

APPLICATION OF BENZODIAZEPINES IN OFFICE OF FAMILY MEDICINE PHYSICIAN

M. Katić, S. Blažeković-Milaković & S. Špehar-Stojanović

*Department of Family Medicine, Andrija Štampar School of Public Health, Zagreb University School of Medicine, Zagreb, Croatia
milica.katic@snz.hr*

Benzodiazepines are among most prescribed medications in the offices of the family medicine physicians. According to data from American Psychiatric Association 11-15% of adult population was taking benzodiazepines during previous year, and 1-2% of the population takes benzodiazepines regularly. According to results of numerous investigations on frequency of prescription of medication, beside "medical" indication for medication selection, prescription of a medication is influenced by other factors - for example, opinions of the medical doctor and the patient that patient has to get "something" from the doctor, and that prescribed medication is the confirmation of illness; popularity of the medication; good tolerance and small number of side effects; price of the medication and insufficient awareness of the doctors and the patients about adverse effects of the medication and risk of addiction.

The purpose of this article is to present features of prescribing, and side effects and risks of prescribing benzodiazepines in family medicine.

Benzodiazepines are according to their pharmacological characteristics very efficient medications and are applied in treatment of various illnesses, as the main medication or and adjuvant medication. They are prescribed as muscle relaxants, anticonvulsants, during detoxification therapy in alcohol dependence and addiction on other substances, and as anxiolytics in illnesses of gastrointestinal and cardiovascular system. They are often applied as adjuvant medications for suppression of pain and other symptoms in incurable patients in terminal phase, most often malignant illnesses. Their efficacy is huge because they are absorbed quickly after ingestion and over 70% of the medication binds to plasma proteins. Many patients with anxious disorders that can diminish during time take benzodiazepines continuously or intermittent during the period of intensive symptoms.

According to data from Croatian National Institute of Public Health among the patients with addiction to some medication benzodiazepines addiction is in the third place. With such wide application of benzodiazepines, family medicine physicians have to know their potential side effects. In the investigation conducted in the group of physicians working in a family medicine service in Croatia from 111 examinees on the question about indications for treatment with benzodiazepines 56.7% gave the correct answer, about side effects 57.6%, about groups of benzodiazepines and definition 57.6%, and about correct application of benzodiazepines only 37.8%.

Benzodiazepines act *synergically* with other medications that have sedative effect, especially hypnotics, antidepressants, neuroleptics, anticonvulsants and alcohol. Their pharmacodynamic interaction with opiates is well known. Psychomotor changes occurs in persons who take alcohol at the same time or after prolonged therapy with benzodiazepines. Also, irritability, aggressiveness or emotional anesthesia, as well as hostility may appear in some persons. Caution is necessary during pregnancy because benzodiazepines are classified as teratogenic medications. Tolerance develops in all benzodiazepines with variations in dynamics and extent. Occurrence of physical and psychic dependence is conditioned with dosage of medication, period of treatment with medication and potency of the medication. Dependence develops faster during treatment with short-acting (alprazolam) than in long-acting benzodiazepines (diazepam). Withdrawal syndrome is most often characterized with anxiousness, agitation, confusion, increased heart rate, increased blood pressure, tremor, insomnia and sometimes with to the most serious forms such as delirium and convulsions.

Addiction to benzodiazepines is a serious problem in the older patients. Older patients often take benzodiazepines during long period of time. Chronic pain, depression and isolation are common problems of older patients, and present the base for frequent use of benzodiazepines and development of addiction. Negative side effects of benzodiazepines and their potential toxicity in older patients are well known although that recognition is insufficiently present in practice. Those problems include sleep disturbances, cognitive difficulties, problems in performing routine daily activities, traffic accidents, and other accidents especially falling and consequent bone fractures. Confusion and disorientation with or without hallucinations appear more often in older patients.

Therefore, the guidelines for adequate prescription of benzodiazepines in older patients recommend treatment during short period of time, intermittent and for the purpose of suppression of acute symptoms.

Knowledge about benzodiazepines, their application and risks in the everyday practice of the family medicine doctor has to be improved continuously through continuous education and personal professional development of every medical doctor. Education has to be based on scientific evidences and work experience of family medicine physicians. Furthermore the guidelines created by the experts of family medicine and experts of other congruent professions have to be applied and evaluated in the practice of family medicine physicians.