Injuries and time-motion analysis in surfers: development of preventive strategies

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Surfing practice has increased in popularity and the numbers of surfers in competitions. Surfers are subjected to external factors (ocean currents, wind orientation, wave size, contact with the board and other surfers) that require quick and efficient adaptations, increasing the risk of injury while riding waves. In a surfing session, it is necessary to perform repetitive paddling movements that require high muscular endurance, moderate-high cardio-respiratory endurance, and anaerobic power of the upper torso. During paddling movements, the surfer performed a hyperextension of the trunk and realized repetitive arm stroke action, and this repeated movement can be considered to be factors associated with chronic overuse injuries. Surfing has become an increasingly acrobatic and dynamic sport, increasing the number of acute injuries acquired while riding waves. Materials used for surfing are becoming lighter and shorter, providing greater speed and improved hydrodynamics and also float lower in the water, causing more instability for the athlete, increasing the injury risk. Thus, it is necessary to develop epidemiological studies, in order to identify the injury prevalence and risk factors, as well as evaluate surfers’ activities times in order to account for the time spent in each surfing activity to enable the development of appropriate preventative strategies. This presentation will approach the prevalence of injuries in this modality, indicating the most frequent types and anatomical sites, the injury mechanism, the associated risk factors and the physiological metabolism used for this practice.

Biography

Beatriz Minghelli has completed her PhD in Public Health at National School of Public Health, Lisbon, Portugal; Master of Science in Physiotherapy in School of Human Kinetics at University of Lisbon, Portugal and Physiotherapist training in Education School Helena Antipoff-Rio de Janeiro, Brazil. She is an Adjunct Professor in the School of Health Jean Piaget/Algarve at Piaget Institute, since 2006; Coordinator of the Physiotherapy Course of School of Health Jean Piaget/Algarve at Piaget Institute. She is the Member of Research in Education and Community Intervention (RECI). She has published more than 30 papers in national and international journals and has been serving as a Reviewer of reputed journals. She is the Editorial Board Member of Journal Austin Spine, EC Orthopaedics Journal, Research and Reviews and Research & Investigations in Sports Medicine (RISM).

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