

A successful case of dose reduction in etizolam dependence using fine granules: a case report

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Abstract: The prevalence of benzodiazepine consumption in Japan is one of the highest worldwide. Etizolam is the most abused drug of the benzodiazepine class. The treatment of benzodiazepine dependence is difficult. We report a case of successful dosage reduction in a 24-year-old female patient with etizolam dependence. She was diagnosed with etizolam dependence at the age of 22 years old. We proposed a benzodiazepine dependence treatment that involved replacing etizolam with a long-acting benzodiazepine class drug in conjunction with a long-term weaning plan. However, the patient refused the treatment and insisted that reducing the number of tablets would increase her anxiety. After providing a detailed explanation and receiving consent from the patient, a treatment regimen consisting of fine granules of etizolam mixed with lactose granules was begun with the aim of reducing the percentage of etizolam at a rate of 0.3 mg/week. The treatment of etizolam dependence in this patient was successful. This treatment strategy may be an effective option for patients who are difficult to treat with conventional methods, or who have anxiety regarding the reduction of the amount of the drug itself.

Keywords: benzodiazepine, Japan, dependence, etizolam

Case report

Herein, we report a case of successful dosage reduction in a 24-year-old female patient with etizolam dependence. This patient had been experiencing occasional but repeated heart palpitations, dizziness, and difficulty walking since puberty. She consulted a psychiatric clinic at the age of 17 years old and was diagnosed with panic disorder. She was prescribed paroxetine and etizolam, which alleviated the symptoms of the panic disorder. However, she then increased her use of etizolam with anticipatory anxiety, but without perceived efficacy. She was diagnosed with etizolam dependence at the age of 22 years old. She stopped paroxetine at the age of 23 years old. Her usage of etizolam continued to increase to 5 mg or more per day as she began obtaining prescriptions for etizolam from several hospitals. Her family and doctor urged her to receive treatment for benzodiazepine dependence; however, a general reduction in dosage was unsuccessful, and she eventually required admission to Yamato Medical Mental Center. The patient's etizolam dependence was maintained for two years and seven months.

We proposed a benzodiazepine dependence treatment that involved replacing etizolam with a long-acting benzodiazepine class drug in conjunction with a long-term weaning plan, or switching to a sertraline or duloxetine. However, the patient refused the treatment and insisted that reducing the number of tablets would increase her anxiety. After providing a detailed explanation and receiving consent from the patient,

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a treatment regimen consisting of fine granules of etizolam mixed with lactose granules was begun with the aim of reducing the percentage of etizolam at a rate of 0.3 mg/week. The reduction regimen was continued according to the patient's wishes to be kept unaware of the dosage of medication she was receiving, or how the treatment plan was progressing. Neither the withdrawal symptoms, nor any other symptoms happened in this case.

Three months after the initiation of this treatment regimen, the patient was able to completely stop taking etizolam. The patient has improved a memory dysfunction and wobble. This patient currently leads a normal life with improved substance dependence.

Discussion

The prevalence of benzodiazepine consumption in Japan is one of the highest worldwide. In 2009, the use of benzodiazepine anxiolytics in Japan was the second highest in Asia, and the use of benzodiazepine hypnotics was the second highest worldwide.¹ According to studies by Matsumoto, Ozaki, and others,² etizolam is the most abused drug of the benzodiazepine class.³ Common practices for treating short-acting benzodiazepine abuse include replacing it with a long-acting substitute, reducing the dose slowly to wean dependence, or replacing it with serotonin (5-HT_{1A}) receptor agonists. However, such treatments did not work for the patient presented here. In this case, the thought of reducing the number of tablets would likely have affected the patient, which is quite different from a rebound effect or anxiety about a specific prescribed drug. Indeed, the effectiveness

of placebo has been shown to relate to the anticipation of the effects of anxiolytics.⁴ In the current patient, reduction and stabilization was successful because she was prescribed what appeared to be the same amount of drug, although it was diluted with lactose granules, which helped mitigate her anxiety.

This treatment strategy may be an effective option for patients who are difficult to treat with conventional methods or who have anxiety regarding the reduction of the amount of the drug itself. In the future, a randomized controlled trial should be conducted to further explore this treatment option.

Disclosure

The authors have no conflicts of interest in this work.

References

1. The International Narcotics Control Board: Report of the International Narcotics Control Board on the Availability of Internationally Controlled Drugs: Ensuring Adequate Access for Medical and Scientific Purposes. United Nations Publication, Vienna, Austria, 2010.
2. Ozaki S, Wada K. Nationwide investigation into substance abuse related psychosis in psychiatric treatment facilities. 2004. The Ministry of Health, Labor and Welfare Science Grant Research (Pharmaceutical and Medical Device Regulatory Science Research). Report on the actual condition of the drug abuse and dependence and the research on the social influence and countermeasure. 2005;86–126.
3. Matsumoto T. Issues in Psychiatric Pharmacotherapy – Views from substance abuse clinics. Findings from the 'Nationwide investigation into substance abuse related psychoses in psychiatric treatment facilities.' *Japanese Journal of Psychiatric Treatment*. 2012;27:71–79.
4. Petrovic P, Dietrich T, Fransson P, Andersson J, Carlsson K, Ingvar M. Placebo in emotional processing – induced expectations of anxiety relief activate a generalized modulatory network. *Neuron*. 2005;46:957–969.

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