More Rational Use of Benzodiazepines in the Outpatient Clinic

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Key words: benzodiazepine, current use, anxiety, insomnia, adverse effect

(DOI: 10.2169/internalmedicine.46.0172)

Benzodiazepines (BZD) are very useful agents; they are the most frequently prescribed drugs in the world for their anxiolytic, hypnotic, and anticonvulsant effects (1). They can be divided into three groups according to their pharmacological half-life: 1) short half-life (less than 10 hours), 2) intermediate half-life (10-35 hours), 3) long half-life (more than 35 hours). Short half-life BZDs have an increased risk of dependence.

Nomura et al (2) recently investigated the patterns of regular prescriptions for benzodiazepine among the psychiatric clinic, internal medicine clinic, and other department clinics of a university hospital in Tokyo. They found that 15% of the outpatients were regular users of BZDs, and regular BZD prescriptions were given more frequently for women (61%), and elderly people above age 60's. Among 1,196 patients of psychiatry, psychiatrists prescribed short acting BZD in 20%, intermediate-acting BZD in 50%, and long acting BZD in 30%. Among 776 patients of internal medicine, internists prescribed short acting BZD in 58%, intermediate-acting BZD in 27%, and long action BZD in 15%. Among 1,919 patients of other outpatient clinics, the doctors prescribed short acting BZD in 51%, intermediate-acting BZD in 22%, and long acting BZD in 27%. Internists tended to prescribe short half-life BZDs (58%) more than psychiatrist (20%). Other clinics also tended to prescribe more short-acting BZDs (51%) as internists did.

In order to compare the above Japanese study, a national cross-sectional telephone survey of the current use of BZDs in the French general population is reviewed. The latter study was published in 2004. Lagnaoui et al (3) completed 4,007 interviews of patients over the age of 18 years. The results indicated that 7.5% of the French population is using BZDs and 75.9% of them have used this drug for longer than 6 months. The usage is higher among women (9.7%) than men (5.2%), and it increases with age. Above the age of 60 years 14.3% of people use the drug. Among the users 88.7% used short half-life BZDs, and 11.3% used long half-life BZDs.

Though the methods of these studies differ, there are common findings in the Japanese outpatient clinic prescription-based study and French telephone interview study. BZDs are somewhat excessively used, and there is a common tendency that women and elderly people above age 60 years use more BZDs. Also it is important to point out the short half-life BZDs which develop more dependence are used more frequently than the intermediate half-life or long half-life BZDs; especially more short half-life BZDs when internists or general practitioners are prescribing the drug.

We are living in a stressful world, and a lot of people are unable to cope with the situation; both at home and at work. In Japan more than 32,000 people commit suicide every year and before they develop depression there is a period that they experience insomnia, absence of work, or just late for work. In a hard competition of the working world, the companies tend to reduce the numbers of the workers and the work load for each individual worker has tremendously increased in the past decades, and a lot of people are not enjoying their lives, and simply do not have time to do what they really wish to do. The real solution to solve the modern situation like this cannot be achieved by giving anxiolytic or hypnotic medications.

BZDs are useful for acute stress reaction and anxiety, and you can use them for 2 to 4 weeks and then taper down over 1 to 2 weeks, and discontinue the drugs (1). In the long run psychotherapy is preferable (1). In most of the cases of anxiety, they are excessively worrying about things, although the worst thing that they may expect to happen does not occur, and statistically a very low incidence even of the worst thing may happen. Since it is difficult to change the world by yourself, we can change ourselves in dealing with daily happenings. If we cannot change the situation, accept it without worrying about it and try to improve just a little bit each time, and eventually things may get better as you try and this confidence of overcoming the situation will give you more power to solve the next problem in

the future. This process is psychotherapy. In addition it is important to enjoy the great gifts of the ancestors; arts, music, literature, philosophy to enrich ourselves and make us even stronger to cope with the difficult world since we already have a lots of wisdom which are given to us from the ancestors and we are adding further knowledge and wisdom day by day.

The adverse effects of BZDs (4) include: 1) dependence, 2) cognitive impairment (anterograde amnesia), 3) daytime sedation, 4) seizures after abrupt discontinuation of the drugs, 5) motor incoordination and falls at night when the elderly try to go to the bathroom with remaining drug action, (hip fracture), and 6) risk of motor vehicle accidents (4). It is a common problem that elderly people have

chronic insomnia, and they ask for sleep inducers. We have to clarify whether they cannot fall asleep and once they fall asleep they can sleep well, or they wake up early in the morning at 2 or 3 AM and they cannot go back to sleep. For the former problem we can prescribe a short half-life BZD, but for the latter we have to prescribe an intermediate half-life BZD. We have to tell them that keep the hallway dim-lighted so they can see the way to the bathroom at night and be careful not to fall.

In order to search for new options for chronic insomnia (4-6), melatonin or a melatonin receptor agonist, ramelteon was created for the long-term treatment of insomnia. More placebo-controlled studies will disclose the effectiveness of the new medicine as well as its adverse effects.

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