

BMI, but not age at puberty, tied to risk of multiple sclerosis

March 20 2019



Demyelination by MS. The CD68 colored tissue shows several macrophages in the area of the lesion. Original scale 1:100. Credit: [CC BY-SA 3.0](#) Marvin 101/Wikipedia

Some studies have suggested that people who are younger when they enter puberty are more likely to later develop multiple sclerosis (MS). But a new study attributes that link to body mass index (BMI). The study

is published in the March 20, 2019, online issue of *Neurology*, the medical journal of the American Academy of Neurology.

"Previous studies have shown that children with higher body weight tend to enter [puberty](#) earlier than children with normal body weight, and increased BMI is also linked to a greater risk of MS," said study author J. Brent Richards, MD, MSc, of McGill University in Montreal, Canada. "It appears that earlier age at puberty is associated with an increased risk of MS, but this association is influenced by BMI. Our findings do not support a substantial role for the effect of the timing of puberty on the risk of MS independent of BMI."

For the study, researchers looked at a genome-wide association study of 329,245 women and 372 genetic variants that are strongly associated with the age when girls have their first menstrual cycle. Previous studies have shown that the genes related to the timing of puberty are well-correlated in girls and boys.

Then researchers looked at another genetic study that included 14,802 people with MS and compared them to 26,703 people who did not have the disease to examine whether the age of puberty was associated with risk of MS.

Richards said they did find that people with an earlier age of puberty were more likely to develop MS, but once they factored in BMI, the results were no longer significant.

"More research is needed to determine whether decreasing rates of obesity could help to reduce the prevalence of MS," he said. "If so, this could be another important reason for public health initiatives to focus on lowering obesity rates."

A limitation of the study was that researchers were not able to analyze

results for men and women separately.

Provided by American Academy of Neurology

Citation: BMI, but not age at puberty, tied to risk of multiple sclerosis (2019, March 20)
retrieved 5 May 2024 from

<https://medicalxpress.com/news/2019-03-bmi-age-puberty-tied-multiple.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--