

New approaches in human movement analysis

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Abstract

Many scientific organizations from different domains have pointed out that in the following years, scientific research will be focalized on osteoarticular pathology “The bone and Joint Decade 2000-2001”). In fact physiopathological aspects related to growth, aging process and osteoarticular pathology, correlated with the overtraining process in sport, are of high interest for healthcare. Awareness of these problems can help the development of new methods of evaluation and rehabilitation in human movement, with clinical applications, leading to limitations of social and economical costs in healthcare, but also with an impact in increasing performance in sport activities. At the present time, different methods in approaching and evaluation of movement are presented in the literature, but the choices are unilateral, without a common approach based on interdisciplinary research which would help in obtaining better and quicker results.

For this reason, the present paper intends to present a new and complex system of acquisition and analysis of motion data with direct applications in sport and rehabilitation, utilized within the research program CEEX-M-C2-2358/2006 entitled „Individualized management of mobility recovery of patients with neurological and orthopedic pathology with the help of some methodology for interdisciplinary research – MANMOBREC”, coordinated by the University of Craiova.

Keywords: motion analysis, non-invasive systems, sport, rehabilitation.