

## Therapy.

### Use of a compound in the prevention, improvement, treatment of mental disorders and behavior related to alcohol.

A research group from the Andalusian Public Health System and the University of Málaga have used a lysophosphatidic acid (LPA) receptor antagonist in its application as an alcohol-related problems drug.



## Description

Alcohol is a psychoactive substance with properties that cause dependence, its consumption is widespread in society from an early age. The destructive consumption of alcohol increases the likelihood of suffering from noncommunicable and infectious diseases in addition to the social effects of excessive and prolonged consumption, which is associated with a large number of mental, physical and organic disorders.

It is of great importance to look for new pharmacological treatments that contribute to modulate the consumption of alcohol, to prevent and / or treat the psychophysiological effects and the behavior of this drug. At present there are different specific treatments in the market; however, none of them are completely satisfactory, given the contraindications and side effects.

Lysophosphatidic acid (LPA) is a biologically active endogenous lysophospholipid present in multiple biological fluids such as plasma or blood. The LPA-mediated signaling system has been implicated in a large number of pathologies (fibrosis, cancer, sclerosis, inflammation, cardiovascular diseases) for which LPA receptor antagonist drugs are presented as a promising therapy.

This research group carried out a preclinical study, administering *in vivo* an antagonist LPA receptor intraperitoneally in a systemic way, twenty minutes before ingesting alcohol.

The result was a decrease in: motivation to alcohol consumption, in the hypnotic-sedative effect, in cognitive deterioration and abstinence symptoms, all without producing aversion. In addition, normal state is recovered in less time and the drug does not affect individual's health in relation to weight, food consumption, motivation by natural reinforcers or behavior.



## Advantages

- This drug may have applications both in people diagnosed with substance abuse or substance dependence disorders and those who are not diagnosed as such.
- The treatment is useful to reduce the desire to consume alcohol, also to prevent other effects of this drug, without resulting aversive.
- Prevents or treats psychophysiological symptoms produced by alcohol intoxication and abstinence, also the cognitive and emotional deterioration induced by alcohol.
- The repeated administration of this drug does not affect negatively the well-being of the individual, reducing the side effects and obtaining various beneficial effects on other related pathologies.



## Intellectual Property

This technology is protected by national patent application.



## Aims

The research group is looking for partnership and/or license agreement.



## Classification

Area: Drug Administration.

Pathology: Substance abuse.



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