Methamphetamine

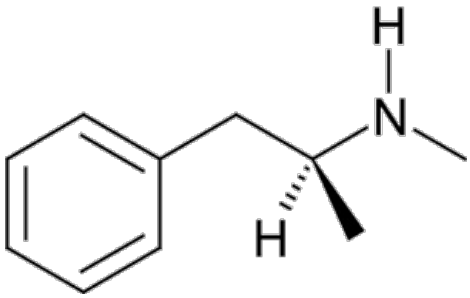
Methamphetamine (*meth*) is a central sympathomimetic, classified among the stimulating amines*. In the Czech Republic, meth is now one of the most widespread illegal drugs with a high potential for addiction.*

History

Its effects were studied at the beginning of the 20th century, but it was still considered non-addictive in the 1930s. Along with other representatives of stimulating amines, it was widely used as a medicine against fatigue, narcolepsy, excessive appetite or to increase the performance of combat units.

Chemical Properties

methamphetamine, systematically named (2S)-N-methyl-1-phenylpropan-2-amine[1] *is structurally similar to the somewhat simpler amphetamine, but is a more effective* ***psychostimulant****. Pure occurs in the form of a white microcrystalline powder, odorless and with a bitter taste. Residues of substances used in home production can cause a purple or yellow color. The starting substance for production is ephedrine or pseudoephedrine, red phosphorus is also used, among other things. An imperfect "boil" can result in production of an intermediate product, whose toxic ingredients greatly increase the health risks of use for the user.*



Metamphetamine

Use

The most common way of application is **intravenous**, as the effect starts almost immediately. By *sniffing*, the effect occurs in 5-10 minutes, by *oral use* within an hour. Recently, smoking from a glass stick has also become popular, where a hollow glass stick is heated from below with a lighter, the substance inside melts and the released vapors are inhaled into the lungs. Doses range from 50-250 mg, experienced users apply up to 500 mg at a time. Much smaller doses (15–20 mg) were used for medicinal purposes. Symptoms of intoxication subside after 8-24 hours. It is excreted from the body in the urine, in which it can still be evident 14 days after use.

Effects

It acts as a psychostimulant. In the CNS, methamphetamine **increases the concentration of mediators'** (dopamine, noradrenaline, serotonin), after its wear off there is a lack of neurotransmitters, which causes an unpleasant condition called a "run-off" during which the user becomes depressed and feels **severe exhaustion*****. After using meth, there is euphoria, an accelerated flow of thoughts and an increased ability to concentrate. The psychomotor pace accelerates, the frequency of breathing increases.*** *It represents a significant burden on the cardiovascular system - it causes hypertension, tachycardia, it can cause arrhythmias.****The body can work until complete exhaustion*** *without subjective signs of fatigue*. The user subjectively has no need to drink, eat or sleep. Long-term use, on the other hand, causes hallucinations, paranoia, states of confusion and inability to concentrate. It is interesting that during prolonged abuse, the so-called "ride", the user may lose consciousness after intoxication and fall into a deep sleep or unconsciousness for several hours, and it is only after waking up that the psychostimulant effect of the substance begins.

Intoxication

'*Acute intoxication* ***is manifested by hyperactivity, severe restlessness and headaches. mydriasis is evident and tachycardia or arrhythmia is usually present. Other symptoms are a rise in body temperature and chest pain. An intoxicated person may become unconscious. As a result of*** *chronic use*, toxic psychosis can arise (typically feelings of persecution - the so-called *punishment*), depression appears (especially if the user does not have the drug) and significant [[anxiety]]. Feelings of tension, irritability and sleep disorders are common. Use causes loss of appetite, long-term abuse increases the risk of anorexia.

The long-term user is usually thin, sleepless, hyperactive and constantly talking ('*thought jet*). Visibly damaged teeth are usually visible, as intoxication slows down the production of salivary glands and bruxism occurs (methamphetamine itself also apparently demineralizes tooth enamel).

Links

Related Articles

- Abuse and intoxication

- Amphetamine

References

1. *PubChem Compound* [databáze]. National Center for Biotechnology Information, U.S. National Library of Medicine, [cit. 2014-05-13]. <https://pubchem.ncbi.nlm.nih.gov/summary/summary.cgi?cid=66124&loc=ec_rcs>.

Used literature

- KALINA, Kamil, et al. *Drogy a drogové závislosti : mezioborový přístup.* 1. vydání. Praha : Úřad vlády České republiky, 2003. sv. 1. ISBN 80-86734-05-6.