World Academy of Science, Engineering and Technology
International Journal of Computer and Information Engineering
Vol:10, No:08, 2016

A Knee Modular Orthosis Design Based on Kinematic Considerations

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Abstract : This paper addresses attention to a research regarding the design of a knee orthosis in a modular form used on children walking rehabilitation. This research is focused on the human lower limb kinematic analysis which will be used as input data on virtual simulations and prototype validation. From this analysis, important data will be obtained and used as input for virtual simulations of the knee modular orthosis. Thus, a knee orthosis concept was obtained and validated through virtual simulations by using MSC Adams software. Based on the obtained results, the modular orthosis prototype will be manufactured and presented in this article.

Keywords : human lower limb, children orthoses, kinematic analysis, knee orthosis
Conference Title : ICDMCME 2016 : International Conference on Data Mining, Civil and Mechanical Engineering
Conference Location : Barcelona, Spain
Conference Dates : August 11-12, 2016