SPOTLIGHT ON PARKINSON’S DISEASE: WHAT’S NEW IN BRAIN HEALTH

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PRESENTATION

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GOALS OF PRESENTATION

• Provide overview of the neuropsychiatric symptoms and cognition in Parkinson’s disease (PD):
  ▪ Presentation
  ▪ Potential risk factors
  ▪ Assessment
  ▪ Management

• Recognize that non-motor symptoms currently may have the greatest impact on quality of life, function, and caregiver burden in PD
POTENTIAL NEUROPSYCHIATRIC SYMPTOMS IN PD

- Depression and Anxiety
- Psychosis
- Impulse control disorders (ICDs)
- Cognitive changes
- Others
  - Disorders of sleep and wakefulness / fatigue (e.g., REM sleep behavior disorder [RBD])
  - Apathy (i.e., decreased motivation)
CAVEATS

- Many PD patients have no psychiatric or cognitive complications
- Psychiatric and cognitive complications are not the fault of and do not represent weakness in a patient
- PD patients in general cope extremely well given they have a chronic, progressive, and sometimes disabling disease
- The family members and caregivers of PD patients are in general remarkably supportive and understanding
Having the illness or its treatments may have under-recognized beneficial effects

- Potential mood or cognition benefits for dopamine agonists or monoamine oxidase inhibitors
- Enhanced creativity for dopamine agonists
- Greater understanding and appreciation of life and relationships
  - Perceiving positive consequences, such as personal growth, as a result of personally having PD or a spouse with PD is related to greater marital quality for both members of the marital dyad
DEPRESSION
THE ROBIN WILLIAMS EFFECT

• Etiology of depression in PD
  ▪ Psychological
    – Being diagnosed with chronic, progressive neurodegenerative disease is life-altering event
    – Additional challenges every step of the way
  ▪ Biological
    – Brain regions and chemicals affected by PD also those responsible for mood regulation
    – Increased rates of depression prior to onset of motor symptoms, now called “prodromal PD”

• In reality the two are intricately linked and can’t be separated
RISK FACTORS OR SYMPTOMS ACCOMPANYING DEPRESSION

- Higher frequency in females and those with cognitive impairment
- Impact of deep brain stimulation (DBS) unclear
  - Depression severity improves on average
  - Preliminary evidence GPi better than STN placement
- Model of 5 traditional depression risk factors classified 75% of depressed PD patients
  - Age, sex, prior depression history, family depression history, other medical conditions
  - PD-specific variables added little to the model
COMPLEXITY IN DIAGNOSING DEPRESSION IN PD

• Symptom overlap on 5 of 9 DSM-5 items
  ▪ Sleep (hypersomnia and insomnia)
  ▪ Appetite change / weight loss
  ▪ Psychomotor changes (e.g., mental-physical slowing)
  ▪ Fatigue
  ▪ Changes in concentration and thinking

• Attribute symptoms to depression or PD?
  ▪ Consensus recommendation is to count toward depression

• Emphasizing mood (as opposed to interest/pleasure) and cognitive symptoms of depression may be more specific
Recent positive studies for medications:
- Tricyclic antidepressants (i.e., nortriptyline)
- SSRI (paroxetine)
- SNRI (venlafaxine)
- Dopamine agonist (pramipexole)

Recent positive study for psychotherapy
- Cognitive-behavioral therapy (CBT)
• **SSRIs**
  - Case literature in psychiatry of SSRIs causing parkinsonism (primarily tremor)
  - Recent venlafaxine and paroxetine study found both well tolerated from motor standpoint

• **Combination with selective MAO-B inhibitors** is controversial
  - Selegiline or rasagiline causing *serotonin syndrome*
  - Anecdotal experience is that this is extremely rare
    - <1% based on data from recent clinical trial
ANXIETY
Most patients with anxiety disorder also have depression, and vice versa.

Anxiety often more disabling than depression:
- More psychologically and physically distressing.

Presentation:
- Generalized anxiety disorder (GAD):
  - One trigger can be mild cognitive changes.
- Social anxiety symptoms also common:
  - Often related to embarrassment over PD symptoms.
- Anxiety attacks (i.e., panic attacks):
  - May be associated with fluctuations or “off” periods, now called non-motor fluctuations.
• No published treatment studies
• Newer antidepressants have anti-anxiety effects
• Sometimes need to use benzodiazepines
  ▪ Lorazepam, alprazolam, clonazepam
  ▪ Beware of (1) cognitive side effects, (2) sedation, and (3) changes in balance / gait
  ▪ Start at low dosage
  ▪ Can be as needed (“prn”) or scheduled
• Clinical experience that cognitive enhancing medications may improve anxiety in those with mild cognitive deficits
• PD is a motor disease in which neuropsychiatric symptoms (NPS) are increasing recognized as common and important
• Co-morbidity of NPS is common
• NPS associated with disease-related brain changes
• PD medications and treatments appear to have mixed effects
• Under-recognition and under-treatment of most disorders
• Still a need for new treatments for most disorders