EDITORIAL

CHALLENGING ISSUES OF BENZODIAZEPINE PRESCRIPTION IN ELDERLY

With advancing age, elderly persons are more sensitive to the potential side effects of benzodiazepines because changes in aged brains take place, these change includes shrinkage of brain, loss of neurons, alternation of neurotransmitters and neuro chemical receptors. The losses of neurons take place in several areas, manly in the neocortex, hippocampus, and substantianigra. Therefore dendrites growstocompensate the degeneration of neighboring neurons and overallchanges in neurotransmission, can takes place to the alter brain function. The neurochemical studies show that the changes also take place in cholinergic, catecholaminergic and peptidergic neurotransmission with age. Dopamine transporter binding has been found to decrease with age.Dopaminergic and serotonergic receptor loss within the prefrontal cortex and striatum have been observed. The N-methyl-D-aspartate (NMDA) glutamate receptor density and function decreases in the cortex, striatum, and hippocampus.

Benzodiazepine receptors in the brain become more sensitive, causing increased sedation, unsteadiness, memory loss, and disinhibition. Psychomotor studies among elderly patients using benzodiazepines indicate that elderly, especially those with dementia, hypo albuminemia, or chronic renal failure,have a greater risk of sedation. Anterograde amnesia diminished short-term recall, increased forgetfulness, confusion, and deficits in visuospatial learning, manly found in elderly with benzodiazepine dependence. The dependence can lead to depression, anxiety and mimic like dementia.

The side effects are also more prone because of altered pharmacokinetics and pharmacodynamics of benzodiazepines. Numerous studies have shown that alterations in the distribution and elimination of these agents occur among older patients. Benzodiazepines with oxidative pathways and longer half-lives, such as chlordiazep oxide, diazepam, and flurazepam, are more likely to accumulate in the body and cause prolonged sedation.

Symptoms such as agitation, anxiety, confusion, delirium, and seizures can occur during withdrawal. Thus, either acute/chronic intoxicating effects or withdrawal symptoms from benzodiazepine use disorders may complicate medical and psychiatric assessment in older adults. The simultaneous use of multiple medications increases the risk of adverse drug reaction therefore it needs careful withdrawal schedules like Setting goals, stabilization on a single benzodiazepine if patient uses multiple, scheduled hypnotic uses rather than sos basis, reductions of doses at rates of 1/8 th to 1/10 th of daily dose at 1 to 2 week interval until lowest available dose achieved, most studies in primary care have found that gradual withdrawal over at least 10 weeks is successful in achieving long-term abstinence.

To manage benzodiazepine dependence, there are three objectives; to treat the dependence; to prevent relapse and to maintain abstinence, further diagnosis and treatment also needed if the underlying disorder present. Apart of benzodiazepine dependence there are many other adverse effect of benzodiazepines those can causes serious problems in the patients, hens in this situation patients needs harm reduction strategy. In this method, patient put on holistic treatment for their dependence, rather than slowly reducing the dose. The high-risk benzodiazepines users are those patients, who are on a high diazepam equivalent dose, have aberrant drug-related behaviours, have a chaotic social setting or unstable psychiatric diagnoses and patients who are alcohol or drug dependent. These people are often

difficult to manage and should refer to a specialist addiction service.

Clinicians should aware of the prevalence of benzodiazepine dependence in this population in order to prevent, detect, and treat this problem.

Adverse reactions to benzodiazepines are more common among elderly patients and occur more frequently. Cognitive behavior therapy can be specific to insomnia or other withdrawal symptoms like sleep restriction therapy, in these method patient needs to curtail time on bed to actual sleep time. He advises to go to bed only when sleepy, use bed/bedroom only for sleep and sex (no television watching, worrying in bed/room either during daytime or at night. If he unable to fall asleep within 15 to 20 minutes, he should get out of bed and go to sleep in another room. He needs to arise at the same time every morning regardless of sleep amount. He Avoid daytime napping.

Harms from drugs such as zopiclone and zolpidem are less well characterized, those dependence managed in the same manner as benzodiazepine dependence. Therefore overall conclusion is that benzodiazepines should be prescribed with caution, at low doses, and for short periods. Restricting use, no more than 2-4 weeks. Short-half-life benzodiazepines, such as oxazepam, alprazolam, and triazolam, are usually recommended in elderly. However these may be associated with a clinically significant discontinuation syndrome and have a higher potential for abuse. On the effectiveness of targeted interventions to reduce withdrawal symptoms like, behavior therapy, Exercise, Complementary or alternative treatments for symptoms of anxiety, Sleep hygiene, Melatonin interventions should be applied for chronic insomnia.

Refereces:

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