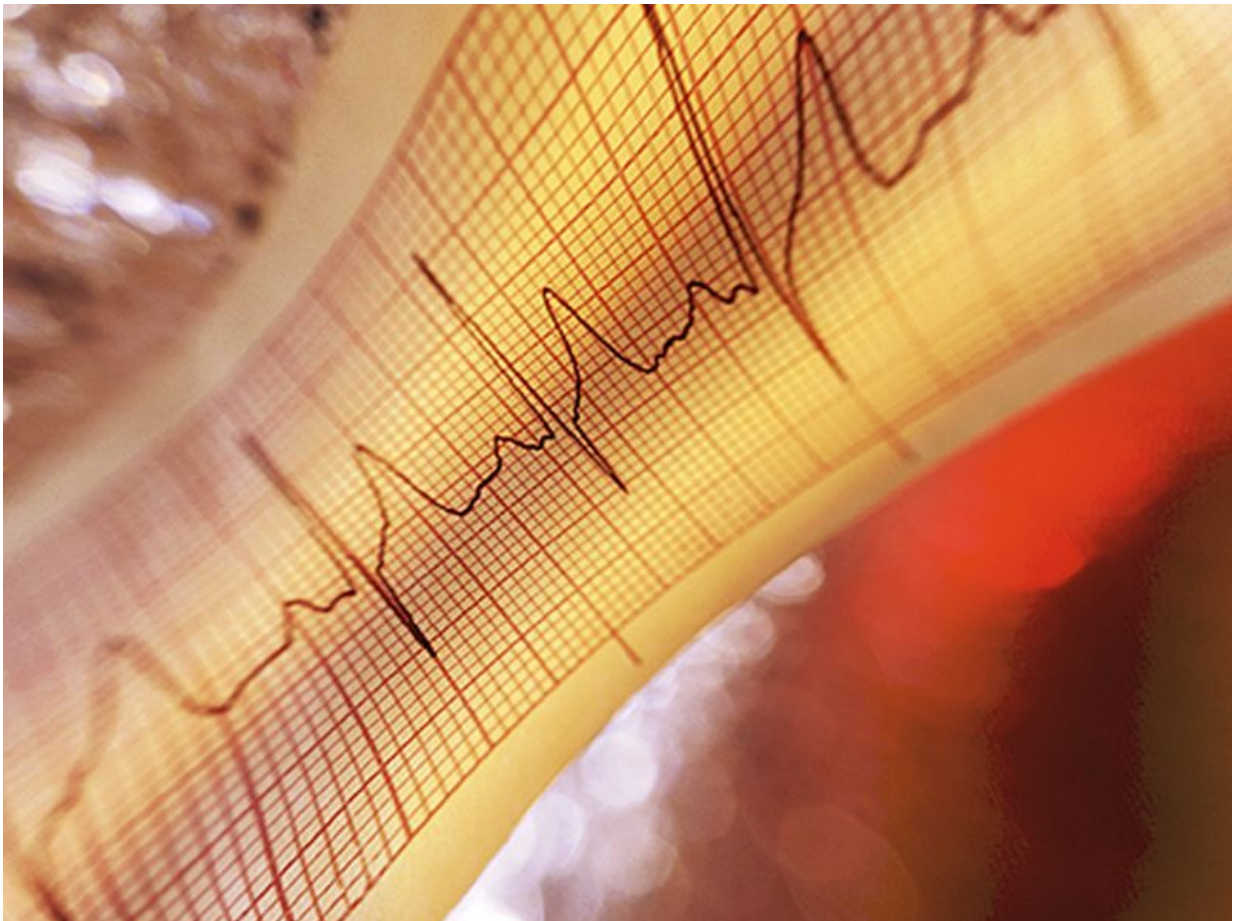


# Post-op A-fib down with low-level vagus nerve stimulation

June 4 2017

---



(HealthDay)—For patients undergoing cardiac surgery, low-level vagus

nerve stimulation (LLVNS) is associated with a reduction in postoperative atrial fibrillation (POAF) and with lower levels of inflammatory cytokines, according to a study published online May 31 in *JACC: Clinical Electrophysiology*.

Stavros Stavrakis, M.D., Ph.D., from the University of Oklahoma Health Sciences Center in Oklahoma City, and colleagues randomized 54 patients undergoing cardiac surgery to active or sham LLVNS (26 and 28, respectively). A bipolar wire was sutured to the vagus nerve preganglionic fibers alongside the lateral aspect of the superior vena cava in all patients. In the LLVNS group, high frequency stimulation, 50 percent below the threshold for slowing the heart rate, was delivered for 72 hours. Patients were monitored continuously during the hospital stay for development of POAF. Inflammatory cytokines were measured in blood collected on arrival to the [intensive care unit](#) and at 24 and 72 hours.

The researchers found that POAF occurred in 12 and 36 percent of the LLVNS and control groups, respectively (hazard ratio, 0.28). There were no complications resulting from wire placement. Compared with the control group, the LLVNS group had significantly lower serum tumor necrosis factor- $\alpha$  and interleukin-6 levels at 72 hours.

"These data suggest that LLVNS suppresses POAF and attenuates inflammation in [patients](#) undergoing [cardiac surgery](#)," the authors write. "Further studies are warranted."

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

Copyright © 2017 [HealthDay](#). All rights reserved.

Citation: Post-op A-fib down with low-level vagus nerve stimulation (2017, June 4) retrieved 27 April 2024 from

<https://medicalxpress.com/news/2017-06-post-op-a-fib-low-level-vagus-nerve.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.