## PROSPECTS FOR THE USE OF IBUPROFEN IN THE TREATMENT OF OSTEOARTHRITIS

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Osteoarthritis (OA) occurs in 10-12 % of the population and is the most common diseases. Increase in the number of patients with OA noted with increasing age: at the age of 50 years, every second man has OA, at the age of 70 years or more clinical and / or radiological signs are defined in 80 - 90% of people. OA does not affect the vital prognosis, but the defeat of the "stress" of the joints significantly affects the quality of life of patients and leads to partial or total disability.

Therefore, based on pathogenic prerequisites for an effective pharmacotherapy is necessary to suppress inflammatory responses and pain as well as normalize cartilage metabolism. Nowadays, using rapid-acting symptomatic agents, which include analgesics, non-steroidal anti-inflammatory drugs, glucocorticoids. Drugs of choice for the treatment of OA, as a rule, are NSAIDs. The results of the multicenter study on the treatment of OA suggest proven symptomatic effects of NSAIDs. Ibuprofen is a medicine from group of non-steroidal anti-inflammatory drugs.

Has a pronounced analgesic, anti-inflammatory, anti-exudative and antipyretic effects. The mechanism of action of ibuprofen is based on its ability to inhibit the enzyme activity of cyclooxygenase and to disturbe metabolism arachidonic acid. Ibuprofen inhibits the synthesis of prostaglandins E and F, as in the tissues of the central nervous system as well as directly in inflammation. Moreover, when the metabolism of arachidonic acid disorder occurs lowering thromboxane. Ibuprofen relates to indiscriminate cyclooxygenase inhibitors, equally it blocks the action of cyclooxygenase-1 and cyclooxygenase-2. In recent years, special attention is paid to the safe use of NSAIDs. The most severe side effects in the appointment of almost all NSAIDs are disorders of the stomach, lung dyspeptic disorders to the development of gastroduodenal ulcers and bleeding. When topical use of NSAIDs are therapeutic concentration of the drug in the soft tissues directly under the place of application, and enter into the general circulation only small amount, that minimizes systemic adverse effects.

Thus, local therapy appropriate dosage forms of NSAIDs (ointments, creams, gels) is not only a reasonable addition to the system prescribe drugs to reduce their number due to the greater bioavailability of the drug in the inflammation, and in some cases to do without them. Local therapy in some cases can be considered as an effective alternative especially for patients with high risk of complications.