CLINICAL REPORT: USE OF ENTEROSGEL IN THE TREATMENT OF ALCOHOL INTOXICATION AND ITS CONSEQUENCES

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Recently, the most challenging problem of narcology is treatment of alcohol intoxication, removal of drunkenness and reduction of withdrawal syndrome.

The complexity of massive elimination of the consequences of alcohol intoxication and treatment of acute psychosomatic disorders arising from it is a result of highly polymorphic disorders associated with significant changes in homeostasis.

An important factor in worsening of these conditions is disruption of the detoxification function of liver and excretory function of kidneys in people consuming alcohol excessively.

Detoxification therapy is the leader in a group of curative measures aimed at correcting homeostasis disorders and reduction of toxic effects of alcohol.

Traditionally, intravenous drop infusion of standard solutions and detoxification compounds is used. Such detoxification methods such as hemosorption, plasmapheresis and hemodialysis, due to their invasiveness, high cost and complexity of performance can be performed only in a limited number of patients, and therefore it is necessary to find new methods of detoxification.

In the pathogenesis of alcohol intoxication the fact should be take into account that the predominant amount of alcohol is transported in the gastrointestinal tract where it is reabsorbed, and thus extending the period of intoxication. This implies the necessity for the fast removal of alcohol from the gastrointestinal tract using different methods: gastric lavage, use of oxygenate solutions (manganese etc.) and powdered activated carbon.

In the early sixties the use of special adsorbent materials called enterosorbents binding substances in the intestinal tract began, which reduced alcohol intoxication, and provided their subsequent removal from the body.

Of the existing sorption methods, enterosorption is the easiest method that is acceptable and practically does not cause complications. It is also known that considering detoxification effect of enterosorption, the results after 2-3 days are comparable to those of hemosorption.

In Ukraine the new enterosorbent, Enterosgel, was synthesized and produced for overall detoxification of the body. It is characterized by high sorption activity, and the effect of total detoxification on the intestinal contents and blood in internal use (through the membranes of capillaries lining the GIT), where Enterosgel adsorbs toxic substances and metabolites.

Enterosgel has no harmful effects on the gastrointestinal mucosa, does not penetrate the mucosa and epithelium and is rapidly excreted from the body.

Enterosgel detoxification effects were examined together with total detoxification in 18 patients intoxicated with alcohol.

Group I: 8 patients in a state of intoxication for a period of 5-14 days, who were in a state of moderate alcohol intoxication at hospitalization.

Group II: 4 patients in a state of severe alcohol intoxication after 3-5 days of alcohol abuse.
Group III: 6 patients on admission with alcohol intoxication more than 20 hours, in a state of manifested moderate withdrawal syndrome.

Age: 26-45 years. All the subjects were men. For all the subjects alcohol abuse was ranked as the second stage of alcoholism.

The control group consisted of 20 people in the second stage of alcoholism, men. Age: 32-41 years.

Depending on the degree of alcohol intoxication, the subjects were divided as follows:

Group I - 12 persons;

Group II - 6 persons;

Group III - 2 persons;

Patients in the main group received Enterosgel as follows: 30 g 3 times a day (1-2 days), 15 g 3 times a day (3-5 days). The infusion volume was determined according to the patient’s condition.

In the control group the volume of infusion solution was from 1.5 to 2.5 liters per day. Both in the main and the control group the following drugs were used for sedation: Seduxen (i.v.), Tisercin (i.v.), Natrium oxybutyrate (per os).

The efficacy was evaluated using Enterosgel according to the criteria:

I. Dynamics of clinical indicators

II. Dynamics of laboratory indicators

III. The volume of drug therapy

Clinical indicators: psychosomatic status, tendency to alcohol abuse, sleep, appetite, sobering rate, reduction of withdrawal symptoms, subjective evaluation of patient condition.

Laboratory markers: bilirubin, ALT, AST, thymol turbidity.

When treating patients of the main group receiving Enterosgel, reduce of intoxication and withdrawal symptoms was observed during the first 24 hours. The next day most patients felt satisfactorily, the appetite returned, the patients did not feel the need to drink alcohol. Withdrawal syndrome proceeded much more slowly, intensive psychotropic therapy was not necessary, while a part of patients after infusion therapy experienced drowsiness and retreating tenseness. Patients of the main group did not experienced deterioration by evening, which was typical for the control group and was probably related to sub-absorption of alcohol, which remained in gastrointestinal tract.

The volume of drug treatment was different for each group. The average volume of infusion therapy was of 1.2 liters per 24 h. in the main group; in the control group - 2.0 liters per 24 hours. The ratio of volumes necessary and psychotropic and somatotropic drugs in the groups was about 1: 2, i.e. the main group needed twice less medication for normalization of homeostasis.

The data obtained thus prove the effectiveness of enteral sorption with Enterosgel in the treatment of alcohol intoxication and withdrawal syndrome. Improvement in basic biological indicators was also observed.