

Improvement in Visual Hallucinations with Rivastigmine in Dementia with Lewy Bodies: Case Report and Review of Literature



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BACKGROUND

Dementia with Lewy Bodies (DLB)¹

Core clinical features:

- Fluctuating cognition
- Visual hallucinations (VH)
- REM sleep disorder
- Parkinsonism features

Recognizing DLB is critical in optimizing clinical management, as antipsychotics for the treatment of hallucinations can exacerbate extrapyramidal symptoms (EPS).

We present a case of an individual with DLB and significant visual hallucinations improved with rivastigmine.

CASE DETAILS

Patient: 61-year-old female with no past psychiatric history, past medical history of T2DM, hypertension, heart failure, ESRD on hemodialysis, hyperlipidemia, and hypothyroidism

- Patient presented with VH of one-year duration
- VH were complex and fully formed, including animals, people, movies, and the beach.
- VH were debilitating to the extent that the patient overdosed on 20+ pills “to sleep and not deal with [VH].”
- Prior to admission, she had been trialed on risperidone with worsening of EPS.

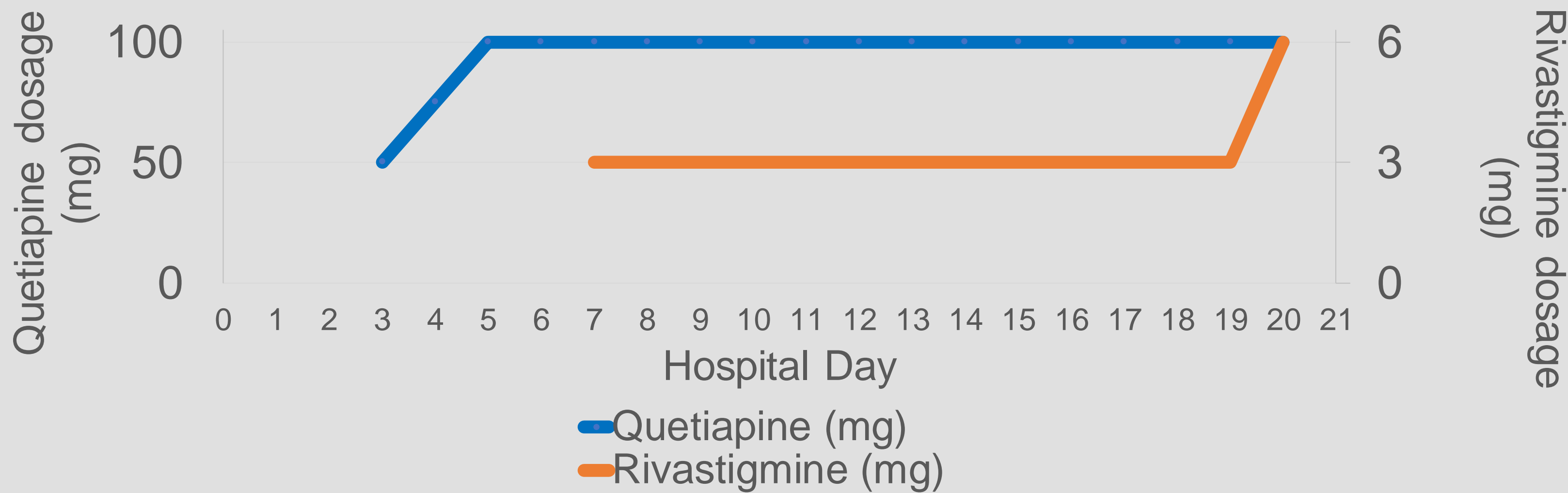
Examination

- MOCA: 13/30
- Parkinsonism features: mask-like facies and bradykinesia

Diagnostics

- B12: 1324
- TSH: 5.437, free T4: 0.8
- RPR nonreactive
- MRI Brain: past occipital infarct, no acute pathology

TREATMENT COURSE



- With initiation of rivastigmine at 1.5 mg BID, patient reported improvement in VH, although still present. She tolerated medication without any adverse effects.
- Patient was subsequently discharged on the following medication regimen: quetiapine 100 mg QHS, rivastigmine 3 mg BID.

DISCUSSION

Randomized, placebo-controlled trials of medications for the management of psychosis in patients with dementia²

Medication class	Medication	Dosing	Efficacy	Adverse effect
Cholinesterase inhibitors	Rivastigmine ^{3,*}	1.5-6 mg BID	Improvement in hallucinations	Mild or moderate, including: <ul style="list-style-type: none">- Nausea- Vomiting- Anorexia- Somnolence Severe adverse: agitation
	Donepezil [*]	3, 5, 10 mg	Improvement in hallucinations	Mild or moderate
Atypical antipsychotics	Quetiapine [†]	25 mg QHS - 150 mg BID	No significant improvement in psychosis	Non-serious
	Pimavanserin ^{4,†}	20-34 mg	Phase 3, double-blind, randomized, placebo-controlled discontinuation trial stopped early for efficacy	

*Study conducted in patients with DLB

†Study conducted in patients with dementia for treatment for agitation or psychosis

- Cholinesterase inhibitors and atypical antipsychotics with weaker D2 antagonism have been studied in the management of psychosis in dementia, including DLB.
- Atypical antipsychotics for management of neuropsychiatric symptoms in dementia have been associated with increased mortality and risk of EPS⁵.
- There have been case reports of the use of rivastigmine to treat hallucinations in Parkinson’s disease and treatment-resistant schizophrenia, highlighting the role of acetylcholine in visual pathways.

CONCLUSIONS

- Rivastigmine can be helpful for DLB patients with disabling, complex VH.
- It is important for CL psychiatrists to be aware of various strategies in the management of psychosis in dementia in addition to atypical antipsychotics.

REFERENCES

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