Defining Atypical Anxiety in Parkinson’s Disease

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Background

Atypical anxiety: undefined, clinically significant and under-recognized

Anxiety is a major non-motor complication of Parkinson’s disease (PD). Anxiety contributes to cognitive, functional, motor and social impairments in PD [1]. On average, 31% of PD patients have anxiety [2]. Up to 25% of PD patients experience Anxiety not otherwise specified (NOS) [3], being clinically significant anxiety that does not meet Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) criteria. Approximately 70% of these patients are untreated for their anxiety [4]. This is a suggested result of the under-recognition of anxiety disorders that do not meet DSM criteria and the lack of guidelines to identify PD-specific anxiety symptoms [5]. As such, anxiety in PD is under-recognized and its diagnosis is under-developed.

25% have Anxiety NOS [3]
70% with Anxiety NOS are untreated [4]

Objectives

To identify the demographic, psychiatric, clinical and cognitive characteristics associated with Anxiety NOS in Parkinson’s disease.

Method

Participants: 156 PD patients (28 with Anxiety NOS, 42 with DSM-IV anxiety, 86 with no anxiety). Participants with dementia (24 MMSE) or other neurological disorders were excluded. Mean demographic data are presented below:

- 60% male, 40% female
- UPDRS Total: 40.33 (out of 199)
- LEOED: 529.86 mg
- MMSE score: 28.62 (out of 30)
- 67.90 years old
- 12.29 years education

Note: UPDRS = Unified Parkinson’s Disease Rating Scale; MMSE = Mini Mental State Examination; LEOED = Levodopa Equivalent Daily Dose.

Data Acquisition: A semi-structured interview was used to cateogorise participants into three groups: PD patients with current Anxiety NOS, DSM-IV anxiety disorders or no anxiety. Two interviews were administered to measure demographic, psychiatric, cognitive and clinical characteristics. Anxiety was diagnosed according to the MINI-Plus (DSM-IV criteria).

Data Analysis: Binary logistic regression models were constructed to identify the characteristics of Anxiety NOS compared to DSM-IV anxiety and no anxiety.

Clinical characteristics of Anxiety NOS

Table 1: Anatomical brain structures and their potential role in the pathophysiology of Anxiety NOS.

Conclusions

- PD patients with Anxiety NOS experienced clinically significant episodic, unpredictable, and social anxiety symptoms.
- Patients with Anxiety NOS experienced greater global cognitive impairment than those with DSM-IV anxiety disorders.
- Anxiety NOS is associated with the presence of dyskinesias, greater time spent with dyskinesias and greater time spent in the “off” state.
- Anxiety NOS in PD is a distinct, undefined, fluctuations-based, PD-specific anxiety subtype. These findings can promote increased recognition and treatment of anxiety in PD

References


Acknowledgements

We thank all participants of this study. We acknowledge principal investigators of the Queensland Parkinson’s Project, Prof George Mellick and Prof Peter Skibum, Research Assistant, Tiffany Fa, and other members of the IDATA-PD study group. Dr Dissanyake is supported by the NH&MRC Boosting Dementia Research Fellowship. The IDATA-PD program is funded by the Royal Brisbane & Women’s Hospital Foundation, Parkinson’s Queensland Inc and Lions Medical Research Foundation competitive grant and fellowship schemes.