

Escitalopram for Delusion in an Oldest Old Patient with Alzheimer's Disease

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Abstract

Objective: To present a case of Alzheimer's disease (AD) associated with delusions that were satisfactorily treated with escitalopram.

Background: In Japan, there are currently no licensed medicines for the management of the behavioral and psychological symptoms of dementia (BPSD) in AD patients.

Patient and Results: We present the case of an 88-year-old woman with AD who developed delusions that were successfully treated with escitalopram. We previously reported that anxiety in elderly AD patients was associated with delusions and hallucinations and was caused by disturbance of the serotonergic system. Therefore, we considered that enhancement of the serotonergic system may be useful for ameliorating delusion in the present AD patient. Escitalopram inhibits the reuptake of serotonin and exerts allosteric potentiating actions on serotonin reuptake inhibitors, moreover, it has evidence of efficacy for treating affective symptoms in the old patients. Therefore, this agent may be useful for ameliorating serotonin deficiency and delusion in the oldest old AD patients.

Conclusions: Escitalopram may be useful for the management of psychotic symptoms in relatively older patients with AD.

Keywords: Behavioral and psychological symptoms of dementia; Delusion; Alzheimer's disease; Escitalopram

Introduction

In Japan, no medicines are currently licensed for the treatment of the Behavioral and Psychological Symptoms of Dementia (BPSD) in patients with Alzheimer's disease (AD). Although antipsychotics for BPSD symptoms such as delusions, hallucinations, agitation, or aggression are prescribed with consent from the legal representatives of AD patients, atypical antipsychotics are avoided because of the increased mortality rate in patients with AD [1]. Here we report the case of an 88-year-old man with AD whose BPSD symptoms were successfully treated by escitalopram. The patient's legal representative provided informed consent for the publication of this case report.

Case Presentation

An 88-year-old woman presented at our clinic with a history of amnesia. Six months back, she had fallen down a flight of stairs and sustained a head injury, for which she was admitted to hospital for 3 months. During this period, there were no recorded psychotic problems. Because of her poor memory, she was discharged to the care of her son, who judged that she could not live alone because of amnesic state and moved her to his home. Since discharge (3 months before visiting our memory clinic), she became increasingly confused about her location and developed delusions that someone had entered her house. She believed that her son tried to steal money from her and even reported these events to the police. This behavior prompted her son to bring her to our memory clinic for further investigation.

On examination, her Mini-Mental State Examination (MMSE) score was 11. Brain computed tomography showed the possibility of atrophy of the parahippocampal cortex and a low-density area in the right frontal cortex. She was diagnosed with AD. However, we considered that her delusions resulted from her symptoms of anxiety. Therefore, we prescribed 10 mg of escitalopram for a month. Although this treatment ameliorated her delusions, the degree of amnesia remained unchanged.

Discussion

The 88-year-old woman reported in this case study was diagnosed with AD on the basis of pre-existing symptoms at the time of the head injury and the lack of symptoms, including delirium, during her hospital stay. We believe that although her head injury caused amnesia and worsened her ability to perform her activities of daily living; this injury was not related to her psychotic state. She also had no psychiatric problems soon after discharge from the hospital. We considered that she became delusional after discharge because she was very unfamiliar with the environment in her son's home as a result of her AD. We previously reported that in relatively older AD patients, affective disturbance was associated with aggressiveness while anxiety was associated with delusions and hallucinations using the factor analysis method [2]; this indicated that aging affected BPSD in AD patients, connecting psychotic and depressive symptoms. We also reported that the division of AD patients divided into relatively high and relatively low cognitive performance groups, affective disturbance and anxiety were associated with aggressiveness, delusions, and hallucinations in the latter group [3]; this indicated that AD progression also affected BPSD, connecting psychotic and depressive symptoms.

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The above mentioned features were related to mixed states of depression and mania because manic symptoms (aggressiveness, delusions, and hallucinations) were connected with depressive symptoms such as anxiety [4]. Indeed, Ng et al. [4] and Dorey et al. [5] commented that BPSD may be related to bipolarity. Therefore, we speculate that the delusions in the current patient may actually represent a hidden anxiety symptom compounded by the AD state. This finding supported the basis that anxiety in oldest old patients with AD is associated with delusions and hallucinations [2].

On the basis of these assertions, physicians should prescribe augmentation medications for BPSD [6]. However, the oldest old are more vulnerable to the adverse effects of antipsychotics, which should therefore be avoided for these patients. Some reports have demonstrated the effectiveness of antidepressants against behavioral symptoms, e.g., selective serotonin reuptake inhibitors, which are particularly prescribed for delusions in patients with dementia [7,8]. Therefore, we prescribed escitalopram for the current patient.

Anxiety is believed to be related to serotonin deficiency [9]. The main symptom in our patient was delusion that we considered to be related to anxiety; moreover, her symptoms were severe enough to justify rapid treatment response. Escitalopram inhibits serotonergic reuptake and exerts allosteric potentiating effects on serotonin reuptake inhibitors [10], making it suitable for causing a rapid and steady increase in serotonin levels. This agent is also suitable for elderly patients; therefore, we prescribed it for the current patient. Our report demonstrates that delusion in the oldest old with AD may be related to anxiety and that antidepressants are a potential therapeutic strategy for BPSD in the oldest old.

Conflicts of Interest

Koji Hori received lecture fees from Eisai Co., Ltd.; Pfizer Japan Inc.; Novartis Pharma K.K.; Daiichi Sankyo Inc.; Ono Pharmaceutical Co., Ltd.; Janssen Pharmaceutical K.K.; Yoshitomi Yakuhin Co.; and Mitsubishi Tanabe Pharma Co.

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