Effects of Various Ankle Braces on Lower Body Skill Related Performance in Collegiate Volleyball Players

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Background
Ankle sprains tend to occur in high-risk sports that include a high rate of jumping and cutting activities. Because of this risk, volleyball players wear various types of ankle braces, the two most common being rigid and semi-rigid braces. These are worn as a preventative measure for injuries, regardless of injury history. It is unknown if these braces enhance or inhibit volleyball performance.

Methods
A total of 13 varsity female collegiate volleyball players will be recruited to participate in the study. Measurements will consist of lower body power (vertical jump height), agility (four cone agility drill), and speed (20 yard sprint). The participants will be randomly assigned to wear a rigid or semi-rigid ankle brace to do the performance tests. A session with no ankle brace will also be administered as a control trial. These tests will be performed in a random order on 3 separate days.

Purpose
To examine the effects of rigid and semi-rigid ankle braces on skill related performance in collegiate volleyball players.

Anticipated Results & Conclusions
We anticipate that players will perform better in lower body power, agility, and speed when wearing semi-rigid braces compared to rigid bracing and no bracing conditions. With this research, coaches and players can be aware of which bracing can enhance performance. It also indicates whether certain players can maneuver around the court while limiting injuries.

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