Gamma-hydroxybutyrate (GHB): an Emerging Substance of Abuse

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Date of receipt / Geliş tarihi: June 22, 2016 / 22 Haziran 2016

Date of the first revision letter / İlk düzeltme öneri tarihi: July 20, 2016 / 20 Temmuz 2016

Date of acceptance / Kabul tarihi: August 20, 2016 / 20 Ağustos 2016



Dear editor;

Gamma-hydroxybutyrate (GHB) is a substance that is structurally related to gamma-aminobutyric acid (GABA) and is found as a metabolite of GABA in the human brain. First developed as an anesthetic agent in 1960, and in subsequent years the abuses have been reported in body building activities as dietary supplements and growth hormone stimulant. Starting from the eighties, it started to be used especially as a "club drug" because of its sexual desire enhancing effects, and an increasing number of case reports of GHB acute poisoning have been reported (1-4).

Although GHB has similar cellular and behavioral effects with classic sedatives-hypnotics such as benzodiazepines and barbiturates, it has been suggested that GHB functions as a separate neurotransmitter/neuromodulator, and for this reason, it must be accepted as a disparate pharmacological agent (3). Typical poisoning symptoms include drowsiness, confusion, bradycardia, hypothermia, hypotension, nausea and vomiting (5). Life-threatening conditions

such as epileptic seizures, respiratory depression, coma and deaths associated with GHB use have also been reported (4-6).

GHB has attracted attention in recent years due to its use in bar, club, and party environments with other psychoactive substances such as alcohol, ecstasy, cocaine, amphetamines and it has been drawn since it has been used in sexual assaults (3-7). It is stated that besides the effects such as euphoria, giving energy, increasing sexual desire, and sociality, lack of side effects such as night falling, the ease of production and selling at low prices makes it preferable (8,9). According to literature; especially teenagers (9) and homosexual and bisexual population, given that widespread use (10). GBH is referred as "liquid ecstasy", "liquid X", "scoop", "soap", "salty water", "grievous bodily harm", "vitamin G" in abroad (3,7) and "G" in Turkey, among the people. In foreign countries, there has been no mention of the use of GHB in Turkey, as it has been found in the literature for many years.

Given the increasing use of GHB in our country today and its potential dangers, we would like to

remind of the importance of developing psychoeducational approaches, making legal regulations, performing clinical researches about determination of clinical parameters including

laboratory screening tests to detect the use of GHB, full of GHB intoxication and withdrawal symptoms, and informing clinicians about effects of GHB, to the prevention of GHB use.

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