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The effectiveness of a Cucumis sativus extract (Imunopure gherkin®) in the management of osteoarthritis

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Statement of the Problem: The global prevalence of osteoarthritis (OA) is escalating worldwide primarily because of the aging of populations and the rising prevalence of obesity. This study evaluated the ability of IminoPure Gherkin® (IPG®), a Cucumis sativus extract, to improve knee symptoms in OA. Methodology: A six-month (180 days) randomized, double-blind study was conducted with two groups of patients diagnosed with primary OA of the knee to compare the effects of IPG® with that of a combination of glucosamine hydrochloride and chondroitin sulphate (GC). One hundred twenty-two (122) OA patients aged 40-75 years with a body-mass index (BMI) of 18-30 kg/m2 were evaluated. The patients received either 10 mg of IPG® or GC twice daily for 180 days. Pain, stiffness and physical function were assessed in each patient using standard tools (visual analog scale (VAS), Lequesne's Functional Index (LFI), WOMAC at baseline (Day 0) and at Days 7, 30, 60, 90, 120, 150 and 180. Findings: The results were expressed as relative scores in percentages. The GC and IPG® treatments significantly ($p<0.05$) and gradually reduced the WOMAC, VAS, and LFI scores by Day 30 from the baseline value. The GK treatment significantly ($p<0.05$) reduced the WOMAC score by 22.44% at Day 30 and by 70.29% at Day 180. The daily reductions with IPG® were significantly ($p<0.05$) higher than that in the GC groups. From magnitude of the reductions, the IPG® treatment at Day 30 had reduced the WOMAC score by 6 ± 0.18% more than the GC treatment and further reduced it by 28.50 ± 0.14 and 39 ± 0.05% at Day 150 and Day 180, respectively. Additionally, the IPG® treatment at Day 30 reduced the average VAS scale by 8.6% and 20.77% at Day 180. At Day 30, the IPG® treatment reduced the average LFI Score by 12.29% and 18.90% at Day 150 and at Day 180, respectively. No adverse events (AEs) were recorded. Conclusion & Significance: Our results indicate the efficacy and potential use of IPG®, as an anti-OA therapy. It significantly ($p<0.05$) reduces the WOMAC, VAS, and LFI scores in patients suffering from OA, bringing about an improvement in knee pain, stiffness, and physical function

Biography

Boris K G Azantsa has expertise in research on Metabolic Syndrome including Diabetes, Obesity Dyslipidemia and Hypertension. His research interests focuses on epidemiology and drug discovery from local herbal medicine. His research aimed at improving the health and wellbeing of patients and to valorize medicinal plants, herbs, spices traditionally used in Cameroon and Africa to treat a number of diseases.

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