



Review

Nicotine dependence – human and animal studies, current pharmacotherapies and future perspectives

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Abstract:

Nicotine dependence is a disease of constantly growing importance. This mini-review describes the effects of nicotine in humans and focuses on the various laboratory animal models developed to study the dependence-related behavioral effects of nicotine. In addition, we outline the current therapeutic approaches designed to substitute nicotine from cigarette smoke with safer compounds or to relieve symptoms of nicotine withdrawal during smoking abstinence. Since several pharmacotherapies have failed to be efficacious in all patients, we also assess the clinical effectiveness of newer agents in relation to existing drugs.

Key words:

nicotine, drug discrimination, self-administration, reinstatement of seeking behavior, sensitization, rat, clinical trials, nicotine pharmacotherapy
