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Volatile substance abuse

Summary

The term „volatile substance abuse” (VSA) denotes the deliberate sniffing and inhaling of gases and vapors of solvents in order to evoke euphoria. The most often abused substances of this type are: saturated and unsaturated hydrocarbons with a small number of carbon atoms in the molecule, some aromatic hydrocarbons, halogenated (i.e. chlorinated, brominated and fluorinated) hydrocarbons, and as regards oxygenated compounds - some ethers, esters, ketones and oxides. They are components of many widely available products used in the daily life, such as glues, various types of sprays, detergents, fuel gases, etc.

Small doses of these substances may rapidly elicit short-term euphoric states, while larger doses produce intoxication symptoms often involving danger to life. Death may be caused either by a direct toxic effect on the heart and central nervous system, or indirectly - by aspiration of vomited matter into the respiratory tract.

Studies on the metabolism of inhaled psychoactive substances indicate that the latter in a considerable part are exhaled with air in the unchanged form, but that an amount (usually a much smaller portion) is transformed into metabolites, quite frequently biologically active ones.

Clothes, hair and breath of „sniffers” smell of solvents, and empty tubes and other containers of glue, sprays, etc. may be found in their meeting spots.

Due to a considerable prevalence of sniffing among the youth all over the world both prevention of this phenomenon and treatment of people with dependence on such substances are a major challenge in the near future.

Key words: volatile substance abuse

Piśmiennictwo

1. Altenkirch H., Wagner H.M., Stoltenburg-Didinger G., Stepper R., (1982) Potentiation of hexacarbon-neurotoxicity by methyl-ethyl-ketone (MEK) and other substances: clinical and experimental aspects, *Neurobehav. Toxicol. Teratol.*, 4, 623-627.