

## 1 **SBN on Parkinson's Disease**



Van D Merkle DC, DABCI, DCBCN, CCN

## 2 **Parkinson's disease (PD)**

The second most common degenerative neurological disorder after Alzheimer's disease. It is estimated that PD affects 1% of the population over the age of 60. ... Approximately 60,000 Americans are diagnosed with PD each year.

## 3 **Parkinson's Disease**

More than one million people in the United States alone have Parkinson's Disease, and more than 50,000 new cases are being diagnosed each year. This translates to a prevalence of about 1-2 cases per every 1,000 in the general population, which dramatically increases to about 1 in 100 when looking at the over 55 population. Men are at a slightly higher risk than women, with the average age of onset being about 60 years. However, it may be diagnosed as early as the mid 30's.

Parkinson's disease is characterized by a unique tremor in that it is worse at rest and may improve substantially when an affected limb is used.

- Perlmutter, David, M.D., BrainRecovery.com: Powerful Therapy for Challenging Brain Disorders, 2000, Pg 11.



## 4 **PD**

Having a parent or sibling with Parkinson's disease is thought to nearly double your risk of developing the disease. Five to 10 percent of people who have Parkinson's disease also have a family member with it.

Feb 5, 2015



## 5 **Young-onset Parkinson's disease (YOPD): people younger than 50 years of age**

In rare instances, Parkinson's-like symptoms can appear in children and teenagers. This form of the disorder is called juvenile Parkinsonism and is often associated with specific, high-PD risk genetic mutations.

I disagree: the younger people I see with PD like symptoms are due to environmental toxins or drugs

Symptoms Young-onset PD is diagnosed similarly to late onset PD:

Tremors of the hands, arms, legs, jaw and face

Rigidity of the limbs and trunk

Bradykinesia- slowness of movement

Postural instability or impaired balance and coordination

Depression

Sleep disturbances

Changes in memory and thinking

Constipation or urinary problems

Think of how many young people have these symptoms that could develop into PD!



## 6 **Mortality from Parkinson's disease**

- ❑ With treatment, the life expectancy of people with PD is similar to that of the general population.
- ❑ However, dementia seems to largely impact life expectancy among people with PD, and about 25-40% of people with PD develop dementia in their lifetime.
- ❑ Risk factors for mortality include later age of onset, male sex, severity of motor impairment, presence of psychotic symptoms, and dementia.
- ❑ Early detection of disease, prevention/delay of motor symptom progression, and treatment of dementia can increase life expectancy. (Quality of life?)
- ❑

#### 7 **Prescription drugs and PD**

- ❑ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3325428/>
- ❑ by HW Shin - 2012 - [Cited by 120](#) - [Related articles](#)
- ❑ Mar 31, 2012 - *Drug-induced parkinsonism (DIP) is the second-most-common etiology of parkinsonism in the elderly after Parkinson's disease (PD).*
- ❑

#### 8 **Known factors that directly causes of PD**

- ❑ Repeat Head Traumas
- ❑ Heavy metals: Arsenic, mercury, copper, lead, aluminum, iron, manganese-
- ❑ All Pesticides including Paraquat
- ❑ Reserpine: Antipsychotic drug
- ❑ PERC (perchloroethylene) is the leading chemical used in garment dry cleaning.
- ❑ TCE (trichloroethylene) is the most frequently reported organic groundwater contaminant, was once used as general anesthetic and coffee decaffeinating agent, and is still used widely as a metal degreasing agent.
- ❑ Solvents

#### 9 **Prescription drugs: Parkinson's D**

#### 10 **Prescription drugs that cause PD**

- ❑ Metoclopramide (Reglan)- For stomach and esophageal problems. It is commonly used to treat and prevent nausea and vomiting, to help with emptying of the stomach in people with delayed stomach emptying, gastroenteritis and to help with gastroesophageal reflux disease.
- ❑ *Prochlorperazine (Compazine)*- is used to treat nervous, emotional, and mental conditions (eg, schizophrenia) and non-psychotic anxiety, treatment of nausea and vertigo. It is also a highly potent typical antipsychotic, 10–20 times more potent than chlorpromazine.

#### 11 **Common medications can cause symptoms of Parkinson's DailyCaring.com 2018**

- ❑ These are some commonly-prescribed medications that have been reported to cause Parkinson's-like symptoms.
- ❑ Mood- or behavior-related medications
- ❑ First generation antipsychotics like haloperidol (Haldol)
- ❑ Second generation antipsychotics like risperidone (Risperdal), especially at higher doses
- ❑ Lithium and antidepressants like sertraline (Zoloft) or fluoxetine (Prozac or Sarafem)

- ❑ Tricyclic antidepressants like imipramine (Tofranil)
- ❑ Monoamine oxidase inhibitors (MAOIs) like phenelzine (Nardil, Nardelzine)
- ❑ Medications for medical conditions
- ❑ Prochlorperazine (Compazine, Stemizine, Buccastem, Stemetil, Phenotil)
- ❑ Metoclopramide (Reglan)
- ❑ Valproate (Depacon) or other drugs used for seizures, migraines, and behavioral issues caused by dementia
- ❑ Anticonvulsants like tiagabine (Gabitril), gabapentin (Neurontin), oxcarbazepine (Trileptal), and lamotrigine (Lamictal)
- ❑

## 12 **New Treatments for Parkinson's**

### **FoxFeed Blog: FDA Approves Xadago for Parkinson's Disease**

***Loren DeVito, PhD, March 22, 2017***

- ❑ The U.S. Food and Drug Administration (FDA) has approved a new drug called Xadago (safinamide) from Newron Pharmaceuticals for people with Parkinson's disease (PD) who are taking levodopa but experiencing "off" episodes.
- ❑ "Off" episodes are times when Parkinson's symptoms, such as tremor or difficulty walking, return despite medication. They are more common as disease progresses.
- ❑ Studies showed that, compared to people taking placebo, those on Xadago experienced more beneficial "on" time (when PD symptoms are reduced) and less "off" time (when PD symptoms are increased).
- ❑ Xadago remaining dopamine to function for a longer period of time. Other types of MAO-B inhibitors that are FDA approved to treat PD include selegiline (Eldepryl, Zelapar, EMSAM) and rasagiline (Azilect).
- ❑ "Parkinson's is a relentless disease without a cure," said Eric Bastings, MD, deputy director of the Division of Neurology Products in the FDA's Center for Drug Evaluation and Research in a press release.

## 13 **Parkinson's disease: mechanisms and models.**

***Dauer W<sup>1</sup>, Przedborski S.***

- ❑ Abstract
- ❑ Parkinson's disease (PD) results primarily from the death of dopaminergic neurons in the substantia nigra.
- ❑ Current PD medications treat symptoms; none halt or retard dopaminergic neuron degeneration.
- ❑ The main obstacle to developing neuroprotective therapies is a limited understanding of the key molecular events that provoke neurodegeneration. The discovery of PD genes has led to the hypothesis that misfolding of proteins and dysfunction of the ubiquitin-proteasome pathway are pivotal to PD pathogenesis. Previously implicated culprits in PD neurodegeneration, mitochondrial dysfunction and oxidative stress, may also act in part by causing the accumulation of misfolded proteins, in addition to producing other deleterious events in dopaminergic neurons. Neurotoxin-based models (particularly MPTP) have been important in elucidating the molecular cascade of cell death in dopaminergic neurons. PD models based on the manipulation of PD genes should prove valuable in elucidating important aspects of the disease, such as selective vulnerability of substantia nigra dopaminergic neurons to the degenerative process.
- ❑

14  **CDC.gov**

**Street-Drug Contaminant causing Parkinsonism**

Recently, a street-drug contaminant has appeared that can cause parkinsonism in drug abusers.

The compound N-methyl-4-phenyl-1, 2, 3, 6-tetrahydropyridine (MPTP) has been identified in underground laboratory preparations of a potent analog of meperidine (Demerol).

Two different synthetic methods were used by the underground chemists, and, in both instances, MPTP was present as a side product in the final drug preparation used or sold in conjunction with these outbreaks.

The MPTP-containing powder, sometimes sold as a new "synthetic heroin," was dissolved in water and administered intravenously or taken by the intranasal route. This contaminant has been documented to produce irreversible chronic parkinson symptoms in drug abusers.

MPTP-induced parkinsonism in man is remarkably similar to idiopathic Parkinson's disease

15  **What do these people have in common?**

[George W. Bush](#)

[Michael J. Fox](#)

[Billy Connolly](#)

[Muhammad Ali](#)

[Charles M. Schulz](#)

[Robin Williams](#)

[Neil Diamond](#)

16  **PD Treatments: Levodopa**

Levodopa is a naturally occurring chemical which can enter the brain and be converted to dopamine when combined with carbidopa. The carbidopa also prevents the levodopa from converting into dopamine before it enters the brain.

This is one of the most effective treatments for Parkinson's although after long-term use, the effects start to fluctuate.

Some people may experience side effects such as nausea, feeling lightheaded, and making sudden involuntary movements.

17  **PD Treatments: Duopa**

In 2015, the FDA approved Duopa, which is a combination of carbidopa and levodopa in a gel form which is administered via a feeding tube into the small intestine.

Duopa is generally given to patients with advanced Parkinson's disease whose response to carbidopa-levodopa is varied. The drug is infused continuously so the level of the drugs remains constant.

The risks associated with Duopa are infections at the site of the feeding tube and the tube falling out.

18  **PD Treatment: Dopamine**

Dopamine agonist mimic the effects of dopamine in the brain. They are generally not as effective as levodopa but the effects last longer and they can be used in conjunction with levodopa to

counter any fluctuation in efficiency.

- ❑ These medications can be administered through a patch, oral medications or as an injection. The side effects are also nausea and lightheadedness, but may also cause drowsiness, hallucinations and compulsive behaviors such as gambling, overeating, and hypersexuality—which will need to be addressed by a doctor.

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#### 19 **PD Treatment: Selegiline, Rasagiline**

- ❑ Medications such as selegiline and rasagiline help to prevent dopamine breaking down in the brain by releasing monoamine oxidase B (MAO-B) enzymes.
- ❑ Generally, these types of medications should not be taken in conjunction with certain narcotics or antidepressants as occasionally patients will suffer from severe reactions. Side effects of MAO-B inhibitors include insomnia and nausea and if taken with carbidopa-levodopa they can also cause hallucinations.

❑

#### 20 **PD Treatment**

- ❑ Catechol-O-methyltransferase (COMT) inhibitors
- ❑ These types of medications help to prolong the effects of levodopa by blocking brain enzymes that deplete dopamine.
- ❑ The side effects are the same as taking levodopa, mainly involuntary movements and diarrhea.

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#### 21 **PD Treatment: Anticholinergics**

- ❑ Traditionally, anticholinergics have been used over the years to help combat tremors commonly experienced in Parkinson's disease patients.
- ❑ However, side effects such as confusion, hallucinations, memory loss, constipation, and urination problems are often more troublesome than the tremors.

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#### 22 **PD Treatment: Amantadine**

- ❑ Amantadine can be prescribed to patients in the early stages of Parkinson's to offer relief from their symptoms. It can also be taken in combination with carbidopa-levodopa in the later stages of the disease to help control side effects such as involuntary movements.

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#### 23 **PD Treatment: Deep Brain Stimulation**

- ❑ Most regularly used in advanced cases of Parkinson's disease for patients who no longer respond to levodopa, deep brain stimulation involves the insertion of electrodes in the brain which are connected to a generator implanted in the chest area. The electrical pulses sent from the generator to the electrodes can reduce the symptoms of Parkinson's disease.

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#### 24 **Parkinson's Case Study**

Parkinson's Disease, Heart Disease, Eye Pain/Problems, Sexual Disorder, Chronic Fatigue, Depression  
Patient KC 25351, a 69 year old male, presented on 4/19/05

#### 25 **When treatment began...**

- ❑ Parkinson's tremor made it impossible to shave using a regular razor.

- ❑ Patient had lost sense of humor and enjoyment in regular activities and spent much time just sitting and staring.
- ❑ Patient had trouble speaking due to stuttering and quivering of tongue, rendering patient unable to continue preaching.
- ❑ Patient walked with slow guarded gait and had to hold on to his wife.
- ❑ Patient had trouble sleeping and had to take afternoon naps.
- ❑ Patient's energy level was greatly reduced.
- ❑ Patient was chronically fatigued and experienced dizziness and balance problems.
- ❑ Patient experienced vision problems.
- ❑ Patient was on MD prescribed medications with serious side effects: Atavan, Cialis, and Levodopa
- ❑ Patient's life was being greatly DISRUPTED by illness!!

26  **MD had prescribed the following medications:**

Atavan - for the management of anxiety

- Side effects: Sedation, Irregular heartbeat, Itching, Confusion, Behavior problems, Inability to coordinate muscle activity, Nausea, Diarrhea, Vomiting, Constipation, Loss of bladder control, Unusual tiredness or weakness, Visual disturbances, Dizziness, Drowsiness

Cialis – for the treatment of erectile dysfunction

- Side effects: Headache, Dyspepsia, Back pain, Myalgia, Nasal congestion, Flushing, Pain in limbs, Asthenia, Face edema, Fatigue, Pain, Angina pectoris, Chest pain, Hypotension, Hypertension, Myocardial infarction, Postural hypotension, Palpitations, Syncope, Tachycardia, Abnormal liver function tests, Diarrhea, Dry mouth, Abdominal pain, Vomiting, Arthralgia, Neck pain, Dizziness, Hypesthesia, Insomnia, Paresthesia, Somnolence, Vertigo, Dyspnea, Epistaxis, Pharyngitis, Pruritus, Rash, Sweating, Blurred vision, Changes in Color vision, Conjunctivitis, Eye pain, Lacrimation increase, Swelling of eyelids, Erection increase, Spontaneous penile erection

Levodopa – for the treatment of idiopathic Parkinson's Disease

- Side effects: Adventitious movements, Dystonic movements, Cardiac irregularities and/or palpitations, Orthostatic hypotensive episodes, Bradykinetic episodes, Mental changes, Paranoid ideation, Psychotic episodes, Depression, Suicidal tendencies, Dementia, Urinary retention, Gastrointestinal bleeding, Development of duodenal ulcer, Hypertension, Phlebitis, Hemolytic anemia, Agranulocytosis, Convulsions, Anorexia, Nausea, Vomiting, Abominal pain, Distress, Dry mouth, Dysphagia, Sialorrhoea, Ataxia, Increased hand tremor, Headache, Dizziness, Numbness, Weakness, Faintness, Bruxism, Confusion, Insomnia, Nightmares, Hallucinations, Delusions, Agitation, Anxiety, Malaise, Fatigue, Euphoria, Muscle twitching, Blepharospasm, Trismus, Burning sensation of the tongue, Bitter taste, Diarrhea, Constipation, Flatulence, Flushing, Skin rash, Increased sweating, Bizarre breathing patterns, Urinary incontinence, Diplopia, Blurred vision, Dilated pupils, Hot flashes, Weight gain or loss, Dark sweat and/or urine, Oculogyric crises, Sense of stimulation, Hiccups, Development of edema, Loss of hair, Hoarseness, Priapism and activation of latent Horner's syndrome, Elevations of blood urea nitrogen, SGOT, SGPT, LDH, Bilirubin, Alkaline phosphate or protein-bound iodine, Reductions in WBCs, Hemoglobin and Hemocrit, Leukopenia

- ❑ Contains: Corn starch, Magnesium stearate, Microcrystalline cellulose, Povidone, Talc and D&C Red No. 7 lake dye

27  **Trading current symptoms for new ones??**

"At present, there is no cure for Parkinson's Disease, but a variety of medications provide dramatic relief from the symptoms. Usually, patients are given levodopa combined with carbidopa. Carbidopa delays the conversion of levodopa into dopamine until it reaches the

brain. Nerve cells can use levodopa to make dopamine and replenish the brain's dwindling supply. Although levodopa helps at least three-quarters of parkinsonian cases, not all symptoms respond equally to the drug. Bradykinesia and rigidity respond best, while tremor may be only marginally reduced. Problems with balance and other symptoms may not be alleviated at all. Anticholinergics may help control tremor and rigidity. Other drugs, such as bromocriptine, pergolide, pramipexole, and ropinirole, mimic the role of dopamine in the brain, causing the neurons to react as they would to dopamine. An antiviral drug, amantadine, also appears to reduce symptoms. In May 2006, the FDA approved rasagiline to be used along with levodopa for patients with advanced PD or as a single-drug treatment for early PD."

-National Institute of Neurological Disorders and Stroke, *Parkinson's Disease: Hope Through Research*, January 2006

## 28 Levodopa

"L-dopa", "Sinemet®"

Used in an attempt to replace the neurotransmitter dopamine, an important brain chemical that the substantia nigra fails to produce in Parkinson's patients.

While it may help to temporarily reduce Parkinson's symptoms, scientific reports in medical journals now warn that L-dopa therapy may actually speed up the progression of the disease by increasing free radical\* production, causing patients to worsen more quickly. It has also been shown to lead to further compromise of the brain's ability to produce energy.

L-dopa therapy remains the mainstay of Parkinson's treatment!!!

- Perlmutter, David, M.D., BrainRecovery.com: Powerful Therapy for Challenging Brain Disorders, 2000, Pg 13, 21.

\*Free radicals are destructive chemicals formed by the normal process of metabolism, toxic elements in the environment, and as a normal response of the body to challenges by infectious agents or other stresses.

## 29 Patient History

Parkinson's Disease:

Neurosurgeon diagnosed Parkinson's disease August of 2004, with the proper radiological exams and physical exams 6 months prior to seeing us and unusual symptoms were noted.

No treatment, other than Atavan for Anxiety, was recommended.

Adrenal Fatigue was diagnosed one year earlier by an 'alternative healer using muscle tester' in the Dayton area.

There was no improvement noticed for the treatment of Adrenal Fatigue after being on the following nutrients for one year.

■ Lecithin

■ Heavy Metal Detox

■ Cortisol

■ Adrenal Support

■ Siberian Ginseng

■ Super Antioxidant

■ Unadegada? Homeopathic

## 30 Patient Presenting Symptoms

Parkinson's Symptoms- takes Levodopa from nearly one year

- Dizziness and balance problems
- Slow guarded gait, uses hand on wife to steady himself
- Problems focusing eye sight
- Shaving is difficult
- Started stuttering and stammering in the last 3 months due to a constant tongue 'quivering' making speaking difficult
- Can no longer preach
- Reduced: Personality and character are different
- 'Cries' or feels like crying 'all of the time'
- Nervous and agitated for last 6 months
- Heart disease
- 5 heart catheterizations
- 2 balloons
- Allergies
- History of Prostate cancer
- Radiation treatment 2004
- Depression
- Takes Atavan for anxiety
- Surgical removal of Uvula years ago for sinusitis resulting in constant drooling, choking and problems drinking fluids.

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32  **Most significant findings in initial testing:**

- Low thyroid
- Low grade infection
- Mild low protein
- Mild low minerals

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34  **Hair Analysis - April 26, 2005**

Toxic elements

- No significant levels of toxic elements.
- This is bad

Essential elements

- The essential/nutrient elements are mostly all low and some very low.
  - These findings support the blood findings.
- There are either toxic elements that are depleting the body of the nutrient elements and/or there is just a deficiency.
- Because of these findings I recommended a DMSA Challenge.
  - Toxic elements commonly or can accumulate in the brain causing symptoms like this patient has.

35  **Diet and Supplements**

**Recommended – Initial Testing**

- The diabetic factors are a little high.
  - This is not primary and may be associated with infection, fast food or just eating too much fruit



this time of year.

■ Patient was recommended he follow a standard whole foods diet and Category 3 diabetic diet.

- Calcium MCHC 1500mg.
- Inflanoid (Turmeric) 2 per day
  - Metagenics
- Iodoral 24mg.
- Lithinase 2 per week
- Magnesium Glycinate 200mg.
- MLK 1000 2000mg.
- Seacure 3 per day
- Spectramin Chelate 900mg.
- Sublingual B12 Plus 2 per day
  - B12/Folic from Douglas Labs
- Thyrostim 2 / day
- GLA 240mg.
- Lauricidin 2 tsp./day

### 36 **CoQ10 in Parkinson's Patients**

- CoQ10 is a vital player in the production of energy and is present in all living cells where it plays a critical role in cellular energy production.
- Energy deficiencies in certain parts of the brain can lead to an inadequate production of important brain chemicals.
- Dr. M. Flint Beal, Massachusetts General Hospital: Found a PROFOUND deficiency of CoQ10 in Parkinsons patients – may explain why their brains produce an inadequate supply of dopamine. Also found a slight deficiency in their spouses – is somehow related to environmental factor(s)???
- Dr. Beal's findings also indicated that orally administered CoQ10 is readily absorbed, well tolerated, and measurably increases cellular energy production.

- Perlmutter, David, M.D., BrainRecovery.com: Powerful Therapy for Challenging Brain Disorders, 2000, Pg 22

### 37 **Parkinson's Disease and CoQ10**

- Archives of Neurology in 2002. Trial results: Daily doses of CoQ10 of 300mg, 600mg or 1,200mg/day; the greatest benefit was found in those taking the highest dose of CoQ10. Compared to placebo, there was a 44 percent less decline in mental function, muscle function and ability to carry out the activities of daily living, such as dressing and feeding themselves. The CoQ10 groups showed a significant increase in the function of the body's mitochondria, tiny furnaces within cells that produce energy. Individuals with Parkinson's disease appear to have reduced levels of CoQ10 and impaired mitochondrial function.
- The latest news by the same researches included vit E and higher levels of CoQ10 of 1,800, 2,400 and 3,000mg/day. The results suggested that 2,400mg/day was an appropriate top dose for future studies of CoQ10 for Parkinson's disease

### 38 **Brain Sustain**

- Nutritional supplement designed to maintain healthy brain function.
- For the protection and enhancement of brain performance.
- Ingredients:

- 400 mg N-Acetyl-Cysteine
- 100 mg Phosphatidylserine
- 400 mg Acetyl-L-Carnitine
- 80 mg Lipoic Acid
- 60 mg Coenzyme Q 10
- Ginkgo Biloba Extract (leaf)
- 60 mg 24% Ginkgo Herterosides

■Other Ingredients:

- magnesium citrate, cellulose, leucine, silicon dioxide

■Contains no animal byproducts

39  **Bump in the Road**

- Patient progress began to plateau after a year on the program.
- New protocol: includes Brain Sustain at 8/day and CoQmelt at 900mg/day.
- Patient progress picked up again, and patient and spouse saw vast improvement!!

40  **DMSA Recommendation**

- My staff informed me that this patient had some good improvement using the DMSA. He noticed immediate improvement in the shaking, unsteadiness and speech just from the challenge so on his own he continued to take the DSMA on a daily basis.
- For a short time, this is OK but the DMSA at that level will also cause a depletion of other beneficial nutrients over time.
- He was recommended the following protocol after the results were in:
  - Take the DMSA at 7 capsules 3 times per day for 3 days then take 11 days off
  - Do this for 5 cycles then do another urinary collection like the first time.
    - He doesn't need to do the pre-challenge test.
  - During the 3 days that the patient takes the DMSA, stop all of the vitamins except for magnesium.
    - The DMSA would most likely eliminate these good vitamins rather than eliminate the toxic ones.
- Then for 11 days take all of the vitamins as recommended

41  **DMSA Challenge**  
**Pre-provocative 05/29/05**

42  **DMSA Challenge**  
**POST-provocative 05/30/05**

43  **DMSA Challenge**  
**POST-provocative 08/15/05**

44  **DMSA**

- Patient began to experience some DMSA sensitivity because of the intensity of his program and developed a skin rash.
- To reduce the DMSA side effects stop DMSA for 2 weeks then resume at a 1/2 dose.

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48  **After 4 months on the program**

- 40% overall improvement
- Energy and allergies are better
- No shaking
- Walking better...can jog now which he wouldn't do before because of unsteadiness, weakness and angina.
- Better with people and emotions are much better
- Doesn't feel like crying all the time
- Talks better...stutters much less!
- "More with it."
- Back to preaching

49  **13 months after treatment began (5/24/06)**

- Stopped Levodopa at the beginning of our treatment one year ago
  - Parkinson's is not worse after one year of our care
  - Symptoms are 90-95% improved
- Parkinson's tremor is gone.
- Patient is able to walk 3 miles 3 times per week on his own!!
- Stuttering and quivering of tongue have improved/resolved.
- Sense of humor has returned, and patient is much more lively and talkative again.
- Energy level has increased and patient is now able to work throughout the day and no longer has to take afternoon naps.
- Patient can once again use a regular razor for shaving.
- Patient reduced the number of MD prescribed medications he was on to just Atavan, at half the dose and he is reducing this further and will try to eliminate it completely very soon.
- Patient is able to return to a more NORMAL life.

50  **Update 12-12-2006**

**Patient at 71 y/o**

- Patient relates:
  - Doing even better
  - Walks 3 miles 3 times a week
  - No shakiness, more energy, feel good
  - His 'sex life' is back
  - Back to preaching part time
  - 
  - Passed away quickly at age 83 from a stroke but he had no significant disability or symptoms of PD.

51  **Parkinson's Disease**

- More than one million people in the United States alone have Parkinson's Disease, and more than 50,000 new cases are being diagnosed each year. This translates to a prevalence of about 1-2 cases per every 1,000 in the general population, which dramatically increases to about 1 in 100 when looking at the over 55 population. Men are at a slightly higher risk than women, with the

average age of onset being about 60 years. However, it may be diagnosed as early as the mid 30's.

❑ Parkinson's disease is characterized by a unique tremor in that it is worse at rest and may improve substantially when an affected limb is used.

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#### 52 ❑ **PD, Alzheimer's tips**

❑ All of my patients with such neurological problems will have a variety of toxicities, imbalances and nutrient deficiencies.

❑ All have heavy metals that are only seen with the UTEC and it is critical, that this be addressed or results and recovery will be reduced.

❑ Be patient, results might be slow

#### 53 ❑ **Dr. Merkle's testing for pts with signs of Parkinson's**

❑ Foundational testing plus:

■ Cancer panel

■ Hormone panel

■ Cleveland Heart panel and BNP

❑ Hair test

❑ UTEC

❑ Dipstick urine

❑ Stool test for blood