ABSTRACTS - Special Topics

3:15 p.m.

The Cost Effectiveness of Functional Cardiac Testing in the Diagnosis and Management of Complicated Coronary Artery Disease: Principal Results from the CECA Trial

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Background: A prospective randomised controlled trial vs. patients with stable chest pain to test 2 methods of testing: a) functional cardiac testing as a gateway to angiography for diagnosis and (b) ability of functional diagnostic testing to identify patients who can avoid coronary angiography.

Methods: 1761 patients investigated for stable chest pain were randomly assigned to one of 5 initial tests: exercise stress testing, 2D echocardiography, gamma camera SPECT, thallium-201 stress images, or coronary angiography. Principal outcomes measured were:

1. Primary exercise treadmill test at 18 months after randomisation
2. Categorisation of treatment according to Cardiac Catheterization Society classification of quality of life, the subsequent patient and group decisions.

Results: 22% of patients with MIBI patients, 28% of thallium-201, and 38% of stress echocardiography patients were not considered for angiography, 25% in the thallium-201, 28% in the stress echocardiography, and 30% in the exercise stress test. The mean (50% confidence interval) total additional costs over 18 months compared to exercise were £197 (95% CI 149, 264) for SPECT, £204 (95% CI 149, 264) for 2D echocardiography and £246 (95% CI 238, 255) for stress echocardiography. Clinically important differences in health related quality of life between Cardiac Catheterization Society groups and the group that could be ruled out were not observed. Conclusions: 22% of patients may avoid invasive testing by the use of functional diagnostic testing as a gateway to angiography, with substantial cost savings.

3:20 p.m.

A School-based Health Education Program Identifies Risk Factors for Cardiovascular Disease and Diabetes: Baseline Data From Project Healthy Schools 2005-06 Pilot Study

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Background: Overweight and obesity status in children is becoming increasingly prevalent. Adolescents are considered for this condition. Our main focus has been to address the issue of childhood obesity in Michigan over the 2005-06 school year. The aim of this study is to determine the incidence of cardiovascular risk factors in sixth grade students.

Methods: The Project Healthy Schools (PHS) program was implemented in 2004-05 as a school-based multidisciplinary intervention program designed to promote healthy habits in middle school children. The project's primary objective is to reduce overweight status of students through meal planning and physical activity. The project has been evaluated using a variety of research methods, including surveys, laboratory tests, and questionnaires. The purpose of the current study was to determine the incidence of cardiovascular risk factors in sixth grade students.

Results: The study included 276 school students in grades 6-8, aged 11-14 years. Of these, 141 (42.4%) were overweight or obese, 21 (6.8%) were at risk for future cardiovascular disease, and 10 (3.2%) were at risk for diabetes. The findings indicate that the prevalence of overweight and obesity is high in this age group and that there is a need for interventions to prevent further increase in the prevalence of obesity and related conditions.