

THE BENEFICIAL EFFECT OF ESCITALOPRAM ON OBSESSIVE–COMPULSIVE-RELATED MUSICAL HALLUCINATIONS IN ELDERLY PATIENTS WITH HEARING IMPAIRMENT: A CASE SERIES

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Introduction

Musical hallucinations (MHs), characterized by the hearing of tunes, melodies, or songs, is a relatively under-recognized phenomenon among patients with auditory hallucinations. Initially, MHs were considered as a rare condition; however, explicit evaluation of this phenomenon in patients with psychiatric disorders revealed a substantial rate of occurrence. Hence, MHs were identified in roughly 10–20% of patients with schizophrenia or obsessive–compulsive disorder (OCD)^{1,2}.

Advanced age is among the most strongly related factors in MH^{3,4,5}. Treatment of MH in elderly individuals is challenging. With a compelling sense of reality of a true perception, MHs meet criteria for a hallucinatory phenomenon that necessitate treatment with an antipsychotic agent. Indeed, several case reports suggest that antipsychotics may be effective in MH; however, a lack of response has also been reported^{6,7}.

In the present case series, we describe our clinical experience with the selective serotonin reuptake inhibitor (SSRI) escitalopram in elderly individuals with obsessive compulsive (OC) – related MH and hearing impairment in the absence of psychiatric or neurological comorbidities, who did not respond to previous antipsychotic treatment.

Methods

Six consecutive elderly patients with MH (two men, four women; mean age 77.6±3.5 years, range 74–85 years) were treated in the psycho-geriatric outpatient department at the Tirat Carmel Mental Health Center (Tirat Carmel, Israel) during the period from January 2010 to December 2012 (**Table 1**).

For all patients, the **major reason for referral was MH** that included hearing familiar melodies and songs for a mean period of 15.7±10.9 months. **None met DSM-IV criteria for other psychiatric disorders, dementia, or neurological disorders.** Brain imaging (computed tomography, MRI) revealed mild cortical atrophy in three patients.

All patients had a mini–mental status examination total score of at least 27/30, indicating that they **did not have any diagnosed cognitive impairment.**

Previous antipsychotic treatment included perphenazine (4–8 mg/day) in four patients and risperidone (1–2 mg/day) in two patients for a minimal period of 6 weeks (mean 9.1±3.5 weeks). Three patients had clinically significant akathisia and two patients had antipsychotic-induced parkinsonism. **All patients showed a lack of clinically meaningful response of MH to antipsychotic treatment. Hence a switch to the SSRI escitalopram was considered.**

Table 1: Demographic and clinical characteristics of six elderly patients with musical hallucinations

Patient number	Sex	Age (years)	Duration of MH (months)	Previous treatment	Adverse effects	Escitalopram (daily dose)	Y-BOCS% decrease (endpoint–baseline)
1	Female	74	48	Risperidone (1 mg/day)	Akathisia	10	20
2	Female	78	3	Risperidone (2 mg/day)	Parkinsonism	20	35
3	Male	72	9	Perphenazine (4 mg/day)	Parkinsonism	10	12
4	Female	75	16	Perphenazine (6 mg/day)	Akathisia	20	32
5	Female	85	9	Perphenazine (6 mg/day)	–	10	10
6	Male	79	9	Perphenazine (4 mg/day)	Akathisia	10	40

MHs, musical hallucinations; Y-BOCS, Yale–Brown Obsessive–Compulsive Scale

Results

- The mean escitalopram dose was 12.5±3.3 mg/day (range 10–20 mg/day)
- There was a **clinically meaningful decrease in both the severity and the duration of MH**
- The **mean Y-BOCS total score** before switching to escitalopram was 13.2±0.9. This was **significantly reduced to 7.8±2.8 (p<0.01) after 12 weeks of escitalopram administration.**
- Using the recommended criterion of response in OCD treatment trials⁸, namely a decrease of at least 30% on the Y-BOCS total score, **three patients (50%) were considered responders (Table 1)**
- The remaining three patients responded to some degree (12, 10, and 20%, respectively (**Table 1**))

Conclusions

- Before escitalopram initiation, all patients showed a lack of response to either typical or atypical antipsychotic agents, and five of them developed clinically significant extrapyramidal adverse effects, antipsychotic-induced akathisia, and parkinsonism. This is consistent with the reported poor tolerability of elderly individuals with MH to antipsychotic treatment^{9, 10}
- The present case series shows that the SSRI escitalopram may be of therapeutic value in OC-related MHs in elderly individuals without additional psychiatric and neurological comorbidity.
- Escitalopram (mean 12.5mg/day for 12 weeks) was well tolerated and resulted in a clinically meaningful improvement in three of six patients.

Acknowledgements

The authors thank Rena Kurs for technical assistance in preparation of the manuscript

Disclosures

There are no conflicts of interest.

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