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The Lateral Habenula and Alcohol: Role of Glutamate and M-type Potassium Channels

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Abstract

Alcohol use disorder (AUD) or alcoholism is a chronic relapsing disorder. Our knowledge of alcoholism hinges on our understanding of its effects on the brain. This review will center on the effects of alcohol in the lateral habenula (LHb), an epithalamic structure that connects the forebrain with the midbrain and encodes aversive signaling.

Like many addictive drugs, alcohol has both rewarding and aversive properties. While alcohol's euphoric property is believed to be important for the initiation of drinking, increasing evidence suggests that alcohol's negative affect plays a critical role in excessive drinking and alcohol dependence. During withdrawal and abstinence, alcoholics often experience anxiety and depressions, both of which have been implicated in relapse drinking.