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INFLUENCE OF ORIGINAL ANTICONVULSANT ON PHARMACOMETABOLIZING FUNCTION OF LIVER IN PATIENTS WITH ALCOHOLISM

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Objective: We investigated effect of long-term dosing of original anticonvulsant Galodif[®] (derivative of meta-chlor-benzhydriourea). On activity of liver cytochrome P-450 system of alcoholics.

Methods: 68 patients with alcoholism were examined. Pharmacokinetic parameters were calculated with method of statistical moments of K. Yamaoka.

Results: In chronic alcoholism elimination of antipirine becomes slower. Examined by us patients had enough long term of alcoholization and we may suppose that acceleration of elimination of antipirine, occurring at the onset of disease was replaced by some suppression of activity of microsomal monooxygenases; accordingly, elimination of model connection has become slower. This supposition corresponds to data about decrease of consumption of oxygen and suppression of oxidative processes in chronic alcoholization both in experimental animals and people. Hypermetabolic state is observed at the onset of disease conditioning probably increase of tolerance toward alcohol, xenobiotics resistance and high resistance of organism. Subsequently exhaustion of adaptive mechanisms occurs and possibly hypermetabolic state disappears. This is confirmed by decrease of tolerance toward alcohol during long course of illness. In addition, it should be taken into account that liver hypermetabolism is mostly expressed in alcohol withdrawal syndrome.

Conclusion: The higher background of activity of monooxygenases system of liver is at baseline, the major degree of manifestation of inducer is and vice versa. It is possible that reinforcement of reactivity of microsomal monooxygenases of liver of alcoholics toward Galodif is associated with synergetic action of preparation-inducer and ethanol.