIRAPEX (pramipexole dihydrochloride)**

This newly released dopamine agonist acts directly on D2 and D3 (dopamine) receptors. It differs from previously approved dopamine agonists in that it is a non-ergot drug. This is important since, although rare, some individuals have shown a sensitivity to pharmaceutical products that contain ergot.

**Dosages Supplied:** Tablet .125 mg, .25 mg, .5 mg, 1.0 mg, and 1.5 mg. (The .25 mg, .5 mg, 1.0 mg, and 1.5 mg are scored so that they can easily be broken in half).

**Side Effects:** This list will include the more common adverse effects. As with all medications, any new problem or side effect should be reported to your health care provider.

- **Nausea** can occur when medication is started or dosage is increased. It is often relieved if medications are taken with crackers or a light snack. If nausea persists, or is severe, notify your health care provider.
- **Hypotension** (decreased blood pressure) is lightheadedness most often when standing or changing position.
- **Hallucinations** are the experience of visual disturbances and require a decrease in medication dose.
- **Constipation** is a noticeable decrease in the daily bowel movement pattern, or hard dry stools that are difficult to pass.
- **Insomnia** is difficulty in falling asleep or difficulty staying asleep following the start of new medications or dose changes.
- **Somnolence** is increased daytime drowsiness following the start of new medications or dose changes.
- **Dyskinesia** (involuntary movements) is an indicator that too much dopamine is available in the brain. Dyskinesia consists of involuntary movements which may occur in the face, limbs, neck, and/or trunk. Dyskinesia usually warrants a dose decrease or a change in timing of doses.

### **Special Considerations:**

- Be patient it may take several weeks to notice effectiveness.
- Start at a low dose and go upward/downward slowly (small changes).
- If lightheadedness is a problem, blood pressure may be too low. Supine and standing blood pressures should be monitored for several days in a row.

## **REQUIP (ropinirole)**

This newly released dopamine agonist acts directly on D2 (dopamine) receptors, and also has some D3 activity. It differs from previously approved dopamine agonists in that it is a non-ergot type drug. This is important since, although rare, some individuals have shown sensitivity to pharmaceutical products that contain ergot.

**Dosages Supplied:** Tablets .25mg, .50mg, 1.0 mg, 2.0mg, and 5.0 mg.

**Side Effects:** This list will include the more common adverse effects. As with all medications, any new problem or side effect should be reported to your health care provider.

- *Nausea* can occur when medication is started or dosage is increased. It is often relieved if medication is taken with crackers or a light snack. If nausea persists, or is severe, notify your health care provider.
- *Hypotension* (decreased blood pressure) is lightheadedness most often associated with standing or changing position.
- *Somnolence* is increased daytime drowsiness following the start of new medications or dose changes.
- *Headache* may occur after the start of medication or change in dosage.
- *Vomiting* is severe nausea unrelated to an unidentifiable change in diet.
- *Dyskinesias* (involuntary movements) indicate that too much dopamine is available in the brain. Dyskinesias are involuntary movements which may occur in the face, limbs, neck, and trunk. Dyskinesias usually warrant a dose decrease or change in timing of doses.
- *Hallucinations* are the experience of visual disturbances and require a decrease in medication dosage.

### **Special considerations:**

- Be patient it may take several weeks to notice effectiveness.
- Start at a low dose and go upward/downward slowly (small changes).
- If lightheadedness is a problem, blood pressure may be too low. Supine and standing blood pressures should be monitored for several days in a row.

# COMT Inhibitors

Julie H Carter, R.N., M.S., A.N.P.

These medications block catechle-O-methyltransferase, an enzyme that breaks down dopamine. This action increases the availability of dopamine. COMT inhibitors must be used in combination with carbidopa/levodopa (Sinemet) in order to be effective. These are currently two COMT inhibitors available in the United States. The first approved, Tasmar (tolcapone), requires a continuous liver monitoring program due to an increased risk of liver toxicity. The second approved drug, Comtan (entacapone), does not require monitoring of liver function, although individuals with a history of liver disease should not use these drugs.

## COMTAN (entacapone)

**Dosages Supplied:** Tablet, 200mg

**Side Effects:** This list will include the more common adverse effects. As with all medications, any new problem or side effect should be reported to your healthcare provider.

- **Diarrhea** if this side effect develops, control requires taper (gradual decrease) in dose; usually the diarrhea continues until drug is discontinued.
- **Dyskinesias** (involuntary movements which may occur in the face, limbs, neck, and trunk). Dyskinesia usually warrants a carbidopa/levodopa (Sinemet) dose decrease or a change in timing of doses.
- **Hypotension** (decreased blood pressure) is lightheadedness or dizziness when standing or changing position.
- **Hallucinations** the experience of visual disturbances, will require a decrease in dose.
- **Nausea** can occur when medication is started or dose is increased.
- **Urine discoloration**, urine may appear darker (brownish/orange), but does not represent change in health status or require any dose adjustments/discontinuation.

## TASMAR (tolcapone)

**Dosages Supplied:** Tablet, 100mg, 200mg

**Side Effects:** This list will include the more common adverse effects. As with all medications, any new problem or side effect should be reported to your healthcare provider.

- **Diarrhea**, if this side effect develops, control requires taper (gradual decrease) in dose; usually the diarrhea continues until drug is discontinued.
- **Dyskinesias** (involuntary movements) indicate that too much dopamine is available in the brain. Dyskinesias are involuntary movements which may occur in the face, limbs, neck, and trunk. Dyskinesia usually warrants a carbidopa/levodopa (Sinemet) dose decrease or a change in timing of doses.
- **Hypotension** (decreased blood pressure) is lightheadedness or dizziness when standing or changing position.
- **Hallucinations**, the experience of visual disturbances, will require a decrease in dose.
- **Nausea** can occur when medication is started or dose is increased.
- **Urine discoloration**, urine may appear darker yellow, but does not represent change in health status or require any dose adjustments/discontinuation.

### Special Considerations:

This medication currently has a box warning from the Food and Drug Administration. TasmAR should be used as an adjunct only in patients with Parkinson's disease on levodopa/carbidopa who are experiencing symptom fluctuation and who are not responding satisfactorily to or who are not appropriate candidates for other adjunctive therapies.

Patients must have liver function tests at regular intervals (more frequently during the first six months of therapy.)

# ANTICHOLINERGICS

## ANTICHOLINERGICS

These drugs are primarily used to treat tremor early in the course of treatment, or tremor not controlled by Sinemet. They allow a proper balance of brain chemicals; acetylcholine and dopamine. A poor response or side effect with one anticholinergic drug does not necessarily exclude a trial with another. People who experience the side effects of confusion or difficulty urinating, may not be able to use these drugs. They should **not be** used by people with glaucoma.

### Dosages Supplied:

- **COGENTIN (benztropine mesylate):** Tablets 0.5 mg, 1 mg, 2 mg
- **ARTANE (trihexyphenidyl HCL):** Tablets 2 mg, 5 mg
- **PARSITAN (ethopropazine):** Tablet 50 mg, not available in the United States, but available in Canada
- **BENADRYL (diphenhydramine HCL):** Capsules 25 mg, 50 mg

**Side Effects:** Side effects may occur when medication is first started or at any time during the use of the drug. As with all medications, any new problem or side effect should be reported to your health care provider.

- **Dry mouth** is a noticeable decrease in saliva sometimes accompanied by increased thirst.
- **Blurred vision** is an abrupt onset of difficulty focusing on objects usually seen with ease. This often is first noticed when reading.
- **Urinary Retention** is a noticeable decrease in the ability to urinate.
- **Confusion**, if drug related, will stop when drug is decreased or discontinued.
- **Hallucinations** are the experience of visual disturbances and require a decrease in medication dose.
- **Sedation** is a noticeable decrease in alertness unrelated to "tiredness" seen with over activity.
- **Constipation** is a noticeable decrease in the daily bowel movement pattern, or hard dry stools that are difficult to pass.
- **Vomiting** is severe nausea unrelated to an identifiable change in diet.

- ***Loss of appetite*** is a noticeable decrease in the usual desire to eat lasting greater than 24 hours; sometimes accompanied by changes in taste or by nausea.
- ***Weight loss*** is a decrease in usual body weight that is unexplained by dieting or an increase in activity level.
- ***Listlessness*** is a feeling of lack of energy and/or motivation; even though *ability* to perform activities is retained.
- ***Nervousness*** is a feelings of anxiety or "too much" energy with no apparent cause.

**Special Considerations:**

- Since Benadryl may increase sedation, it should never be taken with alcohol.

## ADDITIONAL MEDICATIONS

### ELDEPRYL (selegiline)

This drug is an MAO type B inhibitor which decreases the breakdown of dopamine. This medication can be used in combination with Sinemet or as a first-time therapy to relieve symptoms of Parkinson's disease. This agent may slow the progression of Parkinson's disease, but large, well-controlled studies have not proven this theory.

**Dosage Supplied:** Tablet 5 mg

#### Side Effects:

- **Insomnia** is difficulty falling asleep or staying asleep. Eldepryl doses should be taken before 2 pm to prevent this problem.
- **Excessive dopamine symptoms** may resume when used in combination with Sinemet. Eldepryl may overly enhance dopamine and cause an *increase* in dyskinesia, dystonia, or confusion. Sinemet may need to be decreased to balance this effect.
- **Gastric ulcer** reoccurrences have been experienced by individuals with a history of gastric ulcer problems.

#### Special Considerations:

- Eldepryl should **not** be taken with Demerol (meperidine) products. Demerol is a narcotic used occasionally for pain management but may also be an ingredient used in general anesthesia. Patients scheduled for elective surgery should notify their health care provider so that the medication is discontinued or appropriate measures are taken.
- Unlike people using MAO type A inhibitors, individuals who take Eldepryl do not need to follow a special diet.

### AMANTADINE (formerly Symmetrel)

Amantadine is an antiviral compound believed to boost the release of dopamine in the brain..

**Dosage Supplied:** Capsules 100 mg, liquid syrup

**Side Effects:**

- *Swelling of ankles and legs.*
- "*Livedo reticularis*" is a bluish-purplish skin discoloration.
- *Hallucinations* are a report of seeing something that is not there.
- *Confusion*, if drug-related, will stop when drug is decreased or discontinued.

**Special Considerations:**

- Amantadine should be used cautiously in patients who have heart and/or kidney disease.
- A trial of at least two weeks is often necessary to notice benefit.

# **MEDICATIONS THAT CAN INCREASE PARKINSON SYMPTOMS OR INTERACT WITH PARKINSON MEDICATIONS**

Marie H. Saint-Hilaire, M.D.

People with Parkinson's disease often take medication for other health problems. This module will identify medicines that may not be compatible with antiparkinson medications or cause a worsening of Parkinson's symptoms. However, it may happen that in special circumstances, one of these medications has to be used temporarily. To better improve communication with all health care providers, patients should keep complete lists of health problems and medications. Any allergy should be reported.

## **MEDICATIONS WHICH MAY INCREASE PARKINSON SYMPTOMS**

- **Antipsychotics:** Haldol<sup>®</sup> (haloperidol), Loxitane<sup>®</sup> (loxapine HCL), Navane<sup>®</sup> (thiothixene), Prolixin<sup>®</sup> (flufenazine), Stelazine<sup>®</sup> (trifluoperazine), Trilafon<sup>®</sup> (perphenazine), Thorazine<sup>®</sup> (chlorpromazine)
- Mellaril<sup>®</sup> (thioridazine) is a drug that falls in this category and may increase Parkinson's symptoms but is often used in very small doses in Parkinson's disease when hallucinations are a problem.
- **Antidepressants:** Triavil<sup>®</sup> (perphenazine & amitriptyline), Ascendin<sup>®</sup> (amoxapine)
- **Antianxiety:** Buspar<sup>®</sup> (buspirone)
- **Antivomiting:** Compazine<sup>®</sup> (prochlorperazine), Reglan<sup>®</sup> (metoclopramide), Torecan<sup>®</sup> (thiethylperazide)
- **Antihypertensives:** Serpasil<sup>®</sup> (reserpine), Aldomet<sup>®</sup> (alpha-methyldopa), Raudixin<sup>®</sup> (rauwolfia serpentina)

## **MEDICATIONS WHICH MAY INTERACT WITH MEDICATIONS USED FOR PARKINSON'S DISEASE**

- **Antidepressants:** Nardil<sup>®</sup> (phenelzine), Parnate<sup>®</sup> (tranylcypromine) These two may react with Sinemet<sup>®</sup> (levodopa/ carbidopa) or Eldepryl<sup>®</sup> (selegiline). Prozac<sup>®</sup> (fluoxetine) may interfere with Eldepryl<sup>®</sup> (selegiline)
- **Narcotics:** Demerol<sup>®</sup> (meperidine) This drug may react with Eldepryl<sup>®</sup> (selegiline)