

Enhancing Concussion Prevention: Findings from an International Survey of French-speaking Athletes on Sport-related Concussion Characteristics

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Background

- Sport-related concussions (SRCs) pose significant physical, emotional, and economic burdens on athletes and the sports community.
- Effective preventive strategies are needed according to long-lasting consequence of SRC.
- In the present study, we aimed to investigate the relationship between demographic data, history of concussion and sports' characteristics with the number of SRC, symptoms' duration and resting period. The differences between Europe and Canada will be highlighted.

Design Method

- Cross-sectional online survey
- A three-month online survey was conducted among athletes over 14 years old in five French-speaking countries (Belgium, Canada, France, Luxembourg, Switzerland).

- The survey was created on an online platform and distributed through institutional networks, professional associations, regional clubs, and research centers.

Results

- 998 athletes answered.
- Mean duration of symptoms was 109.14±277 days and mean duration of return to sport was 47.14±93 days (figure 1). Mean duration of symptoms was 132.54±21.34 days for female, and 81.37±19.93 days for male athletes ($p<0.001$).
- Mean of difference between duration of symptoms and duration of return to sport was 80±295 days in Canada and -0.9±132 days in Europe ($p=0.01$, figure 2).
- A positive correlation was observed between the number of SRCs and symptom duration ($r=0.172$, $p=0.01$). Canadian athletes had higher number of SRCs than European athletes ($p<0.001$).

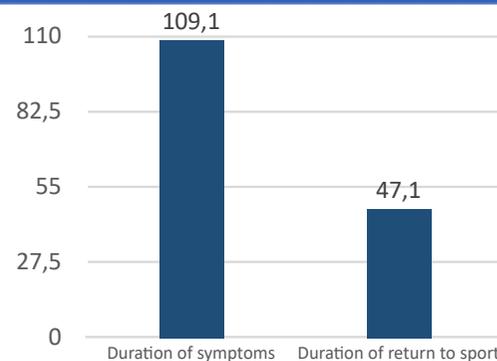


Figure 1. Mean duration (days) of symptoms vs. mean duration of return to sport in all the participants.

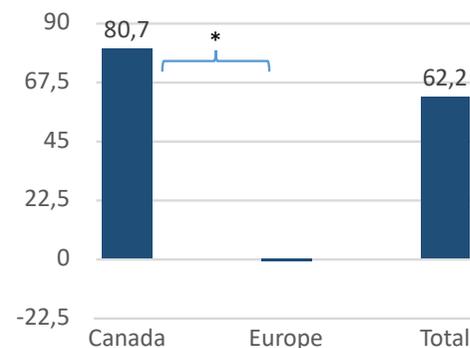


Figure 2. Mean of difference between duration of symptoms and duration of return to sport in Canada vs. Europe.

Conclusions

- Symptoms duration exceeding recommended recovery periods raises crucial concerns in SRC management, emphasizing the importance of preventive measures.
- Differences in the management of SRC seem to exist between Europe and Canada.
- These findings highlight the need for better concussion management guidelines in all athletes.

Affiliations

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Our findings highlight the need for implementation of concussion management guidelines and tailored preventive strategies for all athletes.



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