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SHORT COMMUNICATION

Enterosorption in Complex Therapy of Patients with Drug Addiction

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Keywords

Opioid dependence, Withdrawal state, Enterosorption

Background

Long-term consumption of psychoactive substances is accompanied by chronic intoxication, various metabolic disorders, accumulation of toxic substances in the body, which requires the development of effective methods of detoxification and treatment of drug addicts [1-3].

Aims

The study of the effectiveness of complex therapy of patients with drug addiction with the inclusion of an enterosorbent.

Methods

The study involved 60 male patients aged 16-25 лет (22.88 ± 4.16) with opioid dependence who were admitted to the clinic of the Mental Health Research Institute, Tomsk National Research Medical Center. The diagnosis was verified by addiction psychiatrists according to ISD-10: dependence syndrome (F11.21); withdrawal syndrome (F.11.30).

The patients of the main group (30 men) were prescribed enterosorbent for 10 days with the complex of standard detoxification therapy in the acute period of the withdrawal syndrome; the control group of patients (30 men) received standard treatment. Clinical and biological examinations were carried out at two points: before the detoxification therapy and after 7-10 days. The concentration of IgM, IgG, IgA in the blood serum were measured by ELISA; level of circulating immune complexes (CIC) - by the method of selective precipitation with PEG-6000.

Results

Drug dependence in patients was caused by the use of raw opium treated with organic solvents and administered intravenously. The enterosorbent “Enterumin” is a powder or rounded granules of aluminum oxide - a mineral matrix coated with carbon. The sorbent does not dissolve in water, organic and biological media, firmly absorbs toxins, medium and high molecular weight compounds, is non-toxic, is excreted from the body within 24-48 hours, is used in medicine for poisoning and diseases accompanied by endotoxicosis.

After 7 days of therapy in patients of the main group the cases of diarrhea were significantly reduced, pain in the epigastric region and along the intestines decreased, appetite was restored faster. The number of patients with individual symptoms in the structure of opium withdrawal syndrome on the seventh day of therapy in the main group and the comparison group was respectively: asthenia 24 and 30; hyper/hypotension 20 and 28; hyperhidrosis 17 and 24; hyperthermia 11 and 16; muscle cramps17 and 24; astheno-dysthymic 4 and 18; agripnia 3 and 9.

Data of biological parameters in the main group at 1 point (before the appointment of therapy) and after 10 days of combination therapy: CIC - 339.5 [270.0; 410.0]

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and 280.0 [210.0; 295.0] conventional units, p = 0.015; IgM - 2.36 [1.94; 2.78] and 1.82 [1.62; 2.40] g/l, p = 0.045; IgG - 17.38 [15.00; 20.04] and 15.40 [14.92; 17.08] g/l, p = 0.050; IgA - 2.27 [1.86;2.76] and 1.57 [1.18;2.14] g/l, p = 0.034. A particularly pronounced positive dynamics of the CIC level was noted, which in some patients at 1 point exceeded the normal values (89.0 [67.0-110.0]) by 3-5 times.

Conclusion

The use of efferent methods of detoxification with the use of an enterosorbent increases the effectiveness of therapy of patients with opioid dependence at the stage of withdrawal syndrome.

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