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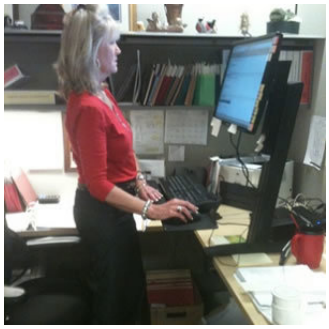
# Can Worksite Intervention Reduce Cardiac Risk?



The latest clinical trial from the Trans-Atlantic Network to Study Stepwise Noninvasive imaging as a Tool for Cardiovascular Prognosis & Prevention (TANSNIP), the Progression of Early Subclinical Atherosclerosis trial (clinicaltrials.gov/ct2/show/NCT02561065), began in January 2016 and will evaluate whether worksite interventions result in a reduction in the prevalence of cardiovascular disease risk factors that are related to lifestyle.

The trial will have two groups of 40 to 60 years old employees from a Spanish bank. One group will be employees with high imaging-defined cardiovascular (CV) risk, the other those with low imaging-defined CV risk. Participants will randomly receive either a three-year worksite lifestyle intervention or standard occupational care.

The lifestyle intervention programme will include personalised lifestyle counselling sessions, a personal fitness monitor and a sit-to-stand workstation. The primary outcome measures will be blood pressure, physical activity, sedentary behaviour, body mass index, fruit and vegetable consumption and smoking – using the FUSTER-BEWAT score. Secondary outcomes, such as lifestyle, smoking, body weight, diet, vitality and quality of life, and risk factor profiles, as well as changes in blood biomarkers, and work-related outcomes such as work productivity and absenteeism will also be measured. The hypothesis is that greater level of compliance will be found in the group with high imaging-defined CV risk as compared to the low imaging-defined CV risk.

See Also: Worksite Lifestyle Intervention to Reduce Cardiac Risk

*HealthManagement.org* spoke to the study's chair, Prof. Valentin Fuster, Physician-in-Chief at Mount Sinai Medical Hospital, Director of Mount Sinai Heart, the Zena and Michael A. Wiener Cardiovascular Institute and the Marie-Josée and Henry R. Kravis Center for Cardiovascular Health.

Fuster explained that the Progression of Early Subclinical Atherosclerosis (PESA) trial will follow an apparently normal population. "We already have information for the trial participants' health for the past five years, and will follow them for five more years after which we will be able to identify who had atherosclerotic disease and who did not regardless of symptoms, ie when the disease is pre-clinical. In the first study (Fernández-Friera et al. 2015) we found that using two different simple noninvasive imaging modalities we could predict who was going to have cardiovascular events in a short period of followup. This is to allow better understanding of the role of the risk factors between the disease-affected people and those not affected. We want to know whether we can modify the behaviour of these people in terms of health. If you know that you have the disease, is it helpful in changing your behaviour?"

Fuster added that another TANSNIP study is to correlate the disease in the main arteries, using imaging technology, with the disease in the tiny arteries of the brain and with cognitive function. Ultrasound will be used image the peripheral arteries that supply blood to the brain and to the legs, and CT to look at coronary arteries with calcification. The preliminary study will be followed with a prospective study on the role of risk factors in large vessel disease in the brain.

The risk factors are high cholesterol and diabetes, mechanical, ie, obesity and high blood pressure and whether the subjects smoke or not and exercise or not.

Fuster explained that the study uses the BEWAT ( **B**lood pressure, **E**xercise, **W**eight, **A**limentation, **T**obacco) score to measure outcomes, because it gives the information required without the need to take blood.

Source: Interview with Dr. Fuster
Image Credit: Wikimedia Commons

**Reference**

Fernández-Friera L, Peñalvo JL, Fernández-Ortiz A et al. (2015) Prevalence, vascular distribution, and multiterritorial extent of subclinical atherosclerosis in a middle-aged cohort: the PESA (progression of early subclinical atherosclerosis) study. Circulation, 131(24): 2104-13.

Published on : Mon, 29 Feb 2016