



Parkinson's Disease Psychosis (PDP)

What is Parkinson's Disease Psychosis (PDP) ?

- PD psychosis is a non-motor symptom of Parkinson's Disease that causes patients to experience hallucinations and/or delusions
- More than 50% of all PD patients will develop this over the course of their disease
- The condition relates to both neurology (nervous system) and psychiatry (mental and behavioral health)
- **Hallucination**; sensory perception that has the sense of reality of a true perception but that occurs without external stimulation.
- **Types: Auditory**; hearing, **Visual**; sight, **Tactile**; touch **Olfactory**; smell, **Somatic**; physical sensation, **Gustatory**; taste
- **Delusions**; false beliefs that are not based in reality
- **Types: Persecutory**; harm is going to occur, **Jealousy**; jealous, **Reference**; events that occur have strong personal significance

What causes Parkinson's disease psychosis ?

- There is not a clear understanding of the exact cause of PDP
- Certain brain chemicals and brain receptors are believed to play a role (dopamine and serotine)
- Condition is believe to be caused by either one of the following:

Side effect of Dopamine Therapy

- Side effect of dopaminergic therapy, (most common treatment for PDP)
- Increasing dopamine levels can cause chemical/physical changes that may lead to hallucinations and delusions

Natural Outcome of disease progression

- Condition can be triggered by changes in the brain
- Some changes occur naturally as Parkinson's disease progresses

Progression of Parkinson's Disease Psychosis

- Hallucinations begin (Patients are able to cope with symptoms without behavioral disturbances)
- Hallucinations progress (Insight is lost. As symptoms progress, patients may find these symptoms to be threatening and may act aggressively, creating behavioral disturbances)



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- Onset of delusions (Caregiver burden increases)
- Hospitalizations, Most PDP patients experiencing mild hallucinations progress to more severe symptoms
- It is not uncommon for most people to remain silent about their psychosis
- About 10-20% will report their symptoms to their physicians

Burden of Parkinson's Disease Psychosis

- Caregiver burden increases as PD symptoms progress
- More than 40% report a decline in physical health
- 66% report that their close relationships suffer
- Nearly 50% have scores indicating depression
- Symptoms of psychosis were identified as reason for nearly a quarter of hospital admissions
- PD patients with hallucinations were 2.5 times more likely to be admitted to a nursing home
- Mortality at 3 years was approximately 40% for PDP patients

Diagnosing Parkinson's Disease Psychosis (PDP)

- **Symptoms:** requires at least **one** of the following symptoms; Hallucinations, delusions, Illusions, False sense of presence
- **Associated features:** May occur with or without: Insight, dementia, Parkinson's disease treatment
- Must occur in patients with previously diagnosed PD
- Must be recurrent or continuous for **at least one month**

Key Factors that Contribute to PDP

Intrinsic Factors

- **Disease Progression**
PD disease severity and duration
Older age
- **Abnormalities of Neurodegeneration**
Neurochemical abnormalities
Visual processing deficits
- **Comorbid Conditions**



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Presence of comorbid medical conditions and/or psychiatric conditions
UTI

Extrinsic Factors

- **Medications**
Anti-Parkinson medications (eg. higher levodopa dose)
Other medications (eg. anticholinergics)
- **Environment**
Dim lighting
Time of day
Lack of sleep