Psychotic symptoms in Parkinson’s disease

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Introduction

- Parkinson’s disease
  - Motor Symptoms
    - Depression
    - Anxiety
    - Sleep disorders
    - Cognitive dysfunction
    - Gastrointestinal Issues
    - Sexual Dysfunction
  - Non Motor Symptoms
    - Psychosis

- Parkinson’s disease
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    - Anxiety
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    - Sexual Dysfunction
Definitions

• **Psychosis:** altered thinking with disruption of the ability to distinguish real from unreal

• **Hallucinations:** a false perception, seeing, hearing, feeling or perceiving something that is NOT there.

• **Delusion:** altered thinking with a fixed conviction that something is real when it is not

• **Paranoia:** a delusion dominated by suspiciousness, fear, and concern about safety
What is Parkinson’s disease psychosis?

• Psychosis is a frequent complication of Parkinson’s Disease (PD)
• Hallucinations are the most common manifestation.
  - Can affect 40 -50 percent of patients with PD, particularly those at an advanced stage of illness.
  - Most commonly Visual hallucinations – people/animals, vivid colors, frightening
• Delusions – less common and rarely occur without hallucinations
  - More frequent in dementia patients
  - Infidelity or paranoid type
What causes psychosis in Parkinson’s disease?
What causes psychosis in Parkinson’s disease?

• Certain brain chemicals and receptors (e.g. dopamine and serotonin) are believed to play a role.

• Believed to be caused by either one of the following -
  Side effect of dopamine therapy
  Natural outcome of the disease
What causes psychosis in Parkinson’s disease?

Side effect of dopamine therapy

• Dopaminergic medications are the most common treatment for Parkinson’s disease.

• Dopaminergic therapy increases dopamine levels, helping improve motor symptoms. However, increasing dopamine levels can also cause chemical and physical changes in the brain that inadvertently lead to symptoms such as hallucinations or delusions.
Who is at risk for psychosis?

- Higher age
- Later disease onset
- Higher PD severity
- Longer PD duration
- Cognitive impairment
- Depression
- Visual disorders
- High medical comorbidity and polypharmacy, especially including the use of psychoactive drugs.
Treatment

• **Steps to implement at home to prevent and treat hallucinations**
  - Encourage good sleep habits
  - Keep lights on to decrease misinterpretations of shadows
  - High risk of hotels, overnight visits, unfamiliar places

• **Coping strategies**
  - Patients: recognize that hallucinations do not mean “I am going crazy.”
  - Do not react to these visions or sounds
  - Caregivers: Correct and do not engage
Treatment

• Identifying and treating the underlying causes and contributory factors like infection (e.g., pneumonia or urinary tract infection).

• Reduce or stop non PD medications –
  • Anticholinergic medications can contribute to confusion and exacerbate psychosis in PD.
  • Psychoactive medications are potential culprits and should be reduced or stopped if possible.
Treatment

• Antiparkinson medication adjustments
Treatment

• Antiparkinson medication adjustments

• Reduce dose or stop PD medication if possible (without worsening motor symptoms).

• Antipsychotic medications.
Treatment

- Antipsychotic medications

Boxed warnings

INCREASED MORTALITY IN ELDERLY PATIENTS WITH DEMENTIA-RELATED PSYCHOSIS

Elderly patients with dementia-related psychosis treated with antipsychotic drugs are at an increased risk of death.

A risk of death in drug-treated patients of between 1.6 to 1.7 times the risk of death in placebo-treated patients [cardiovascular (e.g. heart failure, sudden death) or infectious (e.g. pneumonia) in nature].
Treatment

- Antipsychotic medications

  Pimavanserin (Nuplazid) – approved by the FDA

  Quetiapine (Seroquel) – Not approved but commonly used

  Clozapine (Clozaril) – Rarely used but effective.
Protecting our caregivers

• Caregiver burden and stress high when hallucinations develop

• Psychotic behaviors often targeted at caregivers

• Need to protect sleep and respite for caregivers

• Hiring overnight supervision or “day off” staff
Thank You!