

# Difficult to predict low testosterone in older men using data on younger men

June 20 2016

---

A new study published in *CMAJ (Canadian Medical Association Journal)* highlights the difficulty in defining and managing age-related testosterone decline in older men.

Physicians generally use the definition of low testosterone or [hypogonadism](#) found in [younger men](#) to diagnose and treat older men for low testosterone. Hypogonadism is divided into two groups. The first includes specific symptoms, such as delayed sexual development, impaired sexual function, less facial and body hair, small testes, low bone mineral density and other signs caused by underlying disease. The second group includes more general symptoms, such as lower energy and motivation, depressed mood, poor concentration and loss of muscle mass.

To understand the accuracy of using signs and symptoms to predict low testosterone in older men, researchers conducted a systematic review of 40 studies on hypogonadism in ageing men that included 37 565 patients with a mean age of over 40 years.

"We found weak correlation between signs, symptoms and [testosterone levels](#), uncertainty about what threshold testosterone levels should be considered low for ageing men, and wide variation in estimated prevalence of the condition," said Dr. Adam Millar, an assistant professor at the University of Toronto and a physician at Mount Sinai Hospital, part of Sinai Health System, in Toronto, Ontario.

Study limitations included different methods for measuring testosterone across the included research, small sample sizes and inconsistent consideration of other health conditions.

"Our extensive review of all clinical studies published to date shows that in men over the age of 40, the symptoms and physical signs that are classically found in young men who suffer from pathological hypogonadism, caused by disease in the testes or pituitary gland, correlate poorly with their testosterone levels," said Dr. Allan Detsky, a professor at the University of Toronto and a physician at Mount Sinai Hospital. "These results suggest that it is difficult to extrapolate the way we diagnose pathologic hypogonadism in younger men to older men who have age-related declines in testosterone levels."

The authors noted the substantial controversy over [testosterone](#) replacement therapy in [older men](#).

The study was conducted by researchers from Mount Sinai Hospital, University Health Network, Women's College Hospital and the University of Toronto, Toronto, Ontario, Canada; and Durham Veterans Affairs Medical Center and Duke University, Durham, North Carolina, United States.

Provided by Canadian Medical Association Journal

Citation: Difficult to predict low testosterone in older men using data on younger men (2016, June 20) retrieved 22 September 2024 from <https://medicalxpress.com/news/2016-06-difficult-testosterone-older-men-younger.html>

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.