

# **Surgery unnecessary for 95 percent of those with asymptomatic carotid stenosis**

September 25 2008

---

Research led by Dr. David Spence of Robarts Research Institute at The University of Western Ontario shows that with more intensive medical therapy, the risk of stroke has become so low that at least 95 per cent of patients with asymptomatic carotid stenosis (ACS) would be better off with medical therapy than with surgery or stenting. ACS is a narrowing in the carotid artery, which supplies blood to the brain, which has not yet resulted in a stroke or transient ischemic attack (TIA). In the United States, one-half to two-thirds of the patients being subjected to surgery for revascularization are asymptomatic.

Spence will present his findings September 25th at the 6th World Stroke Congress being held in Vienna, Austria. He is the Director of the Stroke Prevention & Atherosclerosis Research Centre, a professor of neurology and clinical pharmacology at Western's Schulich School of Medicine & Dentistry and the author of "How to Prevent Your Stroke".

Spence says the less than five per cent of ACS patients who could benefit from revascularization can be identified with a procedure called Transcranial Doppler Embolus Detection: a helmet is placed on the head to hold ultrasound probes in place, and the arteries inside the head are monitored for microemboli, small blood clots or chunks of plaque that break off from the narrowing in the carotid artery and go into the brain arteries.

The historical benefit of revascularization for ACS was based on less intensive medical therapy than is now prevalent. Spence and a team of

researchers studied 471 ACS patients. Of those, 199 were seen before 2003 and 272 after January 1, 2003. Microemboli were present in 12.6 per cent of patients before 2003, but in only 3.7 per cent since 2003. The decline in microemboli was associated with better control of plasma lipids and slower progression of carotid plaque. Since 2003, there have been significantly fewer strokes and heart attacks.

"The 96 per cent of patients without microemboli have only a one per cent risk of stroke in the next year, whereas the ones with microemboli have a 14 per cent risk of stroke," says Spence. "Since the risk of surgery is four to five per cent, patients without microemboli are better off with medical therapy including medications and lifestyle modifications. Only the ones with microemboli would benefit from carotid endarterectomy or stenting."

Source: University of Western Ontario

Citation: Surgery unnecessary for 95 percent of those with asymptomatic carotid stenosis (2008, September 25) retrieved 23 April 2024 from <https://medicalxpress.com/news/2008-09-surgery-unnecessary-percent-asymptomatic-carotid.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.