

# Psychosis in Parkinson's Disease

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## Disclosures

I do not have any financial relationships with commercial interest companies to disclose.

I will be discussing off-label use of a commercial product.

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## HPI

82 Male PMH of afib s/p pacemaker on anticoagulation, hypertension, hyperlipidemia, Parkinson's disease

Initially presented to psychiatric urgent care accompanied by wife for concerns of hallucinations and agitated behavior was then sent to ED for evaluation and possible admission.

Wife reports that patient has been seeing a man in bed with them who he believes is having an affair with his wife and has become agitated. Wife also reports patient has been having delusions and hallucinations for the past few months which have slowly gotten worse.

Patient has had depressed mood with suicidal ideation with plan to cut out his pacemaker. Patient's wife reports that she stopped patient approximately 3 nights ago from attempting suicide by cutting out his pacemaker. Patient endorses poor sleep, decreased appetite, depressed mood, feelings of hopelessness, suicidal ideation, poor memory.

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### Current medications

Apixaban 5 mg daily  
 Atorvastatin 80 mg daily  
 Carbidopa-levodopa 100-25 tablet four times daily (recently decreased by outpatient neurologist from 2 tablets four times daily)  
 Hydrochlorothiazide 25 mg daily  
 Lisinopril 10 mg daily  
 Pantoprazole 40 mg daily  
 Calcium, vitamin D, magnesium, vitamin C supplements

**Allergies - Penicillin**

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### Past Psychiatric History and Family Psychiatric History

Patient was diagnosed with depression at the same time he was diagnosed with Parkinson's disease and started on escitalopram by his primary care provider. This medication was titrated to 30 mg daily. Patients wife did not think that escitalopram is helping any longer.

No previous psychiatric hospitalizations

No known family history of psychiatric illness, neurocognitive illness, or seizures

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### Diagnostics completed

WBC	6.53
HGB	13.5
MCV	87
PLT	199
TSH	2.330
HGBA1C	6.1
Prottime/INR	14.7/1.1
Lactic Acid	1.4
B12	1496

NA	138
K	4.4
CL	102
CO2	21
BUN	21
Creatinine	0.96
CA	9.1
GLU	113
ALT	<5
AST	27
ALKPPOS	45
BILITOT	0.6

Clarity	CLEAR
Glucose	NEG
Bilirubin	NEG
Ketones	NEG
Blood	NEG
Leukocyte Esterase	NEG
Nitrite	NEG

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### Diagnosis

Major Neurocognitive Disorder due to Parkinsons disease vs Lewy Body

Major Depressive Disorder, recurrent, moderate

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### Initial medication adjustment

Discontinue escitalopram

Start Sertraline 50 mg daily

Start Quetiapine 50 mg nightly and

Quetiapine 25 mg 3 times a day as needed for anxiety/agitation

Continue Carbidopa/Levodopa at decreased dose recommended by neurologist

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### Hospital Course

Patient initially up and down throughout the night, angry and agitated, received IM lorazepam for severe agitation

quetiapine increased to 75 mg at bedtime

Patient more confused, talks about girlfriend not wife, paranoid thoughts, hallucinations

quetiapine increased to 100 mg at bedtime

lorazepam 2 mg every 6 hours as needed for severe agitation added

Patient slept overnight shift, Received IM lorazepam due to aggression and agitation. Case discussed with outpatient neurologist and Carbidopa-Levodopa was decreased to 1/2 tablet 4 times daily

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### Hospital Course continued

Patient restless and agitated overnight, nonsensical, confused, unsteady gait, impulsive, kicking, punching hitting staff received IM lorazepam with relief after as needed quetiapine did not decrease agitation

Quetiapine was increased to 25 mg in AM, 50 mg at 1400 and 150 mg at bedtime

Rivastigmine patch 4.6 mg/24 hours added

Patient with severe agitation/aggression overnight requiring 1:1 supervision and as needed IM lorazepam as needed quetiapine not effective in decreasing agitation

Nighttime Quetiapine increased to 200 mg at bedtime

Quetiapine 50 mg three times daily

Sertraline increased to 100 mg daily

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### Hospital Course continued

Patient was no longer agitated, did not require IM injections but is sedated, sleeping throughout the day. Has difficulty transferring to bathroom with unsteady gait

Daytime Quetiapine decreased to 25 mg three times daily

Patient smiling but sedated, unable to ambulate, requires assist of 2 for transfers, disorganized thoughts, restless and fidgety at times, tearful

Daytime Quetiapine discontinued. Trial of Depakote 250 mg at 1400 for agitation

Patient more sedated during day, didn't sleep well overnight, received as needed seroquel. hit at staff numerous times. Required IM injection after threatening staff and hitting staff when they assist with care

Depakote was discontinued. Trazodone 25 mg two times daily and 50 mg at bedtime started

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### Hospital Course Continued

Patient agitated, hitting out at staff, IM lorazepam received, climbed out of bed swearing at staff striking out

Lurasidone 20 mg two times daily added for hallucinations

Quetiapine decreased to 100 mg at bedtime

Patient alert and awake during day, confused but not agitated. One episode of aggressiveness overnight but redirectable

Memantine 5 mg daily started

Patient cooperative with staff, pleasant, denies suicidal ideation, unable to ambulate alone but able to with staff assist. Patient is pleasant with staff and family.

Increase Lurasidone to 40 mg two times daily

Quetiapine discontinued

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## Disposition

Ultimately, patient discharged stable, pleasant, confused without agitation or behavioral outbursts, unsteady gait, to nursing home locked memory facility on the following medications:

Carbidopa-Levodopa 0.5 tablet 4 times daily

Lurasidone 40 mg two times daily

Memantine 5 mg daily

Rivastigmine patch 4.6mg/24 hours

Trazodone 25 mg two times daily and 100 mg at bedtime

Sertraline 100 mg daily

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## Psychosis in Parkinsons disease

Very difficult to treat

Start by decreasing Dopaminergic medications if possible

Pimavanserin - FDA approved for hallucinations and delusions associated with Parkinson's disease psychosis - Drugs.com discount price - "The cost for Nuplazid oral capsule 34 mg is around \$3,808 for a supply of 30 capsules, depending on the pharmacy you visit. Prices are for cash paying customers only and are not valid with insurance plans."

Clozapine

Quetiapine

Lurasidone

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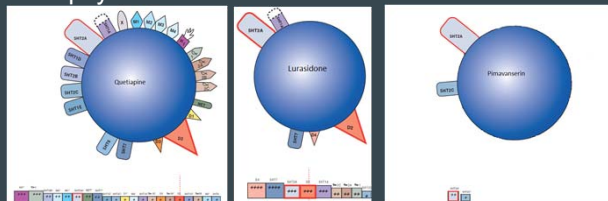
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## Antipsychotic medications



Images from Stahl's Essential Psychopharmacology 4th edition

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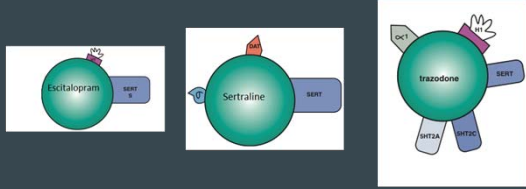
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### Antidepressants



Images from Stahl's Essential Psychopharmacology 4th edition

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### Questions?

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### Sources

Stahl, S. and Muntner, N. 2019. *Stahl's Essential Psychopharmacology*. Cambridge: Cambridge University Press, pp. 169-369.

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Zhang, H. et al. 2019. *Atypical antipsychotics for Parkinson's disease psychosis: a systematic review and meta-analysis*. *Neuropsychiatric Disease and Treatment* 2019;15 2137-2149.

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