Benefit in patients with knee osteoarthritis through adjuvant electro auricular acupuncture vs. Manual body stimulation with self-controlled energo neuro adaptive regulation (SCENAR®™)

R. Schukro1, I. Mandl-Krusche2, A. Kaider3, S. Sator-Katzenschlager4

1 Special Anesthesia and Pain Therapy, Medical University of Vienna, Vienna, Austria
2 Dept. of Trauma Surgery, Medical University of Vienna, Vienna, Austria
3 Center for Medical Statistics Informatics and Intelligent Systems, Medical University of Vienna, Vienna, Austria
4 Dept. of Special Anesthesia and Pain Therapy, Medical University of Vienna, Vienna, Austria

Introduction: Knee osteoarthritis (OA) is a major cause of knee pain. Alternative approaches such as electrical auricular acupuncture (EAA) are gaining importance. Another alternative treatment aiming to reduce pain is Self Controlled Energo Neuro Adaptive Regulation (SCENAR®™).

Methods: 46 patients were randomized to the EAA group (n=15), to the SCENAR group (n=14) and to the control group (n=15). Amount of rescue medication, pain intensity (NRS), range of motion (ROM) in the sagittal plane and the pain free walking distance in minutes as well as knee function assessment were evaluated on study day 1, 42 and 70.

Results: Comparing the rescue medication after baseline therapy no significant difference was found between the three groups (p=0.86). In the control group we found a median of 1 [Q1 25%=1; Q3 75%=2], in EAA group a median of 0 [Q1=0;Q3=3] and in the Scenar group a median of 0 [Q1=0;Q3=3]. Highly significant differences of amount of rescue medication were found on day 42 and 70 comparing EAA group and control group (p<0.001), as well as in the Scenar group compared to the control group.

Conclusion: The results of this study show that EAA and Scenar in combination with medical analgesic treatment are superior to medical analgesic treatment alone. Pain relief was maintained one month after the therapy was discontinued in these two complementary methods. Further studies are necessary to evaluate long lasting effects in knee OA.