

Combined therapy in osteoarthritis of the knee, double blind randomized clinical trial

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Background: Osteoarthritis is the most common joint disease during which knee joints are affected more than the other joints. Various drugs are used to treat osteoarthritis that each with advantages and disadvantages. The purpose of this study was to compare the efficacy of single and combination of acetaminophen, naproxen and omega-3 with a special focus on knee osteoarthritis.

Methods: In a randomized clinical trial, 156 patients with moderate osteoarthritis, in 6 groups of 26 persons with acetaminophen, naproxen, acetaminophen + naproxen, acetaminophen + omega-3, naproxen + omega-3, acetaminophen + naproxen + omega-3 therapy. With acetaminophen 1000 mg was used every 8 hours, naproxen 500 mg every 12 hours and omega-3 1000 mg every 8 hours for 6 weeks. Twelve patients missed the study. Before the start of the treatment and at the end of treatment, we evaluated the results of the treatments using Visual Analogue Scale (VAS) and Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC).

Results: Patients pain, physical function, joint stiffness and WOMAC ranking in all treatment groups significantly decreased after the treatment. WOMAC ranking after the treatment between groups was significantly different and triple -drug therapy yielded better results than one- drug therapy.

Conclusion: The least cost of treatment is attributed to acetaminophen and the highest cost of treatment is attributed to acetaminophen+ naproxen+omega-3. The best results of therapies of knee osteoarthritis was attributed to naproxen+omega-3.

The study showed that adding omega-3 will increase the efficacy, reduce joint stiffness and reduce severity of the side effects of these drugs. The efficacy of omega-3 may be due to anti-inflammatory effect through competitive inhibition of the arachidonic pathway.

Key words: Knee Osteoarthritis, Omega -3, Naproxen, Acetaminophen, Joint Stiffness.