

Can genetic tests predict children's risk of developing scoliosis?

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In a study published in the *Journal of Bone and Mineral Research*, investigators developed and validated a genetic risk score for predicting the onset and severity of the most common type of scoliosis in

adolescents—called adolescent idiopathic scoliosis (AIS). AIS causes spinal deformities in as many as 3% of youth, and because its heritability is high, genetic data could help improve detection.

Use of the score may help clinicians identify children at risk of developing AIS who could benefit from preventive therapies.

"We found that a risk score based on genome-wide association study data could predict not only susceptibility to AIS, but also its severity. We hope our findings will be useful for personalized medicine," said senior author Chikashi Terao, MD, Ph.D., of the RIKEN Center for Integrative Medical Sciences, in Japan.

June is [Scoliosis Awareness Month](#).

More information: Nao Otomo et al, Polygenic Risk Score of Adolescent Idiopathic Scoliosis for Potential Clinical Use, *Journal of Bone and Mineral Research* (2021). [DOI: 10.1002/jbmr.4324](https://doi.org/10.1002/jbmr.4324)

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