



Review

Role of serotonin (5-HT)_{1B} receptors in psychostimulant addiction

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Abstract:

Psychostimulant (cocaine, amphetamine and its derivatives) addiction is an important health problem with implications in social and economic life. Although mesocorticolimbic dopamine system plays a crucial role in the mechanism responsible for the rewarding effects of these drugs, recent data also show involvement of the brain serotonin (5-HT) system. In the present review we discuss the role of 5-HT_{1B} receptors in the psychostimulant addiction on the base of the effects of 5-HT_{1B} receptor ligands on the behavioral effects of the psychostimulants in experimental models (sensitization, intracranial self-stimulation, conditioned place preference, self-administration and extinction/reinstatement model) used to assess their addictive properties. Moreover, the effect of long-term treatment with psychostimulants on 5-HT_{1B} receptors is also discussed.

Key words:

5-HT_{1B} receptors, psychostimulants, behavioral models of drug addiction
