

Case Reports

Rapid improvement in medically ill elderly patients treated with methylphenidate for apathy

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Apathy is commonly seen in elderly patients with co-morbid medical conditions. It adversely affects the motivation and recovery of the patients. There is no standard treatment for apathy but antidepressant with slow onset is often the drug of choice. Methylphenidate, a psychostimulant with rapid onset, offers an alternative therapeutic option. We reported two cases of elderly patients who presented with withdrawn and apathy after recovering from medical illnesses. Both cases were treated with methylphenidate and showed response in less than a week without significant adverse events. Herein, we discuss the advantages of methylphenidate as treatment option for rapid improvement in medically ill elderly with apathy.

Key words: Apathy, aged, terminally ill, methylphenidate.

INTRODUCTION

Apathy, depression, lethargy and loss of appetite are common presentation in the geriatric population of patients who are medically ill. Apathy can be described as a feeling of impassivity with a general lack of interest in everything (Spiegel et al., 2009).

Apathy can be attributed to several psychological conditions like depression, and also medical conditions like delirium, dementia, Parkinson and stroke. These conditions are often found in the elderly population who suffers from different medical conditions (Ebenezer, 2009). It is important to detect and address the issue of apathy especially in the elderly group because the failure to do so may result in adverse outcomes. An elderly individual who is medically ill may not be motivated or have no interest to join rehabilitative efforts scheduled for their recovery (Galynker et al., 1997).

There has been no specific treatment for apathy but antidepressant such as selective serotonin reuptake inhibitor (SSRI) has been the drug of choice so far. However, SSRI has a slower onset of action and takes about 4 to 6 weeks to work. Methylphenidate, a psychostimulant, however, has a shorted onset of action

and takes about 2 to 6 days for a noticeable effect (Wallace et al., 1997; Challman and Lipsky, 2000). Its use in the treatment of depression and apathy is not new in the field of psychiatry. Methylphenidate works by inhibiting the reuptake of dopamine from the synaptic cleft as opposed to the release of newly synthesized dopamine from the nerve terminal induced by amphetamines (Challman and Lipsky, 2000).

Recent trials had been conducted to study the beneficial use of methylphenidate in treating apathy and lethargy in medically ill elderly patients. The following cases are the few examples used to illustrate the advantages of methylphenidate in the treatment of apathy in medically ill elderly patients.

CASE REPORTS

Case 1

Mrs K is a 79 year old Malay lady who was admitted to the Emergency Department for bloated abdomen, decreased appetite, fever and confusion. She was later diagnosed with bacteraemia secondary to a urinary tract infection. Subsequently, she later develops an upper gastrointestinal bleed and a pressure sore from the long

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stay in the wards. The nurses noted that she had not been eating well and seemed quiet.

A more detailed account of a medical history reveals that she was also a known diabetic and hypertensive. Apart from that, she had no past psychiatric history. But due to her multiple medical conditions, her stay in the hospital was prolonged. An assessment by a psychiatrist shows that she was withdrawn, had poor eye contact and her speech was monotonous but was relevant and coherent. She also complained of lethargy and poor appetite.

After reviewing her condition, her attending psychiatrist prescribed her with methylphenidate 5 mg BD. 6 days later when another psychiatric evaluation was performed; she was noted to be more interactive and was gaining back her appetite. She claimed to be more cheerful and was sleeping better. However, she complained of nausea. Her dose was titrated down to 5 mg ON and that seems to solve the problem. She was then discharged well with a follow up arranged 3 weeks later to monitor the effectiveness of her treatment.

Case 2

Mrs W, 89 years old pensioner, was hospitalized for a urinary tract infection (UTI) and acute gastroenteritis (AGE). However, during her stay in the wards, the patient exhibited mutism and resorted to sign language to communicate with her children and the doctors. Her affect was restricted and she responds occasionally to the psychiatrist during the interview.

Mrs W also did not have much appetite and had poor sleep. According to her son, she was previously a cheerful and active lady. But ever since she had a fall one month ago, she had been less independent and complained about her disabilities most of the time.

Mrs W was started on venlafaxine 75 mg OD. After one week on venlafaxine, the patient was not talking still, and did not show any improvement in mood, appetite and sleep. She was then taken off venlafaxine and was given methylphenidate 5 mg BD for 1 week. 2 days after she was given methylphenidate, she started talking albeit not much. Her son said she started eating and had been sleeping. She was also noted to be more interactive with the staffs. A week later she was discharged with much improvement in speech and appetite.

DISCUSSION

Both cases demonstrated a rapid improvement after they were started on methylphenidate. Both patients reported better sleep and increased appetite. The nurses and psychiatrist also noted an increase in interaction and better mood in both patients. They were no adverse side effects observed in both patients. Common side effects

associated with the use of methylphenidate are appetite suppression, hypertension, palpitations, nervousness, cardiac arrhythmias, dyskinesias, headaches, psychosis, insomnia and tolerance to the drug (Katon and Raskind, 1980). None was observed in the two cases aforementioned where short-term low dose regimes of methylphenidate were administered. The patient in case 1 did complain of slight nausea but that matter was corrected when her medication was titrated to a lower dose.

In the two cases aforementioned, methylphenidate was used as a monotherapy to combat apathy in the elderly patients with other co-morbidities rather than as an adjunct therapy in concordance with SSRIs and other antidepressants. Whether used as monotherapy or as an adjuvant, methylphenidate still seem to results in a quicker onset of action (within 2 days to 2 weeks) as compared to SSRIs which required up to 6 weeks to take effect.

As we can observed from the 2 cases aforementioned, changes in energy level, interaction level, mood, sleeping pattern and appetite can be seen a week after they were switched on methylphenidate.

Studies by Hardy (2009) and Wallace et al. (1995) also reported similar improvements in the aspect of apathy and mood in the geriatric population with medical illness (Wallace et al., 1995; Hardy, 2009). These studies reveal the possibility of methylphenidate usage in reversing apathy due to the transient depression. These improvements were sustained even after the drug was taken off. Another recent report demonstrated the positive outcome of methylphenidate in the treatment of catatonia in elderly patient with depression (Prowler et al., 2010).

While many are worried about the development of tolerance and dependence with the use of psychostimulant in the treatment of depression, studies are yet to prove so (Katon and Raskind, 1980; Buhagiar and Cassar, 1997; Challman and Lipsky, 2000; Padala et al., 2007). In fact, in drug trials, comparing methylphenidate and other antidepressants show that methylphenidate is better tolerated among the elderly patients (Wallace et al., 1995; Emptage and Semla, 1996).

Despite so, most studies conducted reviewed the effects of short-term methylphenidate therapy and the sample size are either inadequate or there was no proper means of measurement in the improvement of apathy and mood. Further trials and randomized controlled study should be done to better evaluate the benefits and potential long-term adverse effects of methylphenidate in treating depression in the geriatric group of patient.

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