

PREVALENCE OF MUSCULOSKELETAL PAIN AMONG SWIMMERS IN AN ELITE NATIONAL TOURNAMENT

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ABSTRACT

Background: Professional swimmers are often affected by a high number of injuries due to their large amount of training. The occurrence of musculoskeletal pain during an important tournament has not been investigated.

Objective: The objective of the study was to assess the prevalence of musculoskeletal pain and its characteristics in professional swimmers. Secondary objectives included evaluating the swimmers' injury history over the previous 12 months, and examining the association of the presence of pain with personal and training characteristics of the swimmers.

Design: Observational, cross-sectional study

Method: Two-hundred and fifty-seven swimmers who participated in the Brazilian Swimming Championship were included in the study and answered a questionnaire about personal and training characteristics, presence of pain, and injuries in the previous 12 months. The relative risk of presence of pain was calculated for the following variables: gender, BMI, stroke specialty, swimmer's position, strength training, practice of another physical activity, and previous injuries.

Results: The prevalence of musculoskeletal pain was about 20%, with 60% of swimmers reporting at least one injury in the previous 12 months. The shoulder was the most commonly affected region and tendinopathy was the most common type of previous injury. No significant relationships were found between the presence of pain and personal or training characteristics.

Conclusions: The results demonstrated that the prevalence of musculoskeletal pain in professional swimmers participating in the most important Brazilian national tournament was approximately 20%, while the majority of participants reported previous injuries in many areas.

Level of Evidence: 2c

Keywords: Aquatic sports, epidemiologic studies, injuries, swimming

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