



EFFECTIVENESS OF COSTUMIZED INSOLE IN PATIENTS WITH MORTON'S NEUROMA: A RANDOMIZED, UM ENSAIO CLINICO RANDOMIZADO, CONTROLLED, DOUBLE-BLIND CLINICAL TRIAL.

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BACKGROUND

Morton's neuroma (MN) is a benign enlargement of the third common digital branch of the medial plantar nerve. The most common symptom is burning pain in the plantar foot, located between the metatarsal heads, often radiating to the two corresponding toes. Treatment can be surgical or conservative, which consists of decreasing nerve pressure and irritation through therapies that promote analgesia, patient education, and plantar orthosis. The custom insole prescriptions are aimed at relieving the pressure in the MN region, and to redistribute pressure throughout the sole of the foot. There is no study evaluating the effect of insoles in patients with MN.

MATERIALS AND METHODS

A randomized, controlled, double-blind, clinical trial was carried out with intent-to-treat analysis. Seventy-two patients with NM were randomly allocated into a study group (n=36) and control group (n=36). One week following the baseline evaluation, the study group received a customized insole with metatarsal and arch support made of ethyl vinyl acetate and the control group received a flat insole of the same material, color and density. The groups were evaluated after 6, 12 and 24 weeks of insole use. The following assessment parameters were employed: pain when walking, on palpation and at rest (END); paresthesia (ENP); quality of life (SF-36); foot function (FFI and FHSQ); six-minute walk test (6MWT) and foot pressure analysis using the AM Cube FootWalk Pro program.

RESULTS

The groups were homogeneous regarding the majority of variables at baseline. In the comparisons over time, statistically significant differences between groups were found for pain when walking ($p=0.048$), in the general health domain ($p < 0.001$) and physical activity ($p = 0.025$) in the FHSQ questionnaire, in the general FFI questionnaire score ($p = 0.012$) and in the functional capacity domain of the SF-36 questionnaire ($p = 0.046$). For pain at rest and palpation, in the domains of the FFI, some parameters of the FHSQ (vigor, pain, function and general health of the foot) and quality of life (limitation by physical aspects, bodily pain and vitality), we observed improvement in both groups with no statistically significant difference between them. No change was observed in the baropodometry parameters with the use of the insole.

CONCLUSION

A customized insole with metatarsal and arch support reduce pain when walking and improve function of patients with NM.