

Hallucinogens

This article has been translated from WikiSkripta; ready for the **editor's review**.

A *hallucinogen* can be a natural or synthetic substance. They are used in cult ceremonies with the participation of a shaman or to induce psychosis.

Speeches

Hallucinogens cause visual and auditory hallucinations, as well as changes in the perception of reality. A person acts uncontrollably and unexpectedly, therefore he can pose a threat to himself and others.

They usually have a rapid onset of action. The fading time ranges from a few hours to a few days. Symptoms are similar to schizophrenia, alienation, hysteria, delirium.

An overdose can also cause death (e.g. DOB – 2,5-dimethoxy-4-bromoamphetamine).^[1] With chronic abuse, psychological dependence, tolerance and flashbacks can occur.^[1]

Division

Hallucinogenic substances are divided according to their origin into natural and synthetic.

Synthetic, semi-synthetic substances

- Phencyclidine ("angel dust"), nitrous oxide ("paradise gas");
- LSD – synthesis from ergot;
- MDMA, TMA, PMA, DOB,....^[1]

Natural substances

We can find them in plants and living organisms.

- Cannabinoids
- Psilocybin, psilocin (*Psilocybe mexicana*, *Psilocybe bohemica*...).
- Mescaline (*Peyotl* cactus).
- Dimethyltryptamine, DMT (common reed, some acacias, etc.).
- Ibogaine (*Tabernanthe iboga*).
- Scopolamine/Atropine (*Atropa belladonna*, *Hyoscyamus niger*, *Datura stramonium* etc.).
- Bufotenin (secretion of toad BUFO, seeds of sedge, e.g. *Anadenanthera colubrina*...)^[1]

Hallucinogen-type drug addiction

Hallucinogens (psychedelics, delirogens, fantastics, psychosomimetics, psychotomimetics, psychodysleptics) induce psychological changes in users up to the stage of toxic psychosis.

- Qualitative disorders of consciousness, complete or insular memory loss,
- euphoria or depression, anxiety (can lead to aggression), panic,
- disturbances in the perception of time and space, time runs faster or, on the contrary, slower, wrong estimation of distances, disturbance in the perception of surroundings, feelings of derealization, at higher doses hallucinations
- persecutory and other delusions, loss of judgment
- striking behavior, hyperactivity or, conversely, stiffness.^[2]

Active ingredients

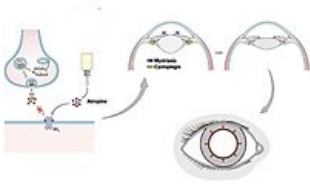
- **Psilocybin'** - bald eagles,
- **ibotenic acid, muscarine'** - red toadstool,
- **mescaline** - cactus *Lophophora Williamsi*
- **bufotenin** - seeds of the plant *Cohoba*
- **ibogain** - the root of the bush *Tabernate Iboga*
- **Atropine, Scopolamine** - dope.^[2]
- **DMT** - Reed Beetle, Reed.^[2]

Mechanism of action

- Acts on serotonin receptors
 - mild psychological dependence and the absence of somatic dependence and withdrawal
 - behavioral disorders during psychosis
 - psychotic reminiscences (flashbacks).^[2]
- 🔍 For more information see *Hallucinogens*.

Atropine - Scopolamine

Atropine - ester of tropic acid and tropine



- an alkaloid obtained from numerous eggplant plants
- natural is (–) hyoscyamine – pharmacologically effective
- when treated in solutions, it spontaneously changes to the racemate - atropine

Scopolamine - Hyoscine

- an alkaloid found in plants alongside hyoscyamine in varying amounts
- chemically and in effect it is close to atropine
- both substances have one center of asymmetry – 2 enantiomers

File:Scopolamine.jpg
Scopolamine

Mechanism of action

- Atropine inhibits the effects of acetylcholine by competing for receptors.
- Atropine has a high affinity for the receptor, but does not activate it.
- Acetylcholine release is not affected by atropine.
- Atropine thus weakens the muscarinic effects of acetylcholine.

Symptoms of poisoning

- facial redness, dry mucous membranes, tachycardia, mydriasis.^[1]

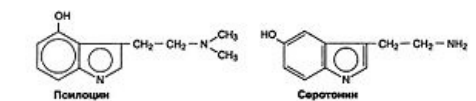
LSD

🔍 For more information see *LSD*.

Psilocybin - Psilocin

Psilocybin:

- ester of phosphoric acid and 4-hydroxy-N', N'-dimethyltryptamine
- (for structural similarity see serotonin 5-HT)
- Unstable, spontaneously splits into psilocin
- Effects - unpredictable.^[1]

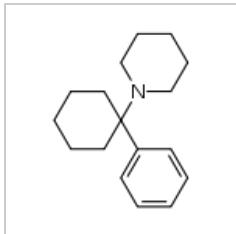


Psilocybin

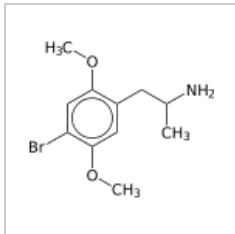
Ancient Cult Rites

Hallucinogenic substances used in cult ceremonies in Asia, Africa and South America. **Anticholinergic substances in plants with magical powers:**

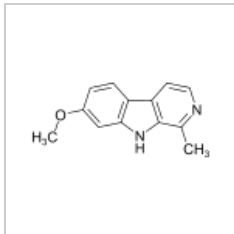
- Indian drink Ayahuasca
 - harmaline, harmine, harmalol, DMT, scopolamine, atropine.
- Snuff "cohoba, yopo"
 - bufotenine, DMT.
- Amanita muscaria - Siberian peoples
 - muscarine, ibotenic acid - muscimol.}}



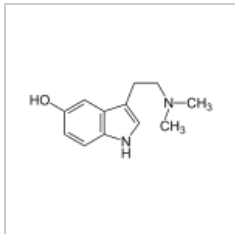
Phencyclidine



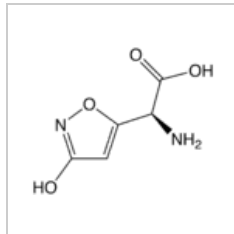
DOB



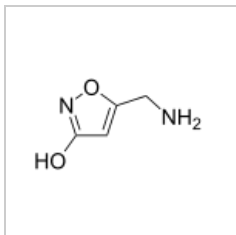
Harmine



Bufotenin



acid. ibotenic



Muscimol

Links

Related Articles

- Substance abuse • Drug addiction and illegal production and possession of narcotics • Opioid abuse
- Amphetamines • Cocaine • Cannabinoids • Hallucinogens • LSD • Psychodrugs • Barbiturates • Benzodiazepines • [[Ethanol]]
- Cannabinoid use disorders • Opioid use disorders

References

1. BALÍKOVÁ, Mary. *Abuse and intoxication* [online]. [cit. 2012-03-09]. <<https://el.lf1.cuni.cz/p56355604/>>.
2. Sananim – civic association. *Hallucinogens* [online]. ©unknown. The last revision unknown, [cit. 2010-04-07]. <<http://www.drogovaporadna.cz/halucinogeny.html>>.