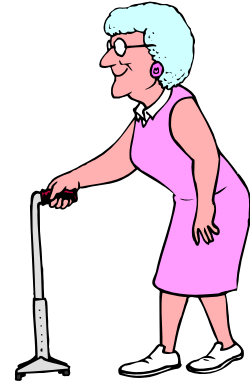
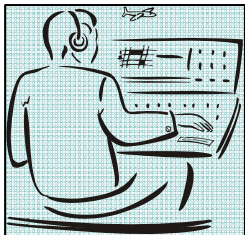


Caring for Clients with Parkinson's Disease



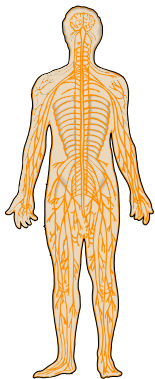
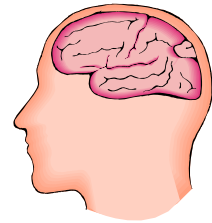
Learner's Guide

Understanding Parkinson's Disease



Imagine what would happen if the computers in the air traffic control tower at an airport began malfunctioning, shutting down and then randomly working again, or giving the wrong information to the controllers. Airplanes would be flying without proper coordination, causing chaos, confusion, and accidents.

Something similar happens with Parkinson's disease (PD). In PD, brain cells that produce the chemical **dopamine** are destroyed or impaired. Dopamine helps direct muscle activity, so when the cells that make it aren't working, the brain can't coordinate the body's muscle movements. It is as if the body's control tower computers are malfunctioning, and the muscles are left without direction. The result is disorganized movement, or a complete inability to move at all.



Parkinson's disease is one form (the most common) of a group of movement disorders called Parkinsonism. These disorders all share the same main symptoms, and are the result of the loss of dopamine-producing brain cells, but may have different causes and treatments. These disorders affect the motor, or movement, systems of the body, which are controlled by the central nervous system.

Parkinson's disease affects over a million people in the U.S. 75% of all cases are in people over age 50, and men and women are afflicted equally. It begins gradually, getting worse with time. The disease is named after the British doctor who first described it in 1817, calling it "the shaking palsy."

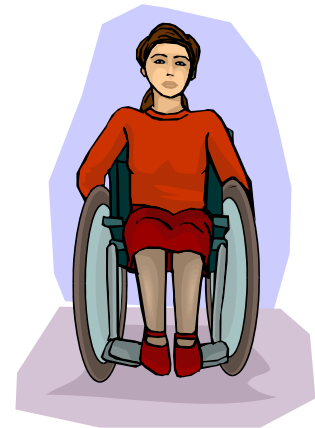
Most forms of PD occur without any known cause. In some cases, PD symptoms may be caused by drugs, head injury, genetic mutations, or other medical disorders.

PD is not a fatal disease by itself, but it progresses over time. With the right treatment, most people with PD can live productively for many years. In some people, PD symptoms progress over 20 years or more. In others, PD progresses more quickly. In the late stages, PD may cause complications that can lead to death, such as choking, pneumonia, and falls. There is no cure for Parkinson's disease.

Symptoms and Characteristics of Parkinson's Disease

There are four main symptoms:

1. Tremor or trembling in hands, arms, legs, jaw, and face
2. Rigidity or stiffness of limbs and trunk
3. Slowness of movement
4. Impaired balance and coordination



Parkinson's disease has these characteristics:

1. It is chronic, persisting over a long time.
2. It is progressive, growing worse over time.
3. It is not contagious or directly inherited.
4. It does not affect the thinking or feeling parts of the brain, so a client is aware of his or her disabilities and is often depressed by them.

Problems of Parkinson's Disease

- Impaired mobility, including a halting or shuffling gait and freezing or slowing when trying to move.
- Slowing of the stomach and intestinal muscles, causing constipation, loss of appetite, and weight loss.
- Inability to control the muscles in the mouth, face, jaw, and throat. This leads to drooling and swallowing difficulties, causing dehydration and weight loss. It also creates speech difficulties, and is a factor in respiratory infections and pneumonia.
- Falls — Poor balance and impaired muscle control lead to a high risk for falling.

Think about it:



Close your eyes and imagine what it would feel like to lose control of your muscles. Imagine that the following things start to happen:

- Your hands shake uncontrollably.
- You drool constantly.
- You can't blink your eyes.
- Your limbs and body are stiff and rigid.

Imagine how you would feel if you couldn't control your movements right now, and couldn't communicate well.

- You are unbalanced, leaning to one side.
- Your face becomes a blank mask. You cannot show either anger or happiness.
- You shuffle as you walk, and you have almost no control over this.
- You can't speak well enough to make anyone understand you.

Think about how you would feel—depressed, angry, frustrated? That is how clients feel.

Treating Parkinson's Disease

There is no cure for Parkinson's disease, but some of these treatments may help control the symptoms of the disease or delay the progressive worsening of the symptoms:

1. Medications

- There are many different medications that can help with some of the symptoms of PD, and new ones are being developed. No medication exists to cure the disease, and many of the medications become less effective over time.
- The most common side effects of the main drugs for Parkinson's are **nausea and low blood pressure**.
- Medication dosages often have to be adjusted as they become less effective.



2. Surgery

- Surgery is sometimes indicated to destroy parts of the brain that produce some of the symptoms, such as tremors and rigidity.
- Most surgeries for PD are experimental.

3. Exercise

- Physical therapy or muscle-strengthening exercises can tone muscles and put rigid muscles through a full range of motion. Exercises can improve balance, gait, strength, and speaking and swallowing ability.
- Exercise may also help with depression. It can postpone the worsening of the disability and enable the client to continue more activities of daily living for a longer time.
- Exercise is an important part of caring for PD, and caregivers should encourage clients to perform as many safe exercise activities as possible.



4. Diet

- Research has not found any nutrients or special diets that have any therapeutic value for Parkinson's disease.
- Adequate fluid and calorie intake are important to prevent dehydration and weight loss.



How to Help the Client with Parkinson's Disease

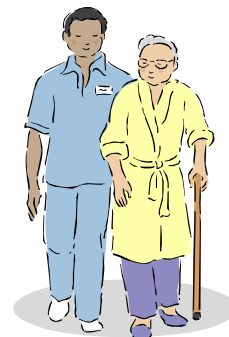
Ways to Help a Client Improve His Mobility

The client should learn to use ambulatory aids such as rails, canes, and walkers, and should know and use fall prevention techniques.

Maintaining a rhythmic stride is the key to smooth mobility and gait, but is very difficult for someone with Parkinson's disease.

Try this:

1. Teach the client to look ahead to anticipate changes in the flooring, such as a change from carpet to tile. Anticipating these changes gives the brain a longer time to coordinate the change, and may help prevent the freezing or slowing that can occur when a stride adjustment is required.



Parkinson's disease makes clients unstable in their movements. Use fall precautions and safety measures at all times.

2. Teach the client to count while he walks, saying "1, 2, 3, 4" over and over again. Another way is to listen to strongly rhythmical music in a headset (such as marching music). This provides cues to the brain, stimulating regular movement.

3. If the client freezes in place:
 - a. Never pull him or her forward by the arms — this can cause a fall.
 - b. Have the client take a step backwards or sideways, which can stimulate a return of movement so the client can again move forward.
 - c. Have the client give orders to his or her body. He/she should say, "Right foot up, right foot down," and so on, while starting to walk. This prompts the brain to send the correct signals to the muscles.

Ways to Help with Swallowing Difficulties

1. Use thick liquids, not thin, for the client who has trouble swallowing. Give soft and semi-soft foods.
2. Teach the client to think of swallowing as a sequence of small events:
 - a. Put food on the tongue
 - b. Close the lips
 - c. Chew the food
 - d. Lift the tongue up and back
 - e. Swallow
3. Teach the client to alternate chewing on one side of the mouth, then the other.



Ways to Help with Stomach Problems

- Constipation can be a very serious problem for clients with PD.

Helpful hints:

1. Provide a diet high in fiber — vegetables, fruits, and whole-grain breads are good.
2. Encourage fluid intake — make sure the client has cups and utensils that he can easily manipulate. Straws often help.
3. Encourage exercise, such as a daily walk.



- Weight loss caused by a loss of appetite and by swallowing difficulties leads to poor health.

Do these things:

1. Weigh the client weekly.
2. Offer smaller, more frequent meals, which can be easier to swallow and digest.
3. Offer high-calorie liquids like instant breakfast drinks.

Ways to Help with Speech Difficulties

1. Teach deep breathing exercises to strengthen the respiratory muscles:
 - a. Take five deep breaths, expanding the stomach muscles on inhalation.
 - b. Exhale while speaking the sounds “ah” and “oh” aloud.
 - c. Deeply inhale, and then exhale while saying the days of the week with pronounced facial motions.
2. Don't rush the client who is trying to talk. Be sure your body language is relaxed and that you are **patient and encouraging**. If the client becomes frustrated when trying to speak, phrase questions that require only a “yes” or “no” answer. Offer to provide a word or phrase, or offer to return later.
3. Encourage the client to sing, and to read or speak aloud. This provides exercise, stimulation, and practice.





Caring for Clients with Parkinson's Disease *Word Search*

This puzzle is made up of words that deal with Parkinson's disease.

Find the words in the puzzle and circle them. Find all the words that are in the list below.

E	D	I	R	T	S	C	I	M	H	T	Y	H	R
P	N	E	U	M	O	N	I	A	P	G	C	G	M
Q	L	D	E	H	Y	D	R	A	T	I	O	N	O
W	Z	D	E	P	R	E	S	S	I	O	N	I	B
I	N	S	T	A	B	I	L	I	T	Y	S	W	I
E	V	I	S	S	E	R	G	O	R	P	T	O	L
M	B	S	O	R	D	S	E	A	H	U	I	L	I
U	A	S	F	C	O	O	L	A	I	T	P	L	T
S	L	E	T	I	S	M	P	L	T	T	A	A	Y
C	A	N	F	N	U	O	E	A	A	H	T	W	I
L	N	W	O	O	F	H	H	R	M	F	I	S	T
E	C	O	O	R	D	I	N	A	T	I	O	N	R
S	E	L	D	H	F	R	E	E	Z	I	N	G	G
W	Z	S	S	C	E	X	E	R	C	I	S	E	Y
Y	T	I	D	I	G	I	R	H	C	E	E	P	S

- | | | |
|----------------|-------------|-----------------|
| Balance | Exercise | Progressive |
| Chronic | Falls | Rhythmic stride |
| Constipation | Freezing | Rigidity |
| Coordination | Gait | Slowness |
| Deep breathing | Instability | Soft foods |
| Dehydration | Mobility | Speech |
| Depression | Muscles | Swallowing |
| Dopamine | Pneumonia | Tremors |





Caring for Clients with Parkinson's Disease *Word Search Answer Key*

A 13x13 grid of letters with words circled in black. The words are: DIRECT, PNEUMONIA, QLEH, YDRA, TION, WZDE, PRES, SION, IB, INSTA, BIL, ITY, SE, SER, GOR, P, TOL, MUS, BSA, SOR, DSEA, HUI, LIT, US, LAN, WOO, FHH, RM, FIS, T, CANS, FN, UOE, AA, HT, WI, LNW, OOF, HHR, MF, IS, T, ESC, ORD, INA, TION, R, SEL, DH, FRE, EE, ZIN, GG, WZSS, SC, EXE, RC, IS, EY, YTI, DIG, IR, HCEE, PS.

- | | | |
|----------------|-------------|-----------------|
| Balance | Exercise | Progressive |
| Chronic | Falls | Rhythmic stride |
| Constipation | Freezing | Rigidity |
| Coordination | Gait | Slowness |
| Deep breathing | Instability | Soft foods |
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