Nux Vomica 200 CH reduced acute hypnotic effect of alcohol in young toads

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ABSTRACT

Potentized Nux Vomica has been reported to produce antialcoholic effect in mice, rats and toads. The effect relates to consumption of alcohol and alcohol-induced loss of righting reflex (RR). RR’s maintain normal erect posture of an animal and are centrally controlled in the midbrain. In the present study young toads, Duttaphrynus melanostictus were first treated with Nux vomica 200 CH and then partially immersed in 209 mM ethanol solution in such a way that their head remained above the level of ethanol solution. Toadlets were removed from the ethanol solution every 10 min, tested for the loss of RR and returned to the ethanol solution. Toadlets were placed in a supine position on a dry flat surface. Failure to right within 60 sec was considered as the loss of RR. The experiment was repeated 10 times. Control toadlets were pretreated with 90% ethanol instead of Nux Vomica 200 CH. The percentages of toadlets showing loss of RR, both in the control as well as in the Nux-treated groups, were shown in graphs against the duration of exposure to ethanol solution. Differences in the percentage distribution between the control and the treatment groups losing RR were tested by χ² test. All the experiments were conducted at room temperature. The percentage of toadlets losing RR increased with time of exposure to ethanol solution. The increase was significantly higher with the control than with the Nux-treated group. Nux Vomica 200 CH might have influenced the mid-brain of toadlets thereby countering the hypnotic effect of ethanol in the toadlets.

Keywords: alcohol, toadlets, hypnotic effect