

Evaluation and comparison of absinthium ointment and liniment analgesia with piroxicam gel in patients with primary knee osteoarthritis

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Background and Aims: Local analgesics for pain control can provide effective local approach. Local agents have similar efficacy without systemic side effects of oral formulations. Medical plants have been used without any significant side effects in traditional medicine since ages. In this study Wormwood extract was studied due to its use in traditional medicine as an analgesic in pain management. The analgesic effect of the ointment and liniment formulation of this plant on osteoarthritis were examined.

Methods: The present study is a clinical trial and double blind study. Patients who referred to Rheumatology Clinic of Shahid Beheshti Hospital of Hamadan with primary osteoarthritis in at least one knee, were randomly divided into three groups. Group I received Absinthium ointment, Group II Absinthium liniment and Group III piroxicam gel. At the beginig of the experiment and two weeks after the commencement of treatment and two weeks after the end of the treatment the WOMAC and VAS indexes were examined and by the Repeat Measure ANOVA test results were compared.

Results: Based on age and sex, all three groups were not statistically different. Among the primary (early) demographic characteristics, there was no significant difference in the three groups. In all WOMAC indexes such as pain, physical function and VAS criterion except for joint stiffness, the result of each group showed a significant difference between two weeks after treatment as well as two weeks after the end of the treatment and before treatment ($P < 0.001$). However, no significant difference existed between the groups. Moreover, related to joint stiffness, a significant effectiveness did not exist between the groups and each group before treatment.

Conclusions: This study shows the local analgesic effect of Artemisia Absinthium products in patients with primary osteoarthritis. This effect is parallel to piroxicam drug that is routinely used in patients.

Keywords: Analgesia; Osteoarthritis; Absinthe; Piroxicam