

## Case Report

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# Zolpidem induced somnambulism in an 80 year old patient with dementia

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### ABSTRACT

Zolpidem is a commonly prescribed non benzodiazepine hypnotic that is used in the treatment of insomnia. It is often used due to its safety in the elderly and mild sedative effects along with its safety in patients with multiple medical illnesses. We present herewith a case of an 80 year old man with dementia that was having insomnia and was prescribed Zolpidem 5mg which was increased to 10mg at night. The patient developed somnambulism and as a result the drug had to be withdrawn.

**Key words:** Zolpidem, dementia, somnambulism, insomnia.

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### INTRODUCTION

Zolpidem is a commonly prescribed non benzodiazepine hypnotic that potentiates GABA an inhibitory neurotransmitter with a selective binding to the omega 1 (BZ<sub>1</sub> receptors) of the GABA<sub>A</sub> receptors [1-2]. It is known to promote sleep initiation rather than sleep maintenance and had milder sedation when compared to benzodiazepines [3]. Zolpidem has shown to improve sleep latency and sleep quality in elderly patients with insomnia and is often used in this age group due to its safety when multiple medical conditions may coexist with insomnia [4]. Zolpidem induced somnambulism has been reported in anecdotal case reports [5-7] but to the best of our knowledge this is the first case where it has been reported in an 80 year old man with dementia. Here we present a case report of Zolpidem induced somnambulism in an 80 year old male with dementia where the drug had to be withdrawn due to its side effect.

### CASE REPORT

An 80 year old male with a history of dementia since the past 5 years prior to presentation was brought by his son with chief complaints of insomnia at night while he slept just 5 hours in the day. His spouse had passed away a year ago and he was being taken care of by his servant. He used to stay alone and his son would visit him off and on. His family physician had started him on Zolpidem 5mg at night due to his insomnia and this was increased to 10mg. He began to sleep well for 6 hours a night at this dose. He slept well for a week and then his servant who used to sleep in the same room with him noticed that in the middle of the night, the patient would get up and walk about in the house with a dazed expression, occasional talking and calling out to his wife at times. These episodes would occur for 20-25 minutes each night (once or twice a night) and the patient would go and lie down in bed and fall asleep after such events. The patient did not respond to any conversation or interruptions during these episodes. In fact he would move without hurting himself or falling during the episodes. In the morning, when questioned, the patient claimed no memory of what transpired during the night and he anyways had poor memory due to the

dementia. The episodes were attributed to Zolpidem as that was the only new addition to his medication. The patient was on Telmasartan 40mg per day for blood pressure. The patient had no other major medical and surgical illnesses. The patient stayed alone and the servant had never noticed such episodes in the past. Zolpidem was withdrawn and the servant reported no episodes after that. The patient was rechallenged with Zolpidem at 10mg and within a week of starting the same the episodes repeated as reported by the servant who even video recorded the same on the mobile. The patient was then withdrawn of Zolpidem and was started on Melatonin 3mg which helped him sleep well.

## DISCUSSION

Somnambulism or sleep walking is a sleep related behavior disorder that occurs during the stages of slow wave sleep [8]. Sleepwalking though rare has been reported in the elderly and in patients with dementia [9]. Laboratory and polysomnography studies have demonstrated Zolpidem to cause deep sleep [10]. In the case we assessed using Naranjo's algorithm [10], the score of +8 indicates a high probability that the somnambulism was induced by Zolpidem. In this case, there was no evaluation done by a sleep medicine expert, and we did not carry out a polysomnographic analysis due to the patient being non cooperative and his son refusing to get the same done. Zolpidem though safe in the elderly must be used with caution as there may be rare side effects which occur in the elderly and may catch the clinician unaware [11]. It is prudent that when evaluating complaints like sleep walking, one must consider the role of sedative hypnotic drugs like zolpidem and benzodiazepines when ruling out other causes.

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