

Can excessive physical activity during adolescence lead to problems with leg alignment?

October 5 2022



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A study published in the *Journal of Orthopaedic Research* used imaging tests to reveal that physical activity levels may impact adolescents' and

young adults' leg alignment during development.

The study included 57 elite male soccer players compared with 34 male and 34 female controls aged 11-21 years. In [magnetic resonance](#) imaging tests, physical activity levels were associated with the development of abnormal leg alignment, which may represent a physiological adaptation to load where the shin bone meets the knee.

"Our study suggests that abnormal leg alignment, a risk factor for future injury and osteoarthritis, develops in [early adolescence](#) due to high activity levels," said corresponding author Scott Fernquest, DPhil, of the University of Oxford. "Modifying activity levels during this critical period of growth may prevent the development of abnormal leg alignment. We hope our findings lead to further research investigating this possibility."

More information: Coronal-plane leg alignment in adolescence and the effects of activity: A full leg length MRI study, *Journal of Orthopaedic Research* (2022). [DOI: 10.1002/jor.25442](https://doi.org/10.1002/jor.25442)

Provided by Wiley

Citation: Can excessive physical activity during adolescence lead to problems with leg alignment? (2022, October 5) retrieved 26 April 2024 from <https://medicalxpress.com/news/2022-10-excessive-physical-adolescence-problems-leg.html>

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