

# Low-intensity warfarin not noninferior in hip, knee surgery

November 5 2019

---



(HealthDay)—Among older patients undergoing hip or knee

replacement, low-intensity compared with standard-intensity warfarin prophylaxis did not meet the noninferiority criterion for the composite outcome of risk of venous thromboembolism or death, according to a study recently published in the *Journal of the American Medical Association*.

Within six different medical centers throughout the United States, Brian F. Gage, M.D., of Washington University in St. Louis, and colleagues initiated [warfarin](#) therapy in 1,650 patients ages 65 and older who were undergoing elective knee or hip replacement. Using a two-by-two factorial design, study participants were randomly assigned to a target international normalized ratio (INR) of either 1.8 (low-intensity warfarin group, 823 patients) or 2.5 (standard-intensity warfarin group, 827 patients) and to either genotype-guided or clinically-guided dosing.

Among the patients, 1,597 (98.6 percent) received at least one dose of warfarin. The researchers found that the rate of the primary composite outcome of deep vein thrombosis or death was 5.1 percent (41 of 804) in the low-intensity warfarin group (INR target, 1.8) versus 3.8 percent (30 of 793) in the standard-treatment-warfarin group (INR target, 2.5), for a difference of 1.3 percent (one-sided 95 percent confidence interval [CI],  $-\infty$  to 3.05 percent,  $P = 0.06$  for noninferiority). Major bleeding occurred in 0.4 percent of patients in the low-intensity group and 0.9 percent of patients in the standard-intensity group (difference of  $-0.5$  percent; 95 percent CI,  $-1.6$  to 0.4 percent). INR values of four or more occurred in 4.5 percent of patients in the low-intensity group and 12.2 percent in the standard-intensity group (difference of  $-7.8$  percent; 95 percent CI,  $-10.5$  to  $-5.1$  percent).

"Future research could help address which patients at high risk of bleeding might benefit from low-intensity warfarin," the authors write.

Several authors disclosed financial ties to orthopedic equipment and

[pharmaceutical companies](#), including Stryker and Bristol-Myers Squibb.

**More information:** [Abstract/Full Text \(subscription or payment may be required\)](#)

Copyright © 2019 [HealthDay](#). All rights reserved.

Citation: Low-intensity warfarin not noninferior in hip, knee surgery (2019, November 5)  
retrieved 26 June 2024 from <https://medicalxpress.com/news/2019-11-low-intensity-warfarin-noninferior-hip-knee.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.