

Benefits vs. Risks: The Effects of Sport Participation on Aerobic Fitness Among BC Children with Congenital Heart Disease

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Presentation Description:

Are activity limitations placed on children with congenital heart disease (CHD) warranted by their condition? This presentation will provide new insight into the relationship between sport participation and physical fitness among a local cohort of children with CHD and discuss the importance of sport in the context of this population.

Abstract:

Sport participation guidelines that have been developed for children with CHD are meant to protect these patients from a cardiac episode while participating in higher intensity activities. However, limiting participation in sport can deprive patients of the social, developmental, and health benefits associated with sport. A growing body of research indicates that these patients can participate beyond prescribed restrictions and have higher physical fitness and self-efficacy as a result. The aim of this study was to investigate the relationship between aerobic capacity and sport participation in a provincial cohort of children with CHD. The study design was a retrospective analysis of patient data collected during routine visits to the BC Children's Heart Centre. Aerobic capacities were measured using gas exchange data collected during a graded cardiopulmonary exercise test, while sport participation was assessed by self-report. Multiple regression analysis revealed that aerobic capacity was significantly associated with the frequency of sport participation, with sex included as a covariate. We conclude that increased sport participation improves aerobic capacity among youth with CHD, which should be considered during clinical exercise prescription.

References/Acknowledgments:

Astrid De Souza, Dave Clarke, Nick Tran, and Kaelen Naylor.