Association of Early Sports Practice with Cardiovascular Risk Factors in Community-Dwelling Adults: A Retrospective Epidemiological Study

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Abstract

Background: Sports practice in childhood and adolescence has been inversely related to the chances of developing cardiovascular risk factors (CRFs). However, it is not clear whether sports practice in childhood and adolescence could be inversely related to CRF in adult life. Objectives: This study aimed to analyze the association between early sports practice and cardiovascular risk factors in a randomized sample of community-dwelling adults. Methods: For this, 265 adults aged ≥ 18 years composed the sample. Cardiovascular risk factors of obesity, central obesity, diabetes, dyslipidemia, and hypertension were collected. Early sports practice was retrospectively self-reported using an appropriate instrument. Total physical activity level was assessed by accelerometry. The association between early sports practice and cardiovascular risk factors in adulthood was analyzed by binary logistic regression, adjusted for sex, age, socioeconomic status, and moderate-to-vigorous physical activity. Results: Early sports practice was observed in 56.2% of the sample. The prevalence of central obesity (31.5 vs. 50.0%; p = 0.003), diabetes (4.7% vs. 13.7%; p = 0.014), dyslipidemia (10.7% vs. 24.1%; p = 0.005), and hypertension (14.1%) vs. 34.5%; p = 0.001) was lower in participants who reported early sports practice. Participants who reported early sports practice in childhood and adolescence were, respectively, 60% (OR = 0.40; 95% CI 0.19-0.82) and 59% (OR = 0.41; 95% CI 0.21–0.82) less likely to have hypertension in adult life when compared to those with no early sports practice, independently of sex, age, socioeconomic status, and habitual physical activity level in adulthood. Conclusion: Early sports practice in childhood and adolescence was a protective factor for hypertension in adulthood. © 2023, The Author(s).

Author keywords

Cardiometabolic; Health; Motor behavior; Physical activity; Youth