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The Effect of a Short-Term Plyometric Training Intervention on Power and Strength in Collegiate Club Hockey Players

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Plyometric training is a power-enhancing training technique that is utilized by coaches and trainers for their athletes. This type of training has been proven to be effective in longer duration training interventions lasting at least 6-8 weeks. However, there are gaps in research regarding the effectiveness of short-duration plyometric training interventions. **PURPOSE:** To determine whether a four-week upper and lower body plyometric training intervention would result in increased power output and strength measures via a Wingate Anaerobic Cycle Test, seated medicine ball throw test, and a one-repetition maximum bench press in Division III college club hockey players. **METHODS:** The participants in this study were Division III college club hockey players (N= 15 for seated medicine ball throw test and N=12 for bench press test and Wingate Anaerobic Cycle Test). Prior to the intervention, the participants completed a one-repetition maximum bench press test, a seated medicine ball throw test, and a Wingate Anaerobic Cycle Test. These tests were repeated following the intervention. The participants completed a four-week plyometric training intervention targeting upper and lower body muscle groups. Six separate dependent t-tests were used to analyze the data, and a significance value of $p < 0.05$ was set for each measurement. **RESULTS:** The seated medicine ball throw test indicated a significant improvement in scores after the intervention period ($p = 0.022$). Anaerobic capacity, measured using the Wingate Anaerobic Cycle Test, improved significantly among the participants ($p = 0.041$). **CONCLUSIONS:** The results of the study indicate that a four-week plyometric training program can significantly improve upper and lower body power generation in college-aged club hockey players.