

Unmasking idiopathic Parkinson disease with the use of the atypical antipsychotics for symptoms of depression and anxiety in older adults: a case series

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Introduction:

The differential diagnosis of a patient presenting with parkinsonism includes neurodegenerative, drug-induced, and less commonly, vascular, traumatic, or infectious causes. Features suggestive of idiopathic Parkinson disease (IPD) include the presence of pre-morbid non-motor symptoms including hyposmia, autonomic dysfunction, and mood or anxiety symptoms as well as an asymmetry of parkinsonian signs on examination. Imaging using dopamine transporter single-photon emission computed tomography can also aid in differentiation with reduced basal ganglia dopamine transporter concentration seen in degenerative syndromes.

Second generation antipsychotics (SGA) are approved for the treatment of psychotic symptoms, bipolar disorder, or for adjunctive therapy of refractory major depressive disorder. However, off-label SGA monotherapy for mood and anxiety symptoms has increased. We describe four patients with parkinsonism treated with off-label SGA for late-life depression or anxiety with historical, examination, and imaging features consistent with neurodegenerative, rather than drug-induced parkinsonism.

Discussion and Conclusions:

Depression and anxiety are well-recognized non-motor features of IPD, with a late-life onset of mood symptoms 5-10 years prior to motor symptom onset; this is in contrast to the young-adult onset of the corresponding idiopathic mood disorders. We postulate that each of our patients, treated with a SGA for late-life onset depression or anxiety, were treated with an anti-dopaminergic agent for a pre-motor IPD symptom. This resulted in an unmasking of their underlying neurodegenerative condition, supported by a variety of evidence including imaging changes in each patient.

Our small series also supports that these mood symptoms were responsive to SGA use, and that the use of SGAs with a lower risk of drug-induced parkinsonism, including quetiapine, may allow effective treatment of mood symptoms with minimal or no worsening of parkinsonian motor symptoms.