E-Poster

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Does the Dose of Garlic Therapy Affect Its Chondroprotective Properties in Knee Osteoarthritis?

Topic: Health Conditions (Nervous System, Musculoskeletal System, Cardiopulmonary System)

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BACKGROUND

In our two previous studies we have proven that garlic in dose of 900 mg daily control inflammation and lower cartilage degradation in knee osteoarthritis

Compare the effect of garlic therapy 900 mg versus 1800 mg daily on serum MMP13, IL1β, TNF α, nitric oxide and selenium as well as clinical manifestations in knee osteoarthritis patients.

METHODS

Prospective randomized double-blind study 150 patients participated. Inclusion criteria; primary knee osteoarthritis (KOA) according to ACR criteria with chronic or subacute condition. All patients provided informed consent and underwent a detailed medical history assessment and musculoskeletal examination, including knee examination. Visual analog scale (VAS) for knee pain. Lequesene 's index. Body mass index (BMI). Initial serum level of MMP13, IL1β, TNF α selenium and nitric oxide (NO). Two groups. Group I received garlic therapy 1800 mg daily and Group II received garlic therapy 900 mg for both for eight weeks. With stoppage of analgesics throughout the study and ice application for 20 minutes pain control. After eight weeks repeat measurement of all values

RESULTS

Mean age of Group I 53.7 ± 6.3, Group II 56.2 ± 8.3. No significant difference between groups regarding age, sex, deformity, tenderness or effusion. Significant improvement tenderness, effusion, Lequesene's index for both groups . VAS improved significantly but higher in Group I. Significant reduction of BMI for Group I . Significant reduction MMP13, IL1β, TNF α, NO, with higher Group I. Significant increase of selenium with higher Group I

CONCLUSION

Garlic therapy whether 900 mg or 1800 mg control inflammation and lessen cartilage degradation in knee osteoarthritis, with significant better more control with higher doses. It is recommended for knee osteoarthritis to take garlic therapy for its chondroprotective properties

Statement of Disclosures

None

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