

Long-term Treatment of Brotizolam and Zopiclone in Elderly Insomniacs

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ABSTRACT. The efficacy and safety of long-term treatment with brotizolam and zopiclone was evaluated in elderly insomniac patients. In 31 patients with a mean age of 74.4 years, brotizolam or zopiclone was administered for a long-term. The mean treatment period of brotizolam was 2.7 years and of zopiclone was 4.5 years. The mean dosage of brotizolam was 0.31 mg/day and of zopiclone was 9.42 mg/day. All of the patients reported no adverse effects such as ataxia, hyperexcitability, daytime anxiety, agitation and confusion, amnesia, affective disturbance, somnambulism or morning drowsiness. Patients had almost 90% of good hypnotic efficacy, and their daily life were smooth and comfortable. These results suggest that there are no difficulties in long-term treatment of brotizolam and zopiclone for elderly insomniacs.

Key words: hypnotics — side effect — old age

Sleep complaints are prevalent among the elderly people. Disturbed sleep in this population is often associated with medical disorders or induced by drugs, such as beta-adrenergic blockers.¹⁾ These types of insomnia have not been improved by general management in the forms of counseling and psychotherapy, which improve daytime activity. Therefore, sleeping pills have been administered to these insomniacs. In general, short-acting benzodiazepines are the primary choice for reasons of safety and effectiveness.^{2,3)} One of the most important problems faced in using hypnotics with the elderly is side effects. Previously, the author reported that the long use of a very short-acting benzodiazepine, triazolam, was safe and maintained the quality of life (QOL) in elderly insomniacs.⁴⁾ The aim of the present examination was to observe the efficacy and the adverse effects that disturbed daily living of a long-term treatment with a short-acting benzodiazepine, brotizolam,⁵⁾ and a new chemical family of hypnotics, zopiclone,⁶⁾ in elderly insomniacs.

METHODS

Retrospectively, we reviewed the records of 31 outpatients who had received brotizolam or zopiclone for insomnia in the department of psychiatry, Kawasaki Medical School Hospital at the present 1999. During the treatment period the adverse effects¹⁾ that disturbed daily living, such as ataxia, hyperexcitability, daytime anxiety, agitation and confusion, amnesia, affective disturbance, somnambulism or morning drowsiness were reviewed. Sleep

quantity and quality were evaluated on a three-point scale (good, satisfactory and unsatisfactory).⁷⁾

RESULTS

The mean age was 74.4 years (range, 70 to 86 years). The psychiatric diagnoses were 23 cases of depression, 1 case of hypomania, 2 cases of hypochondriacal neurosis, 1 case of paraphrenia, 1 case of dementia and 3 cases of nonorganic insomnia. Of these 31 patients, 18 (7 males and 11 females) received brotizolam and 13 (4 males and 9 females) received zopiclone. Brotizolam was given in a dosage of 0.125 to 0.5 mg/day (mean, 0.31 mg). Zopiclone was given in a dosage of 7.5 to 10 mg/day (mean, 9.42 mg). In the brotizolam group, 3 patients had received it for five years or more, 11 patients had received it for one year or more and 4 patients had received it for less than one year. The mean treatment period with brotizolam was 2.7 years. In the zopiclone group, 6 patients had received it for five years or more, 4 patients had received it for one year or more and 3 patients had received it for less than one year. The mean treatment period with zopiclone was 4.5 years (Fig 1). Patients were taking hypnotics within one hour before go to bed, and were following doctor's instructions. During these treatment periods there were no adverse effects that disturbed daily living, such as ataxia, hyperexcitability, daytime anxiety, agitation and confusion, amnesia, affective disturbance, somnambulism or morning drowsiness. Efficacy was assessed as good-to-satisfactory in 88.9% of patients with brotizolam and in 92.3% of patients with zopiclone. No differences were found between brotizolam and zopiclone by the ratio test.

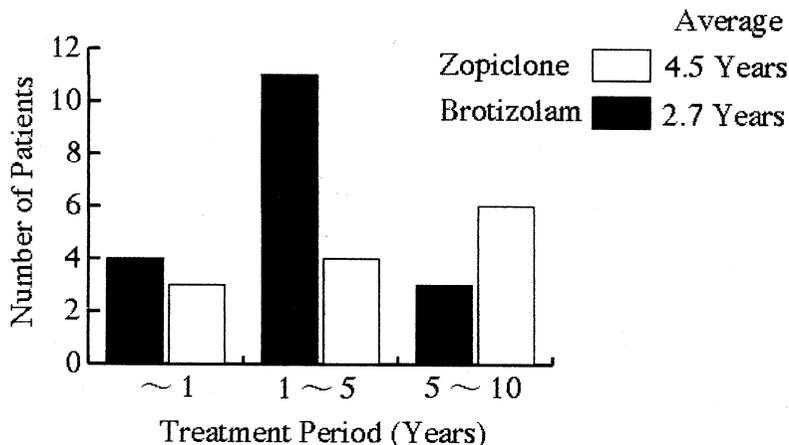


Fig 1. Treatment period of brotizolam and zopiclone

DISCUSSION

Brotizolam and zopiclone showed good hypnotic efficacy without adverse effects in the elderly for a long term, and the patients wished to continue long-term treatment with hypnotics to maintain a comfortable daily life. In general, long-term treatment with hypnotics is not usually recommended for the elderly because of sensitivity of the central nervous system (CNS) to hypnotics

and accumulation of hypnotics increase in the elderly.^{8,9)} Previous reports which evaluated efficacy and safety of brotizolam and zopiclone in the elderly observed short duration (from seven days to one month).^{7,10,11,12,13)} Our results is the first report to evaluate long-term treatment of brotizolam and zopiclone. This examination showed long-term treatment with hypnotics maintained the QOL without adverse effects such as ataxia, hyperexcitability, daytime anxiety, agitation and confusion, amnesia, affective disturbance, somnambulism or morning drowsiness in the elderly. And patients were taking a medicine within one hour before go to bed and were following doctor's instructions. Optimal dosage of brotizolam and zopiclone was used.^{7,10)} What is important is to keep a correct use and optimal dosage of medicine.

The elderly pay a great deal of attention to their sleep. Sleep is a necessity for both body and mind. Sleep has a restorative and refreshing function. There are some 50 reports that tissue mitoses and protein synthesis are enhanced during sleep.¹⁴⁾ Thus, sleep may play a crucial role for the homeostasis and well-being of an elderly individual. So, maintaining a comfortable daily life and sleep are more important than stopping or reducing dosage. On the basis of present data, we may, therefore, reasonably conclude that there are no difficulties in long-term use of brotizolam and zopiclone for elderly insomniacs.

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