The Effect Of A Bodyblade® Training Protocol On Shoulder Strength And Throwing Velocity

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PURPOSE: The Bodyblade® is an exercise device that is currently marketed as an efficient way to exercise taking only minutes a day. A previous study in non-athletes has demonstrated an increase in throwing velocity but no change in shoulder rotation strength. The purpose of this study was to investigate the effects of a Bodyblade® training protocol on shoulder rotation strength and throwing velocity in college baseball players.

SUBJECTS: Twenty-six male college baseball players volunteered to be subjects in the study. Nine players were excluded from data analysis because they were unable to complete either the pre-test or post-test as the result of being on the disabled list.

METHODS: Subjects were tested for internal and external rotation and serratus anterior force using a modified cable tensiometer and throwing velocity using a radar gun. A two group with control, pre-test/post-test design was used. Players were divided into pitchers and position players and each of these groups were randomly assigned to either the control or the experimental group. The control group continued with their normal training and season play and the experimental group combined their normal training and season play with 4 Bodyblade® exercises. The Bodyblade® exercises included two hand grip overhead with side to side motion, two hand grip with motion anterior to the body, one hand grip with throwing arm moving the blade in a forward motion and one hand grip with the throwing arm in a side to side motion. Subjects exercised 3 times per week for 10 weeks. Each exercise routine consisted of 2 repetitions of each of the 4 exercises with the duration of each repetition progressively increasing from 30 to 60 seconds over the 10 weeks.

ANALYSIS: ANOVA was done to determine if there was any difference between experimental and control pre-test values for each measure. Two-tailed, paired T-tests were used to compare pre test/post-test differences for internal and external rotation and serratus anterior force and throwing velocity. Alpha levels were set at 0.05 for throwing velocity and r each strength measures.

RESULTS: There was no significant difference between the control and experimental pre-test measures of all variables. There were no significant differences between the experimental and control pre-test/post-test measures of shoulder rotation strength. There was a significant increase in throwing velocity in the Bodyblade® group compared to the control. The effect size was 1.6.

CONCLUSIONS: This study suggests that the Bodyblade® may be useful for increasing functional performance such as throwing velocity in baseball players. The effect size for throwing velocity seen in this study was greater than that seen with isokinetic exercises reported in the literature and Bodyblade® in non-athletes, but not as great as that seen with an individually designed exercise program. However, there is no evidence to support the claim of increased strength with Bodyblade® exercise at least in this population.

RELEVANCE: The Bodyblade® may be able to provide an increase in functional performance of college baseball players with the addition of less than 10 minutes of exercise, three times per week.