

SUMMER 2006

WELCOME ALAN DIAMOND D.O. MEDICAL DIRECTOR OF CNI MOVEMENT DISORDERS CENTER

Dr. Diamond earned his undergraduate degree from the University of Arkansas and received his medical degree from the University of Health Sciences College of Osteopathic Medicine in Kansas City. He completed his neurology residency as chief resident at Saint Louis University and fellowship training in Movement disorders at Baylor College of Medicine in Houston, Texas.

What is an Osteopathic physician (D.O.)? D.O.s and M.D.s are the only fully qualified physicians licensed to perform surgery and prescribe medication. D.O.s practice a holistic approach to medicine and their training focuses on preventive health care. In addition to undergoing basic medical school curricula, D.O.s receive extra training in the musculoskeletal system.

Dr. Diamond has written extensively on movement disorders focusing on surgical treatment of Parkinson's disease and other movement disorders.

NEUROLEPTIC MALIGNANT SYNDROME

(WHY CERTAIN PD MEDICATIONS SHOULD NOT BE STOPPED ABRUPTLY)

Neuroleptic Malignant Syndrome (NMS) is a *rare*, potentially life-threatening neurological disorder most often associated with an adverse reaction to neuroleptic or antipsychotic drugs. The syndrome may also occur (*however, quite rare*) with the abrupt discontinuation of anti-Parkinson drugs such as levodopa, other dopaminergics and amantadine.

Symptoms of NMS include:

Hyperthermia (high body temperature), fast heart rate, rapid breathing, sweating, fluctuating blood pressure, tremor, rigidity (stiffness), confusion, incontinence, impaired consciousness, delirium, lethargy, coma.

Diagnosis:

The diagnosis requires a high level of suspicion from the treating physician. Generally, hyperthermia with no other cause, rigidity, and at least 5 of the following: tremor, fast heart rate, fast breathing rate, incontinence, fluctuating blood pressure, decreased mental status, metabolic acidosis, increased blood levels of creatinine, sweating, drooling, increased white blood count.

Treatment:

If untreated, may cause death.

If the cause is due to abrupt cessation of anti-parkinson medications such as levodopa, restarting the medication as soon as possible is imperative. If symptoms have advanced and the patient is hospitalized, numerous tests may be done with appropriate treatment with bromocriptine or dantrolene, hydration with fluids, cooling and supplemental oxygen.

If caught and addressed early, usually no lasting ill-effects.

Due to the potential of NMS (albeit rare) occurring with the sudden withdrawal of Parkinsonism medications, "Drug Holidays" are no longer recommended.

WWW.THECNI.ORG

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INSPECTOR GADGET

U-Step Walking Stabilizer

Much better than the average aluminum walker, provides stability and ability to control the tension on the wheels so the walker "will not get away from you". Also has an optional built in laser light to help with "freezing" episodes, optional basket and seat. Locally can be purchased at YouCan TooCan: 303-759-9525 or direct from InStep Mobility products: 1-800-558-7837/ walkers@ustep.com

Recommendation from a PD person regarding a mouse for the computer:

The Assistive Mouse Adapter, uses technology that filters out the shaking caused by tremor in the hand. Find out more information about this at: www.MontroseSecam.com.

Medication reminders

Pill bottles with built-in timers, contact e-pill at 1-800-549-0095 or www.epill.com

Another pill reminder:

www.forgettingthepill.com has an assortment of pill timers, pill boxes and alarm watches.



Center of Excellence

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AUTONOMIC DYSFUNCTION

(NON-MOTOR FEATURE OF PD)

Rigidity, bradykinesia, tremor and balance issues are all motor features of Parkinson's disease. There are numerous non-motor symptoms that may or may not occur in the individual with PD. One of the non-motor features is *autonomic dysfunction*, this refers to bodily functions that are normally carried out automatically, without conscious effort. The autonomic nervous system controls areas such as blood pressure, temperature, gastrointestinal (including swallow) and urinary.

Orthostatic hypotension – this refers to the lowering of blood pressure upon position changes such as lying to sitting or sitting to standing. The individual may experience lightheadedness, fainting, fatigue, blurred vision and decreased concentration. To help alleviate these symptoms, your physician may recommend some simple measures such as: drink at least 2 quarts of fluid per day, liberalize salt intake, drink at least 3 caffeinated beverages daily, change positions slowly, TED or JOBST stockings. In more severe cases, your physician may order medications such as florinef or midodrine.

Constipation – this is quite common in PD, not only is the normal movement of the gastrointestinal tract slower but the anti-parkinson medications can be quite constipating. The PD person should make sure that they are eating plenty of fresh fruits and vegetables, increase fluid intake and increase fiber. If this is not enough, laxatives or stool softeners may be needed on a regular basis.

Dysphagia – dysphagia means difficulty with swallowing, if the person with PD coughs or chokes frequently while eating they should consult with their physician who may order a swallow evaluation by a speech language pathologist or he/she may order a modified barium swallow to determine if there are any structural problems, otherwise, smaller bites of food when eating followed by frequent sips of a beverage may be helpful.

Drooling – Many people with PD drool, some just at night and awaken to a wet pillowcase, others may drool excessively during the day, most think that they are producing excessive amounts of saliva, however, this is not the case. The person with PD is simply not swallowing as frequently as someone without PD. If excessive and troublesome, some anti-cholinergic medications may help to dry secretions, however, these drugs may impair cognitive function. In some cases, botox injections may help.

Excessive sweating and heat intolerance – If prone to heat intolerance, avoid strenuous activity during increased temperatures and drink plenty of fluids. Excessive sweating may occur frequently during "off" times, PD meds may need to be adjusted to decrease "off" times.

Urinary disturbances – Nocturia (frequent night-time awakenings to urinate) and overactive bladder with frequency and urgency are common problems. Less frequent are a slower bladder with symptoms such as hesitancy in starting the urination stream. Urinary incontinence (wetting pants) may occur in both scenarios. Referral to a urologist would be appropriate to determine the exact cause and proper treatment.

Sexual dysfunction – Many people with PD report decreased sexual activity, however, libido (desire) is still generally intact. Erectile dysfunction (difficulty getting or maintaining erection) may be common in males with PD. Evaluation by an urologist should be done to make sure no other problems may be causing the dysfunction. Medications such as Viagra and other similar medications may be of benefit but should be used with caution due to the possible side effect of lowering blood pressure.

DRIVING MOTOR VEHICLES

With advanced Parkinson's disease, the issue of driving a car or other motorized vehicles should be addressed. This is particularly true for the individual with motor fluctuations.

Reaction times may be diminished, especially when the patient is having an "off time" making driving more dangerous. Patients with PD may also have problems with task shifting so it is recommended that they drive with minimal distractions in well lit, low traffic situations. Driving evaluations are recommended if there is any question about ones ability to remain safe on the road. The best driving programs for individuals with neurological problems are ones that the evaluation is performed by an occupational therapist in a controlled setting. Usually, the person must first pass a vision and reaction time screening before they are taken on the road. The road test generally begins in an extremely low traffic area and then works up to higher volumes of traffic.

THE PROGRAMS THAT ARE CURRENTLY AVAILABLE FOR THIS TYPE OF EVALUATION ARE:

Behind the Wheel

Spalding Rehabilitation Hospital

303-363-5321 / www.SpaldingRehab.com

Master Drive of Denver

303.627-4447 / www.masterdrive.com

Master Drive of Ft. Collins and Loveland

970-593-6362 / www.masterdrive.com

Master Drive of Colorado Springs

719-206-9676 / www.masterdrive.com