

# Exercise Ankle-Brachial Index Boosts PAD Diagnosis

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STOCKHOLM — Five minutes of treadmill exercise can boost the diagnostic accuracy of the ankle-brachial index for identifying patients with peripheral artery disease, on the basis of long-term follow-up of about 700 patients.

Consider measuring a patient's ankle-brachial index (ABI) following exercise if the patient was suspected of having peripheral artery disease (PAD) but had a normal ABI of greater than 0.9 at rest, Don Poldermans, M.D., said in an interview at the annual congress of the European Society of Cardiology. But an exercise ABI was no more helpful than a resting ABI for assessing patients who had an abnormal ABI of 0.9 or less when at rest.

Five minutes of treadmill exercise raises peripheral blood pressure in patients who don't have PAD, but in patients with peripheral disease a smaller rise in peripheral pressure identifies atherosclerotic

disease and endothelial dysfunction, said Dr. Poldermans, a professor of medicine at Erasmus University in Rotterdam, the Netherlands.

The finding was based on a review of the outcomes of 3,209 patients who were tested for suspected PAD at Erasmus University Medical Center and were then followed for an average of 8 years. The average age of the patients was 63 years; 71% were men. The overall average ABIs of the patients were 0.65 at rest and 0.45

after exercise. On average, ABI levels fell by 25% with exercise. During follow-up, 321 of the patients died; 51% of the deaths were for cardiovascular causes.

About 700 of the patients in the study had an ABI at rest of more than 0.9, a normal level, despite their referral to the medical center because of suspected PAD. After exercise, a quarter of the patients had no drop in their ABI, and another quarter had a small drop of less than 25%. Follow-up mortality among the patients with a small

drop was similar to the rate among patients with no decline in the ABI with exercise.

But among the 25% of patients whose ABI dropped by 25%-49%, mortality during follow-up was 2.5-fold higher than that in the patients with no change in their exercise ABI. Among the 25% of patients whose ABI dropped by 50% or more, mortality during follow-up was fourfold higher than that in the patients with no change, reported Harm H. Feringa, M.D., an Erasmus physician, at the meeting. ■

## Waist:Height Is Better Indicator Of CV Risk

SAN DIEGO — Waist-to-height ratio is more strongly linked to cardiovascular risk than body mass index (BMI), particularly in middle age, according to a large European study presented at the annual meeting of the Endocrine Society.

Harald J. Schneider, M.D., of the Max Planck Institute of Psychiatry in Munich, and associates in Germany and Austria, examined weight, height, and waist and hip circumference and 18 single or combined cardiovascular risk factors in 48,353 primary care patients.

Waist-to-height ratio was most predictive of risk in the entire cohort in both men and women, followed by waist circumference and BMI.

Overall cardiovascular risk was highest at or above a waist-to-height ratio of 0.53 for women and 0.55 for men.

When investigators examined specific age groups, they found that waist-to-height ratio was linked most strongly to cardiovascular risk in men aged 35-54 years and women aged 55-64 years—pivotal ages for the development of cardiovascular disease.

"In the other age groups, the BMI had a better association," Dr. Schneider told this newspaper following the meeting.

"These findings, however, should be interpreted cautiously because not all differences are significant in the single age groups. Moreover, it should be born in mind that this is a cross-sectional study; therefore, we cannot say which anthropometric parameter best predicts the future occurrence of cardiovascular risk factors and events," he continued.

He suggested that the cutoffs be considered an "orientation" rather than a strict definition of risk.

—Betsy Bates

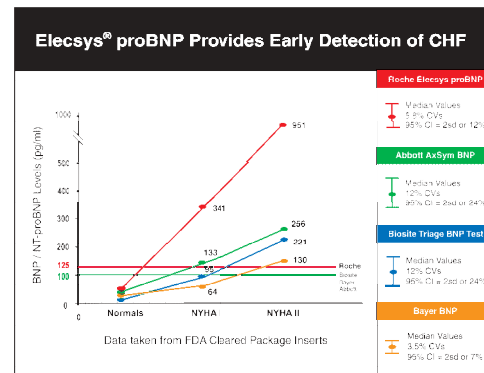


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