

CLINICAL AND PHARMACEUTICAL APPROACHES TO OPTIMIZATION IN FIBROMYALGIA TREATMENT

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Introduction. Fibromyalgia (FM) is a common disease that is difficult to diagnosis and treatment. Despite the availability of pharmacological approaches, based on current understanding of fibromyalgia pain, treatment has limited effectiveness and therapy aims to minimize symptoms. Pregabalin and serotonin reuptake inhibitors (duloxetine, milnacipran) have a leading role in management FM. The frequencies of discontinuation due to adverse events develop the same for all three drugs. Therefore, it is advisable to develop combination drug with one or more drug-free treatments, providing a potentiation of the main pharmacological effects of the drug and reduce the frequency of adverse reactions.

Aim. Evaluation of the advantages of combined fibromyalgia's treatment through the use injection of CO₂ and pregabalin.

Results and discussion. The therapeutic properties of the carbon dioxide are used in medicine for several centuries. Participation of carbon dioxide as a natural regulator of many systems: respiratory, cardiovascular, excretory, hematopoietic, immune, hormonal and so provides wide range effects of carboxytherapy - procedure subcutaneous injections of medical grade CO₂. The additional flow of carbon dioxide in the human body leads to intense dissociation of carbonic acid (H₂CO₃) in H⁺ and HCO₃⁻ ions and enhanced formation of calcium bicarbonate Ca (HCO₃)₂, sodium bicarbonate (NaHCO₃) and potassium bicarbonate (KHCO₃). As a result, the pH shifts in the alkaline side leads to analgesic effect. At the same time there is local vasodilation and accelerates circulation, relaxation of muscle fibers and improving trophic CO₂ at the injection site. During the years of practice using carboxytherapy there were no serious side effects.

Conclusions. FM symptoms can negatively affect quality of life. Management this disease should include a combination of pharmacological methods of its correction. Carboxytherapy procedure can be used in combination therapy fibromyalgia.