

The effects of alpha-methyl-p-tyrosine pretreatment on ethanol-induced narcosis and hypothermia, as well as in the development of tolerance to these effects in UChA and UChB rats

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We have previously reported that UChA rats (genetically low ethanol consumer) develop tolerance to narcosis time easier than UChB rats (genetically high ethanol consumer). We also have reported that UChA rats develop tolerance to the hypothermic effect of ethanol, while in UChB rats the repeated administration of ethanol induces sensitization towards this effect. In the present paper the effects of alpha-methyl-p-tyrosine (AMPT)-a competitive inhibitor of norepinephrine synthesis-on ethanol-induced narcosis and hypothermia, as well as in the development of tolerance to these effects, were studied in both strains of rats. Results obtained show that AMPT pretreatment induced a significantly higher increase in narcosis time and hypothermia, as well as, greater susceptibility to ethanol toxicity in UChB than UChA rats. Furthermore, the simultaneous treatment with AMPT and ethanol did not change the development of tolerance to narcosis time in both strains and to hypothermia and sensitizati