

研究業績 英文表記

和文	
表題	ジュニアと思春期のバドミントン選手のオーバーヘッドストローク後の片脚着地時の体幹高加速度の違い
著者名	笹木正悟 ¹⁾ 、永野康治 ²⁾ 、市川浩 ³⁾
所属	1)東京有明医療大学、2)日本女子体育大学、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	Sasaki S ¹⁾ , Nagano Y ²⁾ , Ichikawa H ³⁾ .
Affiliation	1) Tokyo Ariake University of Medical and Health Sciences, 2) Japan Women's College of Physical Education, 3) Niigata University of Health and Welfare
Abstract	<p>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 (17 junior and 21 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 towards racket-hand leg and anteroposterior acceleration in the movement towards 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.</p>
keyword	Youth athlete; injury mechanism; micro-sensor technology; physical load; prevention.

※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。