

NINDS CDE Guidance

Psychosis in Parkinson's Disease

The NINDS Parkinson's Disease (PD) v2.0 CDE Psychiatry Subgroup reviewed the guidance document on the diagnostic criteria and assessment of psychosis in PD from the v1.0 recommendations. This summary was based on an NIH workshop (Ravina et al. 2007). The subgroup continues to recommend the same diagnostic criteria and definitions for PD Psychosis proposed in Ravina et al. (2007) and the available scales in Fernandez et al., (2008) as described in the summary from v1.0 below. The subgroup has updated the summary report from v1.0 to reflect current literature. Additionally, the Psychosis and Hallucinations Questionnaire, enhanced Scale for the Assessment of Positive Symptoms (eSAPS), and Scale for the Assessment of Positive Symptoms-Parkinson's Disease (SAPS-PD) were identified as updated scales recommended for evaluating psychotic symptoms in PD as part of the v2.0 CDE review.

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Summary of Diagnostic Criteria and Assessments for Psychosis in Parkinson's Disease: Report of an NINDS, NIMH Work Group

Psychotic symptoms frequently occur in Parkinson's Disease (PD) (Fernandez et al., 2008). However, PD Psychosis (PD-P) is not adequately described by the criteria that exist for psychotic disorders. Therefore, criteria to adequately diagnose PD-P were proposed in a NIH workshop (Ravina et al., 2007). These provisional diagnostic criteria define clinical features not commonly shared by other psychotic syndromes, and while still requiring validation these criteria are a "starting point for studies of the epidemiology and pathophysiology of PDPsy [PD-P], and are a potential indication for therapy development." (Ravina et al., 2007)

The definitions proposed at the workshop to help develop PD-P included:

Psychosis: A global term to encompass hallucinations, delusions, and the "minor" phenomena of illusions, "passage hallucinations" and "sense of presence".

Hallucinations: Abnormal perceptions without a physical stimulus that can involve any sensory modality and may be simple or complex in form.

Illusions: Misperceptions of real stimuli which are often visual in nature.

Delusions: False, fixed, idiosyncratic beliefs that are maintained despite evidence to the contrary.

Sense of presence: "An awareness of an external object independent from any feeling that it related to a sensory perception" i.e., experience that someone is present when nobody is actually there.

Passage hallucinations: Fleeting, vague imaging in the peripheral vision (Ravina et al., 2007, Fernandez et al., 2008).

Unlike the pattern of hallucinations and delusions seen in substance induced psychosis and schizophrenia, PD-P has a well-characterized temporal and clinical profile (Sanchez-Ramos et al., 1996, Barnes and David, 2001, Holroyd et al., 2001, Inzelberg et al., 1998, Marsh, 2004). Because of this unique profile coupled with PD-P association with a poor prognosis of chronic psychosis, nursing home placement (Aarsland et al., 2000), and death (Factor et al., 2003) as well as association with Lewy bodies pathology, imbalances of monoaminergic neurotransmitters, and visuospatial processing deficits, it is suggested that PD-P results from the progression of PD disease process, rather than drug intoxication or a comorbid psychiatric disorder (Ravina et al., 2007).

The PD-P diagnostic criteria were based on an extensive review of the literature and describe a "distinctive constellation of clinical features that are not shared by other psychotic syndromes" (Ravina et al., 2007).

The PD psychosis diagnostic criteria improve clinical detection of psychosis in PD above a standard definition of psychosis as indicated in Figure 1, specifically the last two lines showing the improvement from 43 to 60 with the PD-Psychosis diagnosis from Fenelon G et al. (2010) in *Movement Disorders*.

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PD-P Diagnostic Criteria

Characteristic symptoms

Presence of at least one of the following symptoms (specify which of the symptoms fulfill the criteria):

Illusions

False sense of presence

Hallucinations

Delusions

Primary diagnosis

UK brain bank criteria for PD

Chronology of the onset of symptoms of psychosis

The symptoms in criterion A occur after the onset of PD

Duration

The symptom(s) in criterion A are recurrent or continuous for 1 mo

Exclusion of other causes

The symptoms in criterion A are not better accounted for by another cause of Parkinsonism such as dementia with Lewy bodies, psychiatric disorders such as schizophrenia, schizoaffective disorder, delusional disorder, or mood disorder with psychotic features, or a general medical condition including delirium

Associated features (Specify if associated) With/without insight With/without dementia

/without treatment for PD (specify drug, surgical, other)

Fernandez et al. (2008) through a Movement Disorder Society (MDS) established Task Force on Rating Scales in PD, rated scales to address psychotic phenomena specific to PD. The authors reviewed 12 psychosis scales and questionnaires.

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