

# Sleep in Parkinson's Disease

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**PMD Alliance**



# Parkinson's as a Multi-system Disease



Langston, 2006

# Common Sleep Problems

- Excessive Daytime Fatigue
- Difficulty Falling Asleep
- Difficulty Staying Asleep
- Acting out dreams
- Restless Legs Syndrome
- Obstructive Sleep Apnea



# Excessive Sleepiness

- 33-58% of Parkinson Patients complain of extreme fatigue
- 1/3 of PD patients consider fatigue sleepiness to be the most disabling symptom
- May precede diagnosis.
- May worsen as PD progresses
- May or may not relate to depression
- You sometimes have to bring this problem to the attention of your doctor!!

# What Causes Sleepiness

- Poor “sleep hygiene”
- Difficulty Falling Asleep
- Difficulty staying asleep
- Medication side effects!!!
- Obstructive Sleep Apnea
- RLS/PLMS
- Primary problem
- Depression

# Medication and Daytime Sleepiness

- Sinemet (carbidopa/levodopa)—(14%) and increase as the dose increases.
- Dopamine agonists (Mirapex/Requip)—probably worse (>30%) for daytime sleepiness and also dose dependent
- Anti-cholinergic medications worsen sleepiness

# Difficulty Falling Asleep and Staying Asleep

- Inability to get comfortable (“off”)
- Restless Legs (20%)
- Too many daytime naps
- Poor “sleep hygiene”
- Wearing off in the night
- Bladder or Prostate problems.
- Sleep Apnea.
- Dream Enactment Behavior.

# Dream Enactment

**51 Year-Old Japanese Man With  
RBD Is Fighting Off Snakes  
During Dream-Enactment**

*\*Please reference the included CD-ROM  
for footnotes related to this video.*



# REM Sleep Behavior Disorder

- Often Precedes Parkinson's disease
- Ranges from Vocalizations to arm and leg flailing
- Reported in roughly 50% of patients with PD
- Potentially disruptive to sleep of patient and partner
- Easily treatable!!

# Restless Legs

- Present in about 20+% of patients with Parkinson's disease
- Urge to move the legs associated with an unpleasant sensation when laying or sitting still.
- Abnormal sensations relieved by moving the legs.
- PLMS and sleep disruption

# Obstructive Sleep Apnea

- 4.4% of the general population but about 20% of Parkinson's patients
- Can result in frequent awakenings, worsened quality of sleep, and potentially worsened fatigue during the day.
- Snoring with pauses in breathing followed by gasping.



# Treatment of Sleepiness in PD

- Exclude underlying causes
  - Sleep Apnea
  - RBD
  - Hypothyriod
  - RLS/PLMS
  - Medications
  - Depression
- Sleep Hygiene
- Improve overall PD treatment
- Aggressive treatment of Depression
- Urology (Men's Health) evaluation

# Getting to Sleep and Staying Asleep

## ■ DO

- Regular bedtime
- Regular Wake-up
- Relax for 1hr before bedtime
- Use the bedroom for sleep only
- Exercise during the day
- Treat your parkinsonism overnight!!

## ■ DON'T

- Nap in the evening
- Nap more than once
- Eat heavy meals before bedtime
- Continue to lie in bed if you can't sleep
- Drink caffeine late in the day

# Treatment of Dream Enactment

- Clonazepam is about 90% effective even at very low doses.
- Melatonin (3-15mg) or Rozeram/? Long acting melatonin
- Quetiapine (Seroquel)
- Dopaminergic medications
- Environmental modification

# Treatment of Sleep Apnea

- Consultation with a sleep specialist and visit to the Sleep Lab
- No alcohol within 3 hours of bedtime
- Weight loss
- Jaw advancement devices
- ENT consultation
- CPAP

# CPAP-Continuous Positive Airway Pressure





# Treatment of Restless Legs

- Make sure no anemia!!
- Treatment with longer acting dopaminergic medications at night.

# What next!!!

- Sometimes Sleep Aids are necessary despite all efforts at “sleep hygiene”
- Can try to use medication side effects favorably
  - Eszopiclone (Lunesta)
  - Zolpidem (Ambien), Zolpidem CR
  - Sonata (middle of the night)
  - Belsomra (suvorexant)
  - Trazodone
- Dopamine during the night!! (Sinemet CR/redose early AM)
- Fatigue is often a “primary” problem in Parkinson’s disease!!!
- Daytime medications such as Provigil (modafinil) and Ritalin (methylphenidate) may be helpful in some patients.

thank you

