

LOW BLOOD PRESSURE IN PARKINSON'S DISEASE

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Individuals with Parkinson's disease may experience low blood pressure (hypotension) at some point during their treatment course. When it does occur, the patient may recognize and report sensations such as dizziness, lightheadedness, or weakness. If severe, hypotension can lead to fainting and/or falling.

Normal blood pressure is regulated by specific reflexes in the nervous system. Parkinson's disease can impair this reflex mechanism and result in lowered blood pressure. In addition to the disease process, anti-Parkinson's medications as well as drugs used to treat other medical problems such as hypertension, heart disease, anemia or dehydration can directly affect blood pressure. Blood pressure decreases when blood vessels relax or lose their ability to constrict. If there is less fluid in the body, the circulating blood volume is decreased and blood pressure drops. The combined effect of these medications and other medical conditions may potentiate a hypotensive event.

Low blood pressure usually presents itself as a side-effect of anti-Parkinson's medications. Levodopa-carbidopa, dopamine agonists (Parlodel[®], Permax[®], Mirapex[®], Requip[®]) and other anti-Parkinson's agents, including Eldepryl[®], Tasmar[®], and Comtan[®], may contribute to lowering the blood pressure as well as certain antidepressants and sleeping medications. Individuals have also used terms such as giddiness, sleepiness, tiredness, mental or visual blurring to describe what has actually turned out to be low blood pressure. These sensations will often intensify upon standing or after walking. Although any time of day is possible, many report the occurrence more in the early morning hours and/or 1-2 hours after receiving a dose(s) of medication.

Normal blood pressure range is usually 100/60 to 140/90. Drops in blood pressure below 100/60 may result in the sensations mentioned above and a few individuals may not experience any warning signals. The emphasis is to seek the cause and treat the problem before an episode of fainting or falling occurs based on each person's symptoms and associated conditions.

Monitoring blood pressure should be routine in the comprehensive care plan of individuals with Parkinson's disease. It is

advisable that patients have their blood pressure taken in the sitting and standing positions periodically.

MANAGEMENT OF POSTURAL HYPOTENSION

There are a number of simple measures which can be employed to restore normal blood pressure regulation.

- Re-evaluate the patient's complete medication list. Adjustments of the medications themselves or the timing sequence might be all that is needed.
- Interventions such as increasing fluids and salt in the diet can be very effective. Drinking eight glasses of water per day and eating salty foods are commonly recommended. With more fluid in the body, circulating blood volume is enhanced and blood pressure increases.
- Drinking caffeinated coffee, in addition to adding fluid enhances blood vessel constriction, thus increasing blood pressure.
- Eat frequent, small meals as blood pressure is often lowered after a large meal. Alcohol should be avoided as it has a tendency to dilate blood vessels, contributing to lower blood pressure.
- Warm weather, hot baths, or any activities that cause blood vessels to relax should be avoided.
- Waist-high compression/support hose (i.e. Jobst[®] stockings or Sigvars[®] pantyhose) can be helpful in maintaining blood pressure.
- When rising from a lying position, sit on the edge of the bed for a few minutes; then stand up slowly, holding on to a secure support.
- Raise the head of the bed 30-40 degrees as lying flat for a prolonged period of time can contribute to lower blood pressure.
- Occasionally, salt tablets or medications such as fludrocortisone (Florinef[®]) and Pro-Amatine (Midodrine[®]) are prescribed. By increasing blood volume and promoting vascular constriction, these drugs help raise blood pressure. The risks associated with using these drugs can be controlled with close medical supervision. Some patients

respond better using a combination of treatments.

Always consult with your healthcare provider if you experience the sensations described herein and especially before altering your medication schedule.