Changes in Mental Status in Patient with Parkinson's Disease With or Without Psychosis

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LEARNING OBJECTVES

1. Identify diagnostic conditions in patients with Parkinson's Disease who are admitted with a change in mental status.
2. Discuss treatment approaches

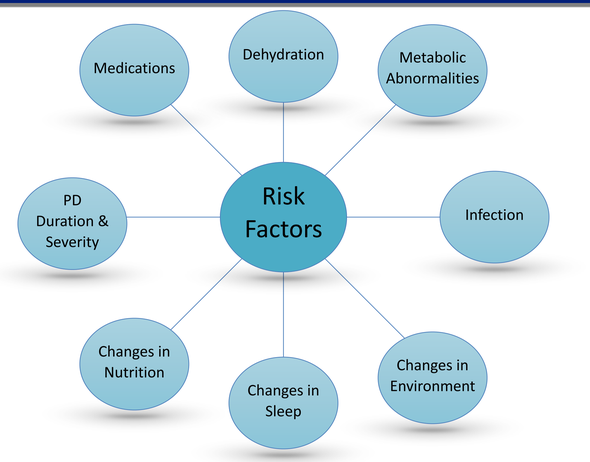
CASE PRESENTATION

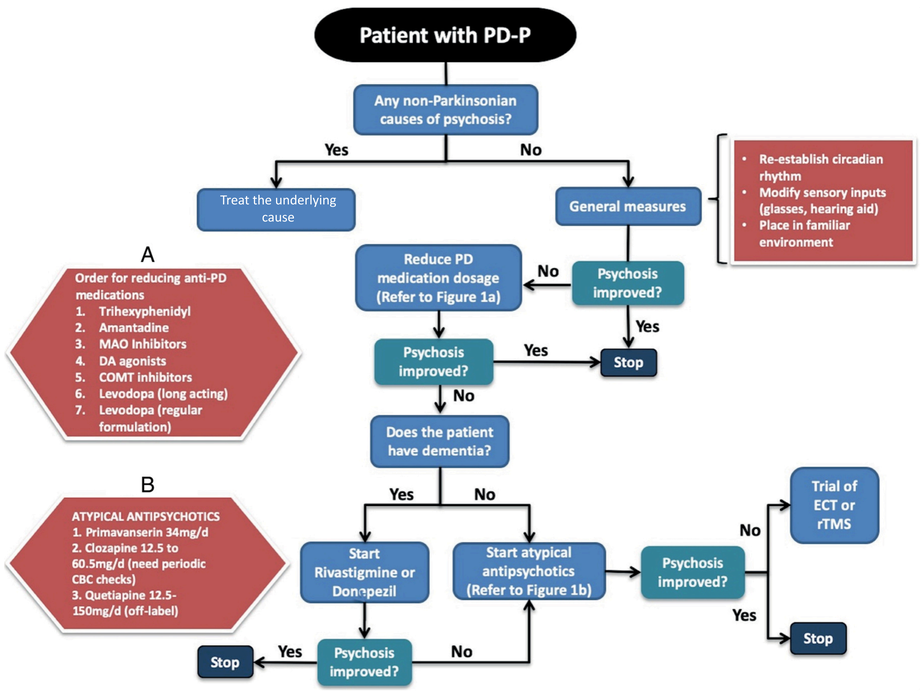
- Male patient in his 70s, with 5 year history of Parkinson's Disease treated with levodopa-carbidopa, was admitted medically after falling and injuring his hip and arm.
- Patient has a past psychiatric history of OCD, depression, social anxiety and PTSD, treated with clomipramine, quetiapine, and fluoxetine.
- Patient has a past medical history of lymphoma, HTN, DM, and HLD.
- Prior to admission, his outpatient psychiatrist was focused on managing the patient's OCD and anger issues which had progressed recently.
- At his first outpatient visit, his lamotrigine was increased from 50mg to 100mg daily, which he stopped taking due to a reported adverse effect of hypnagogic hallucinations.
- CT head on arrival was negative for any acute intracranial events.
- It was unclear if the patient's fluoxetine was effective and was subsequently started on clomipramine 75mg PO daily for his OCD symptoms, with a plan to taper off fluoxetine.
- The patient was continued on quetiapine at 150mg PO daily for psychosis.
- While hospitalized, the patient continued his home dose of psychiatric medications, was optimized medically, and his mental status and QTc were monitored.
- Psychiatry was consulted for acute onset of hallucinations and delusions after accidentally being restarted on lamotrigine, an old medication.

PSYCHIATRY CONSULT

- He was AAOX2, calm and cooperative, no hallucinations or delusions of assessment, diminished recent memory, and poor attention.
- He has a history of delirium with hallucinations attributed to either his levodopa-carbidopa or his fluctuating glucose levels.

TRIGGERS AND TREATMENT OPTIONS





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CONCLUSIONS

- Approximately sixty percent of patients with Parkinson's Disease develop psychosis.
- Potential causes of psychosis in this population include infection, dehydration, metabolic abnormalities, and medications. Other triggers include changes in sleep, environment, or nutrition.
- Treatment approaches include general measures such as re-establishment of circadian rhythms and environment, addressing coexisting medical conditions, and reducing the use of anticholinergic, antiglutamatergic, and sedating drugs.
- Tapering anti-parkinson medications may be considered.
- Clozapine and quetiapine have low D2-receptor affinity and have shown to improve psychotic symptoms without worsening movement symptoms.
- Typical antipsychotics should be avoided as they may worsen motor symptoms.
- In 2006, AAN guidelines identified the need for a new antipsychotic without dopamine antagonist effects. Pimavanserin, an atypical antipsychotic, was developed and approved for the treatment of hallucinations and delusions in PD-associated patients.

SUMMARY

- Patients with Parkinson's Disease can develop psychosis with various risk factors.
- It is important to adequately treat Parkinson's disease psychosis to prevent the worsening of movement symptoms.
- While low D2-receptor affinity drugs have helped to improve conditions without worsening movement symptoms, new medications which target different receptors, Pimavanserin, have also shown to improve psychosis without worsening movement symptoms.

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