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SUBSTANCES AFFECTING DOPAMINE AND SEROTONIN RECEPTORS.

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Abctract: Cocaine exhibits prominent abuse liability, and chronic abuse can result in cocaine use disorder with significant morbidity. Major advances have been made in delineating neurobiological mechanisms of cocaine abuse; however, effective medications to treat cocaine use disorder remain to be discovered. The present review will focus on the role of serotonin (5-HT; 5-hydroxytryptamine) neurotransmission in the neuropharmacology of cocaine and related abused stimulants. Extensive research suggests that the primary contribution of 5-HT to cocaine addiction is a consequence of interactions with dopamine (DA) neurotransmission. The literature on the neurobiological and behavioral effects of cocaine is well developed, so the focus of the review will be on cocaine with inferences made about other monoamine uptake inhibitors and releasers based on mechanistic considerations.

Keywords: dopamine, neurobiological, noradrenaline, catecholamin, myocardium.

Dofam and catecholamines are used in the body Before noradrenaline, α is formed from tyrosine. In M in the central nervous system by binding to dopamine receptors acts as a neurotransmitter. Dopamine receptors have two types D(and D? - divided into receptors. D, - activity of dopamine receptors Adenylate cyclase enzyme is associated with an increase in cyclic AMF.Dopamine mainly stimulates the D2-receptor, where the sympathetic nerves at the end catecholamin, from their preganglionic fiber the release of acetylcholine is limited, the hormone prolactin from the pituitary gland,saliva secretion from the submandibular glands decreases, the activity of the trigger zone increases. A high amount of dopamine D, - receptorlam provokes, when they are provoked, the vessels of the intestine, heart, kidney, brain smooth muscles relax. Stimulator of

dopamine receptors substances are called dopaminemimetic, including dopamine, apomorphine,including bromocriptine. Paralysis of dopamine receptors in neuroleptics has a feature.

Dopamine is obtained synthetically as a drug substance,When injected into the body, dopamine inoreceptors are high amount of noradrenaline, stimulating adrenoreceptors increases release from granules, i.e. indirect adrenomimetic effect shows. Dopamine is less than norepinephrine vascular resistance, systolic blood pressure, heart rate, increases the volume of blood leaving the heart, the heart rate almost unchanged. Although the oxygen demand of the myocardium increases, the coronary with myocardial oxygen due to improved blood circulation in the vessels enough is provided. Renal vascular resistance also decreases, the filtration process in kidney balls increases, mesenteric the veins also dilate. Dopamine to the kidney and mesenteric vessels. It differs from noradrenaline and adrenaline by its effect.

Central nervous system (CNS) stimulants are a diverse group of pharmacological agents that evoke behavioral and psychologic stimulation and alertness, energy, euphoria, and mood elevation. These compounds include naturally occurring stimulant alkaloids derived from plants (e.g., cocaine, nicotine) and synthetic molecules (e.g., amphetamine, methamphetamine, 3,4-methylenedioxymethamphetamine). Psychostimulants have important therapeutic utility in a large population for which they are essential. For example, amphetamine congeners and mixtures are employed to normalize attention deficit disorders and treat narcolepsy , while cocaine is used for nasal and eye surgeries when indicated . Although these compounds differ in potency, duration of action, and preferred routes of administration, this broad range of psychostimulant molecules exhibits prominent abuse liability, and chronic abuse can result in substance use disorders with significant morbidity, potential mortality, and reductions in the quality of life for users and their families. Substantial advances have been made in delineating overlapping and distinct mechanisms of action of psychostimulants and uncovering neurobiological mechanisms of abuse liability; however, effective and accessible medications to enhance recovery and to promote long-term abstinence from stimulant use disorders remain to be discovered.

The most common variant in medications development studies is the evaluation of active drug self-administration under experimental manipulations that allow deductions about the impact of a novel medication on the reinforcing effects of the self-administered drug. The dose-response curve for cocaine typically is an inverted-U with an ascending and descending limb. Any interpretation of reduced drug intake in the absence of a whole dose-response curve could be misleading, because the rate of responding at a given dose provides only a partial evaluation (typically of the descending limb) of the dose-effect curve and hence can be an ambiguous measure of the reinforcing effects of a drug. A drug pretreatment can shift the dose-effect curve to the left, right, or downward; in the case of a left- or rightward shift, it is important to realize that the potency of cocaine may be altered, but some dose of cocaine may still maintain self-administration. A potential medication that shifts the dose-effect curve for cocaine downward may have the greatest clinical utility, whereas a drug that increases self-administration is unlikely to have a desirable clinical outcome. An important consideration in the employment of self-administration for medications development is the "specificity" of effects seen with a candidate medication. Medications should reduce consumption of the abused drug without producing undesirable effects.

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1. Xarkevich D.A. - Farmakologiya, M. 2005 g.
2. S.A. Krijanovskiy - Klinicheskaya farmakologiya, M., «Akademiya», 2003 g.
3. Rukovodstvo po eksperimentalnomu (do klinicheskomu)izucheniyu novix farmakologicheski x veshestv. Pod obshey redaksiyey chlena korrespondenta RAMN, professora R.U.Xabriyeva, M., «Meditsina», 2005
4. Spravochnik vidal. Lekarstvennie preparati v Uzbekistane, M., AstraFarmServis, 2010 g.
5. Abbas A, Roth BL. (2008) Arresting serotonin. *Proc Natl Acad Sci USA* 105:831–832. [PMC free article] [PubMed] [Google Scholar]