

Chiropractic Adjustments and Orthotics on Reducing Discomfort From Prolonged Standing

A Case Report From a Pilot Study

John Zhang, Ph.D., M.D., and Joe Zhou, D.C., Logan College of Chiropractic

These case studies are from a pilot data collection of a randomized controlled study to determine the effect of

chiropractic care and orthotics on reducing discomfort in individuals who spend long hours standing during working hours.

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METHODS

The subjects signed an informed consent form before participating in the study. Then they filled out a patient information sheet and prescreening foot pain questionnaire. The chiropractic treatment was performed using the Activator technique. In-home exercise was prescribed to the subject receiving orthotics and chiropractic care. Foot and Ankle Outcome Score (FAOS) was used for the specific region survey. FAOS was developed to assess the patients' opinion about a variety of foot- and ankle-related problems. FAOS consists of five subscales: pain, other symptoms, activities in daily living (ADL), function in sport and recreation, and foot- and ankle-related quality of life (QOL). The study used a computerized F-Scan offered by Foot Levelers Inc. to record and analyze the foot data. Based on the data collected, the need for orthotics was determined and the data were sent to Foot Levelers Inc. for fabrication.

RESULTS

Two cases, one from experimental and one from control groups, are reported. The experimental case was a 56-year-old Caucasian female who presented with complaints of both feet pain, right dorsal foot numbness, and right hip pain after long standing at work. After chiropractic and orthotics, the preorthotic and postorthotic foot pain questionnaire from the beginning of the study to the end of the 2nd week showed improvement of the pain score from 50 to 83, the symptom

score from 75 to 82, the ADL score from 52 to 94, the score of function in sports and recreational activities from 50 to 95, and the QOL score from 44 to 56. The control case was a 42-year-old male research assistant who presented with a chief complaint of bilateral heel pain after prolonged standing or walking. The subject also complained of lower back pain and knee pain once or twice a month. Without chiropractic care and orthotics, the preorthotic and postorthotic foot pain questionnaire from the beginning of the study to the end of 3rd week revealed no significant changes in all items. The pain score changed from 80 to 86, and the symptom score remained at 75. The ADL score worsened from 100 to 97. The score of function in sports and recreational activities also worsened from 90 to 85. The QOL score was improved from 69 to 75.

DISCUSSION

These case studies were directed to the evaluation of the effectiveness of chiropractic care and orthotics on reducing the effects of prolonged standing. The first case showed significant improvement compared to the second case (control) in function in sports and recreational activities, ADL, and reduction of the pain. It seems that chiropractic care combined with orthotics made a difference (50 points) in function in sports and recreational activities. It was followed by a 47-point improvement in ADL. The third significant improvement was a 27-point change in subject's pain. The changes in symptoms and quality of life may be improved further with time.