研究業績　英文表記

和文	
表題	バスケットボール競技中における前十字靭帯損傷好発動作の抽出.
著者名	永野康治 1)、笹木正悟 2)、市川浩 3)
所属	1)日本女子体育大学、2)東京有明医療大学、3)新潟医療福祉大学
英文	
Title	Differences in high trunk acceleration during single-leg landing after an overhead stroke between junior and adolescent badminton athletes.
Author	Nagano Y[1)], Sasaki S[2)], Ichikawa H[3)].
Affiliation	1) Japan Women's College of Physical Education, 1) Tokyo Ariake University of Medical and Health Sciences, 3) Niigata University of Health and Welfare
Abstract	The magnitude of trunk acceleration reflects the ground reaction force. This study compared the frequency of high trunk accelerations during single-leg landing after an overhead stroke between junior and adolescent badminton players, and examined the difference in each directive magnitude according to age and landing leg. Thirty-eight female badminton players (seventeen junior and twenty-one adolescent athletes) played two singles games while wearing a tri-axial accelerometer on their upper back. The frequency and 95% confidence interval (CI) of single-leg landings that generated >4-G resultant acceleration, and each directive magnitude were calculated. A two-factorial analysis of variance (factor 1: group, factor 2: landing leg) was performed to determine the effects of age and different landing patterns. Frequency of single-leg landings following an overhead stroke in the adolescent athletes (mean, 1.71 cases/min; 95% CI, 1.59-1.83 cases/min) was higher than that in the junior athletes (mean, 1.13 cases/min; 95% CI, 1.01-1.25 cases/min). The adolescent athletes exhibited greater mediolateral acceleration in the movement toward racket-hand leg and anteroposterior acceleration in the movement toward the opposite leg than the junior athletes. This cross-sectional study suggests that the frequency and movement pattern associated with high- load landing in badminton games differ between junior and adolescent athletes.
keyword	Youth athlete, micro-sensor technology, physical load, prevention, injury mechanism.

※本データの英文表記は実際の論文上の表記とは異なります。