

弓道における引分け動作の筋活動様式

Aki Konishi* and Motoko Fujiwara**

*早稲田大学スポーツ科学部

**奈良女子大学大学院人間文化研究科

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Abstract

Kyudo (Traditional Japanese Archery) is one of the traditional sports of Japan. Some stages constitute the shooting movement. In particular, drawing the bow is the most important movement, and is called *daisan* and *hikiwake*. The purpose of this study was to compare the muscle activity patterns for a second before *daisan* phase finish, and during *hikiwake* phase, by the skill level. Eight elite (E) and eight novice (N) players in *Kyudo* participated in the experiment. Each subject performed 24 shots. EMGs were recorded from three muscles in both sides of the body: middle part of deltoid, infraspinatus and triceps brachii. During *daisan* phase the joint of left elbow is extended, and during *hikiwake* phase the joint of shoulder is extended and the joint of elbow is flexioned gradually to pull the bow, concerning right upper limb. On these movements, the muscle of infraspinatus activity in E showed increase or stable patterns. The present results on muscle activity pattern in infraspinatus suggest that E used dorsal muscle effectively to draw a bow.

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連絡先: 小西あき, 〒359-1192 埼玉県所沢市三ヶ島 2-579-15 早稲田大学スポーツ科学部