HEARTBEAT

Cardiovascular Health Study

Special Issue

From left: CHS Investigators David Lefkowitz, MD, and Mary Lyles, MD, review and classify cases with Interviewer Harriet Weiler and Surveillance Coordinator Beverly Tucker.

To the physicians of our CHS participants...

During the next twenty years, the incidence of coronary heart disease and stroke in the US, and the cost of treating these diseases, is expected to increase by 40%. The majority of this increase will occur in persons aged 65 and older; yet before the Cardiovascular Health Study, very little research had targeted this age group. In the past, most studies focused on the risks of coronary heart disease for middle-aged white males; little attention was given to determining which risk factors might lead to heart disease and stroke in females, African-Americans, or older adults.

The Cardiovascular Health Study is committed to identifying these risk factors for all older adults. Findings from CHS have already been published in the medical literature that may help you make more informed decisions about the treatment of your patients. And to a great extent, you have played a crucial role in the process of investigation and analysis that has led to these findings.

When a CHS participant is ill, is hospitalized or dies, we use the participant's medical records to collect information about the illness or death (we call this an "event"). We may have already asked you to complete a questionnaire about a cardiovascular event experienced by one of your patients. When compared to the participant's health status at baseline, this information provides data essential to our research. We appreciate your willingness to support our data collection efforts, which will help make our research more comprehensive, relevant, and effective.

The yearly examinations completed by our participants have provided information that may also be beneficial to you as a health provider. Test results are available to you when requested by your patients. A timeline of CHS examination elements appears on page two of this newsletter.

All of the many published journal articles written by CHS Investigators are available without charge in reprint form. You will find a synopsis of one of these articles on page three. A complete list of articles and a return coupon for requesting reprints is also included.

Your colleagues working with CHS as investigators would welcome any questions you may have about the study. You may call the CHS Field Center at (910) 716-6519 at any time with questions or requests for information. A list of Principal Investigators at the Bowman Gray Field Center appears on page four.

We will continue to ask you to provide information and to share your conclusions about your patients' events and the conditions that precipitated them. We are confident that we can count on your cooperation and support.

CHS Timeline

YEAR	EXAMINATION ACTIVITY
1989-90	Basic Examination: Medical history Blood pressure Height, weight Electrocardiogram Cognitive function test Physical function questionnaire Blood Lab: Lipids, hemostasis, fasting blood chemistries, hematology, glucose tolerance test Additional Tests: Carotid ultrasound Echocardiogram Pulmonary function Physical activity questionnaire Ambulatory ECG (25% of cohort)
1990-91	Basic Examination
1991-92	Basic Examination
1992-93	Basic Examination Blood Lab: Lipids, hemostasis, fasting blood chemistries, hematology, glucose tolerance test Additional Tests: Carotid and aortic ultrasound MRI (first half of cohort) Physical activity questionnaire Performance-based measurements Recruitment of African-American Cohort
1993-94	Basic Examination Blood Lab: Lipids Additional tests: MRI (second half of cohort) Pulmonary function Peak oxygen flow meter Sleep-apnea questionnaire Performance-based measurements
1994-95	Basic Examination Blood Lab: lipids Additional tests: Ambulatory ECG (25% of cohort) Echocardiography Performance-based measurements
1995-96	Basic Examination Blood Lab: lipids
1996-97	Basic Examination Blood Lab: lipids Additional tests: Pulmonary function
1997-98	Basic Examination Blood Lab: Lipids, hemostasis, fasting blood chemistries, hematology, glucose tolerance test
1998-99	Basic Examination Blood Lab: lipids Additional tests: Carotid and aortic ultrasonography
1999-2000	Analyses

Research Highlight

Estrogen Use and Cardiovascular Disease

Associations of Postmenopausal Estrogen Use with Cardiovascular Disease and Its Risk Factors in Older Women: Manolio TA, Furberg CD, Shemanski L, Psaty BM, O'Leary DH, Tracy RP, Bush TL. Circulation 1993;88:2163-2171.

The following is a synopsis of one of the 24 published research papers describing the findings of the Cardiovascular Health Study. Reprints of all 24 papers are available at no charge from the CHS Coordinating Center. Please use the enclosed coupon .

Question: Is estrogen replacement therapy in older, postmenopausal women related to :
- a favorable cardiovascular disease risk profile, similar to that seen in younger women?
- lower levels of subclinical cardiovascular disease?

Population: 2955 postmenopausal women over 65 years old in the Cardiovascular Health Study.

Selected Measurements: Risk Factors: Total cholesterol, triglycerides, HDL cholesterol, LDL cholesterol (calculated), fibrinogen, factor VII, fasting insulin and fasting glucose, body mass index.

Subclinical disease measurements: common and internal carotid thickness (ultrasonography), ECG left ventricular mass, doppler mitral peak flow velocity.

Results: Estrogen use (past or present) associated with:

DECREASED

LDL-Cholesterol	Carotid intimal-medial thickness
Fibrinogen	Carotid stenosis grade
Glucose	ECG left ventricular mass
Insulin	Mitral peak flow velocity
Obesity	
Age	

INCREASED

HDL-Cholesterol
Socioeconomic Status

Conclusions: Postmenopausal estrogen use in older women was associated with a favorable risk profile for cardiovascular disease.

Estrogen use was associated with lower levels of subclinical disease.

Estrogen use may be associated with lower risk of cardiovascular disease in women at least to their mid-70s.

Bowman Gray Field Center Investigators

Research findings of the Cardiovscular Health Study have resulted from the combined efforts of a number of professionals involved in the implementation of procedures and the analysis of data obtained by the study. The investigators are available to answer any questions you may have about the study and may be reached at the CHS Field Center at (910) 716-6519. Investigators at the Bowman Gray Field Center are:

Greg Burke, MD, MS
Allen Elster, MD
Walter Ettinger, MD
Curt Furberg, MD, PhD, Principal Investigator
Gerardo Heiss, MD
Dalane Kitzman, MD
Sid Klopfenstein, MD
David Lefkowitz, MD
Mary Lyles, MD
Maurice Mittelmark, PhD, Co-Principal Investigator
Ward Riley, PhD
Grethe S. Tell, PhD, MPH

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Editorial staff
David Siscovick, M.D., M.P.H.
Annette Fitzpatrick, M.A.
Lynnell Diamond
Coordinating Center

Peg Meyer, R.N., M.Ed.
University of Pittsburgh Field Center

CARDIOVASCULAR HEALTH STUDY
Bowman Gray Field Center
Department of Public Health Sciences
Bowman Gray School of Medicine
Medical Center Boulevard
Winston-Salem, North Carolina 27157-1063

ADDRESS CORRECTION REQUESTED