World Academy of Science, Engineering and Technology International Journal of Aerospace and Mechanical Engineering Vol:14, No:12, 2020

Epidemiological Analysis of the Patients Supplied with Foot Orthoses in Ortho-Prosthetic Center of Kosovo

Authors: Ardiana Murtezani, Ilirijana Dallku, Teuta Osmani Vllasolli, Sabit Sllamniku

Abstract: Background: The use of foot orthoses are always indicated when there are alterations of the optimal biomechanics' position of the foot. Orthotics are very effective and very suitable for the majority of patients with pain due to overload which can be related to biomechanical disorders. Aim: To assess the frequency of patients requiring foot orthoses, type of orthoses and analysis of their disease leading to the use of foot orthoses. Material and Methods: Our study included 128 patients with various foot pathologies, treated at the outpatient department of the Ortho-Prosthetic Center of Kosovo (OPCK) in Prishtina. Prospective-descriptive clinical method was used during this study. Functional status of patients was examined, and the following parameters are noted: range of motion measurements for the affected joints/lower extremities, manual test for muscular strength below the knee and foot of the affected extremity, perimeter measurements of the lower extremities, measurements of lower extremities, foot length measurement, foot width measurements and size. In order to complete the measurements the following instruments are used: plantogram, pedogram, meter and cork shoe lift appliances. Results: The majority of subjects in this study are male (60.2% vs. 39.8%), and the dominant age group was 0-9 (47.7%), 61 subjects respectively. Most frequent foot disorders were: congenital disease 60.1%, trauma cases 13.3%, consequences from rheumatologic disease 12.5%, neurologic dysfunctions 11.7%, and the less frequented are the infectious cases 1.6%. Congenital anomalies were the most frequent cases, and from this group majority of cases suffered from pes planovalgus (37.5%), eqinovarus (15.6%) and discrepancies between extremities (6.3%). Furthermore, traumatic amputations (2.3%) and arthritis (0.8%). As far as neurologic disease, subjects with cerebral palsy are represented with (3.1%), peroneal nerve palsy (2.3%) and hemiparesis (1.6%). Infectious disease osteomyelitis sequels are represented with (1.6%). Conclusion: Based on our study results, we have concluded that the use of foot orthoses for patients suffering from rheumatoid arthritis and nonspecific arthropaty was effective treatment choice, leading to decrease of pain, less deformities and improves the quality of life.

Keywords: orthoses, epidemiological analysis, rheumatoid arthritis, rehabilitation **Conference Title:** ICGHOST 2020: International Conference on Ghost Conference

Conference Location: ghost city, Other Conference Dates: December 12-13, 2020