

## REINFORCEMENT OF IRRITABILITY DURING THERAPY WITH BENZODIAZEPINES

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### SUMMARY

**Background:** Often, long-term treatment with benzodiazepines is a subject of discussion due to potential side effects, with dependence on benzodiazepines as the most serious one. After longer period of benzodiazepines tolerance on their anxiolytic effects develops. Discontinuation is usually beneficial as it is followed by improved psychomotor and cognitive functioning, particularly in the elderly. Previous studies confirmed occurrence of physical dependence in high percentage of patients in long term treatment with benzodiazepines at therapeutic dosages. Benzodiazepines are relatively well-tolerated medicines but can induce serious problems of addiction and that is why their use is regulated. The aim of this article is to report a case of a patient who was taking 15 tablets of oxazepam daily for a period of time, during which reinforcement of irritability occurred.

**Conclusion:** It is necessary to warn patients who take benzodiazepines in therapy that reinforcement of irritability may occur in case of higher dosage of benzodiazepines, which may be misinterpreted as worsening in mental condition.

**Key words:** benzodiazepines – irritability – oxazepam – dependence

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### INTRODUCTION

Often, long-term treatment with benzodiazepines is a subject of discussion due to potential side effects, with dependence on benzodiazepines as the most serious one. The use of benzodiazepine anxiolytics and hypnotics continues to provoke controversy. Views differ from expert to expert and from country to country as to the extent of the problem, or even whether long-term benzodiazepine use actually constitutes a problem. The adverse effects of these drugs have been extensively documented and their effectiveness is being increasingly questioned. Discontinuation is usually beneficial as it is followed by improved psychomotor and cognitive functioning, particularly in the elderly. The potential for dependence and addiction have also become more apparent (Lader et al. 2009). Previous studies confirmed occurrence of physical dependence in high percentage of patients in long term treatment with benzodiazepines at therapeutic dosages (Uzun et al. 2010). After longer period of benzodiazepines tolerance on their anxiolytic effects develops (Uzun et al. 2005). Benzodiazepines are relatively well-tolerated medicines but can induce serious problems of addiction and that is why their use is regulated. It is important to distinguish between addiction to and normal physical dependence on benzodiazepines. Intentional abusers of benzodiazepines usually have other substance abuse problems (Lader et al. 2009, Dièye et al. 2006). Benzodiazepines are usually a secondary drug of abuse-used mainly to augment the high received from another drug or to offset the adverse effects of other drugs (Nyström 2005).

The aim is to report a case of a patient who was taking 15 tablets of oxazepam daily for a period of time, during which reinforcement of irritability occurred.

### CASE REPORT

Patient, 34 years old, was admitted to hospital for treatment after years of taking oxazepam in high daily dosage. The patient was working as a nurse and because of stressful situations in life and at work she began taking oxazepam tablets in higher dosage than the prescribed, which gradually resulted with daily dosage of 15 tablets of oxazepam (daily dosage of 150 mg). Gradually over time, she noticed that one tablet a day is no longer sufficient and increased dosage of oxazepam. She always had to keep oxazepam in her purse, which made her feel calmer. She described how she was dealing with stressful situations in her life – in such situations she usually took oxazepam. In the beginning that was helpful, but after some time the effect of oxazepam decreased. The patient reported poor effect of such therapy, and on the other hand she reported feeling irritable. This was the main reason for initiation of psychiatric treatment – outpatient treatment in the beginning and hospitalization later. Laboratory examination was performed and elevated values of liver enzymes (AST, ALT and GGT) were obtained. Other findings were within the reference value. According to data obtained from the patient and family members she was not consuming alcoholic beverages. The patient reported feeling irritable when taking 15 tablets of oxazepam daily, but she was not able to work any longer without such „therapy“.

At the beginning of hospital treatment the patient agreed to gradually take lower dosage of oxazepam in therapy. Also, duloxetine was introduced in therapy, in daily dosage of 60 mg, along with zolpidem 10 mg in the evening. Oxazepam was completely discontinued from therapy after one month of hospital treatment. The patient reported feeling less irritable after reduction in

daily dosage of oxazepam. On the following laboratory examinations the values of the liver enzymes gradually normalized. After discharge from the hospital outpatient treatment was continued. She managed to function well at work and also socially. Treatment with duloxetine was continued at a daily dosage of 60 mg, and zolpidem was gradually discontinued from therapy.

## CONCLUSION

It is necessary to warn patients who take benzodiazepines in therapy that reinforcement of irritability may occur in case of higher dosage of benzodiazepines, which may be misinterpreted as worsening in mental condition.

## REFERENCES

1. Dièye AM, Sylla M, Ndiaye A, Ndiaye M, Sy GY & Faye B: *Benzodiazepines prescription in Dakar: a study about prescribing habits and knowledge in general practitioners, neurologists and psychiatrists*. *Fundam Clin Pharmacol* 2006; 20:235-8.
2. Lader M, Tylee A & Donoghue J: *Withdrawing benzodiazepines in primary care*. *CNS Drugs* 2009; 23:19-34.
3. Nyström C: *Effects of long-term benzodiazepine medication. A prospective cohort study: methodological and clinical aspects*. *Nord J Psychiatry* 2005; 59(6):492-7.
4. Uzun S, Kozumplik O, Jakovljević M & Sedić B: *Side effects of treatment with benzodiazepines*. *Psychiatria Danubina* 2010; 22: 90-3.
5. Uzun S, Kozumplik O, Mimica N & Folnegović-Šmalc V: *Nuspojave psihofarmaka*. Zagreb: Medicinska naklada, Psihijatrijska bolnica Vrapče; 2005.

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