

## Peer reviewed article

## Excessive use of zopiclone: a case report

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### Summary

We report a case of excessive use of zopiclone and its withdrawal. A 67-year-old man used almost 340 mg/d to treat his insomnia. A review of zopiclone's utility, side effects and potential to trigger dependence will be discussed. The patient is an atypical case – according to his social life and substance use behaviour – compared to polydrug misusers. In persons with multiple addictions reports of abuse and dependency on zopiclone are well known.

*Key words:* zopiclone; drug misuse; withdrawal

### Introduction

Zopiclone was reviewed in 1998 and had shown hypnotic efficacy superior to placebo [1]. After a detailed evaluation of a large body of clinical data the authors stated that zopiclone was as effective as the benzodiazepines in the treatment of insomnia. Therefore, the short-term management of insomnia is the main indication for zopiclone use.

### Case report

We report a case of a 67-year-old male diagnosed with DSM IV primary insomnia (307.42), depressive disorder (311) and abuse of zopiclone (305.40). He was referred to our clinic for zopiclone withdrawal. The patient was born in Switzerland. There were no problems in his early development. He passed school training and an examination as a plasterer. He had to stop working because of an intervertebral disk herniation in 1991.

His insomnia started after a surgery and his first divorce. The patient started using sedatives in 1967. In the beginning he took flunitrazepam – prescribed during his hospitalisation up to 3 mg per day – for about 20 years (1 to 4 mg on a daily basis), later he was put on zolpidem (approximately for half a year, using 20 mg/d) and zopiclone (starting with 7,5 mg/d). His second wife was diagnosed with cardiac insufficiency in 1999. From this time on our patient augmented his

use of zopiclone up to 337.5 mg daily. Besides social drinking of alcohol there is no other use of psychotropic drugs.

When we first saw the patient he was depressed, dysphoric and expressed feelings of hopelessness. His thought was slow and he felt socially deprived. On the Clinical Global Impressions Scale he scored 5 (1 = not ill at all; 7 = extremely ill), his main complaints on the Symptom Check List 90 revised were worrying, sexual anhedonia, back pain, insomnia, hopelessness, and nervousness. He reached 45 points on the Global Assessment of Functioning Scale (1 = very disturbed; 100 = highly functional). His insomnia did not improve even with 337.5 mg zopiclone each day. His blood pressure was in the normal range (130/70 mm Hg). His body mass index was 28.0 kg/m<sup>2</sup>. All chemical and haematological results were in the normal range. ECG and EEG showed no pathological signs.

We put the patient on carbamazepine (up to 400 mg/d) and reduced zopiclone to 15 mg/d after the third day. In addition we started an antidepressive treatment with trimipramine (up to 100 mg/d) to support sleep. Because of side effects (nausea) we had to switch from carbamazepine to diazepam (10 mg/d) on the fourth day. Withdrawal from zopiclone was done after four weeks and the patient reported a sufficient quality of sleep. Additionally, we applied cognitive therapy in individual sessions to focus problem solving strategies and coping behaviour. On discharge some depressive symptoms such as nervousness persisted. On the Clinical Global Impressions Scale he scored 3, his main complaint on the Symptom Check List 90 revised was sexual anhedonia. He reached 80 points on the Global Assessment of Functioning Scale. Our patient received 100 mg/d trimipramine and 5 mg/d diazepam on discharge. Four months later diazepam could be stopped and the patient had begun psychological counselling.

### Discussion

The patient did not experience any side effects from zopiclone. Adverse effects of zopiclone can be taste alteration (bitter taste in approximately 10% of recipients), nausea or dizziness [2]. There were no severe complications due to zopiclone withdrawal in our patient. In normal volunteers [3] changes in sleep pattern and rebound anxiety appeared upon discontinuation of the drug (7,5 mg/d for 21 days). Withdrawal reactions like headache, anxiety or agitation have been found

only in 0.05% (N = 7) of 13 177 subjects of a prescription-event monitoring study [4]. Those patients had been taking up to 225 mg/d for up to 3 months. Our patient used alcohol and sedatives to cope with insomnia and psycho-social stress. He could easily stop drinking 1.5 litres beer each day but had severe problems in reducing zopiclone. It is noteworthy that our patient could stop taking diazepam completely. In recent years more reports have been published with experiences of zopiclone as a drug of misuse [5, 6]. In a review of 15 years' clinical experience the author concluded that dependency appears very low, although abuse potential should be considered in addicted patients and patients with a comorbid psychiatric disorder [7]. Very recently German guidelines for using zopiclone suggested more caution in prescribing this problematic, though valuable, drug [8].

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