ON-ICE LOAD MONITORING IN ELITE FEMALE ICE HOCKEY PLAYERS

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Introduction

The use of wearables in sport has been increasing as technology is decreasing in both size and price. As such, more ice hockey teams have started to employ the technology, without having much background in the literature as to norms or standards of use. The proper use of wearable technology has been shown to help elite sport teams decrease injuries and increase performance\(^1\).

Objectives

Using the Applied Research Model\(^2\), the objective is to further the knowledge-base of on-ice demands of elite female ice hockey players. Due to the limited research done in ice hockey, we will be focusing on high-quality descriptive research focusing on three areas:

1) Player and Positional Comparisons of internal and external on-ice workloads.
2) Relationship between off-ice physical testing characteristics and on-ice workloads.
3) Monitoring on-ice metrics to determine the differences in performance of elite and amateur female ice hockey athletes.

Methods

Secondary analysis is being conducted from the database of Hockey Canada. Data was collected from games and practice sessions from 2015-2017 using Catapult Optimeye S5 monitor. The monitor mounted on the trunk, and measures all of their movements performed on the ice triaxially.

Expected Results

There are no other comparable studies using on-ice player monitoring in ice hockey, however it is expected that there will be a relationship between certain physical fitness characteristics and on-ice metrics. To date, based off data collected up to this point, there is a difference between explosive measures in elite and amateur athletes in games and practices.

Conclusion

This study provides an opportunity to further to research body into the performance of elite female ice hockey players, a subsection of research that consists of very little information. Secondarily, this research will help to better understand that actual physical demands of practices and games, and will allow coaches to better prepare their athletes for game demands.

References:
