

THE ABC DIGEST OF **URBAN**
CARDIOLOGY

A PUBLICATION OF THE ASSOCIATION OF BLACK CARDIOLOGISTS, INC.



**The Stroke Treatment
and Ongoing
Prevention Act (p. 8)**

**Legislative Update
(p. 9)**

**Deep-Vein Thrombosis:
Advancing Awareness
to Protect Patient
Lives (p. 16)**

**Lipoprotein(A):
A Risk Factor Among
Elderly Men (p. 22)**

Presorted Standard
US POSTAGE
PAID
Cleveland, Ohio
Permit 1702

VOLUME II, NUMBER I

FEBRUARY 2004

THE ABC DIGEST OF URBAN CARDIOLOGY

A PUBLICATION OF THE ASSOCIATION
OF BLACK CARDIOLOGISTS, INC.

6849 B-2 Peachtree Dunwoody Road
Atlanta, GA 30328

Urban Cardiology is a bimonthly publication of the Association of Black Cardiologists, Inc., a non-profit organization of medical professionals dedicated to the reduction of cardiovascular and related diseases in minority and underserved populations. The ideas and opinions expressed in this publication do not necessarily reflect those of the Association, editors, or publisher.

Correspondence should be addressed to:
URBAN CARDIOLOGY

Association of Black Cardiologists
6849-B2 Peachtree Dunwoody
Rd., N.E.
Atlanta, GA, 34328

For advertising information, contact
Imquest, Inc.

590 S. Lenola Road, Suite 3121
Maple Shade, NJ 08052
856-489-7550

Publisher

Hilton M. Hudson, II, M.D., F.A.C.P

Editor in Chief

Kim A. Williams
M.D., F.A.B.C., F.A.C.A.

© Copyright The Association of Black Cardiologists, Inc. 2004. All rights reserved. No part of this publication in any form may be reproduced or transmitted without the expressed written permission of the publisher. Library of Congress ISSN# 1096-3863

Hilton Publishing, Inc.
P.O. Box 737
Roscoe, IL 61073

EDITORIAL BOARD

Editor in Chief: Kim A Williams, M.D.
University of Chicago,
Chicago, IL

L. Julian Haywood, M.D.
Prof. Of Med., LAC/USC Med. Ctr.
Los Angeles, CA

Otelio Randall, M.D.
Howard University Hospital
Washington, D.C.

Neal A. Scott, M.D., Ph.D.
Andreas Gruentzig Cardiovascular Ctr.
Atlanta, GA

Roslyn Sterling-Scott, M.D., M.S.H.A.
Associate Professor and Vice Chair,
Dept. of Surgery, Charles R. Drew
University of Medicine & Science
Los Angeles, CA

Laurence O. Watkins, M.D., M.P.H
Cardiologist
Martin Memorial Health Systems
Stuart, FL

OUR EDITORIAL MISSION

The *ABC Digest of Urban Cardiology*, published bimonthly, is an official publication of the Association of Black Cardiologists, Inc. (ABC). The ABC is a non-profit organization of health professionals dedicated to the reduction of cardiovascular and related diseases, especially in minority populations, wherein lies a burden of excessive morbidity and mortality. This publication is provided as an educational service to all health professionals who share this dedication.

The mission of this publication is to assist such clinicians to deliver the best of care to patients with cardiovascular and related diseases and to do so in a culturally competent and demographically appropriate manner. We do so by providing—in a compact, easily comprehensive journalistic style—up-to-date information of immediate applicability to the unique clinical setting of urban medicine. This information consists of:

- Original, evidence-based, clinical and research main articles (including CME self-assessment).
- "Tidbits"—a regular column of useful clinical knowledge gleaned from recent clinical research trials and other information drawn from the medical literature.
- "Developments"—a regular column covering newsworthy recent events such as new drug and device market introductions, new controversies in medicine, new trends in health care, new scientific insights, and new demographic, economic, and governmental activity affecting the practice of medicine.
- Commentary from the president of ABC, the publication's editor in chief, and the publisher.

We strive continually to improve upon the execution of our editorial mission and therefore encourage and welcome your suggestions on how we can serve you, our reader, better.

In this issue you will observe product advertisements from Pfizer Pharmaceuticals, GlaxoSmithKline, Schwarz Pharma and AstraZeneca. These pharmaceutical firms are providing educational grant support to the Association of Black Cardiologists, Inc. to enable us, among other things, to provide you with this publication without a subscription charge to you.

We encourage you—as you deem appropriate—to acknowledge and show appreciation for this support, as well as for these supporters' recognition of the special health challenges faced by minority and underserved populations and by the clinicians who treat them.

A NEW BEGINNING

Just as January is the beginning of the New Year, it also is the beginning of our work with the Association of Black Cardiologists' *Digest of Urban Cardiology*. We, at Hilton Publishing Company, share many of the concerns of this journal and of ABC. Our mission is to address the health disparity that exists in almost all disease states and that impacts minority populations in society. It is, to a large extent, similar to the mission that is reflected in the government's "Healthy People 2010" initiative. Because of the high rate of disparity related to cardiovascular health and related cardiovascular diseases, a significant amount of our effort is focused on cardiovascular health.

Our mission in relation to the *Digest of Urban Cardiology* is largely one that comes "behind the scenes." We will be working with ABC, its members, and journal advertisers to ensure that this magazine comes out in a timely way; that it continues to be produced with high editorial and manufacturing standards and values; and that it continues to reflect well on ABC and its members.

As a practicing cardio-thoracic surgeon, as well as a publisher, the information in the *Digest* is of particular relevance and importance to me. Because I am on the front lines of the cardiovascular battle, I know first-hand how important the information delivered by this *Digest* is; and how important the work is of those who write, edit, and produce the journal.

As partners of ABC in publishing the *Digest of Urban Cardiology*, our pledge is to continue to develop it over the next few months. You'll see some changes in design; in the quality of the *Digest's* paper; and in other areas that are less noticed. What you won't see are any compromises in editorial quality or integrity. ABC is committed to achieving and attaining the highest standards for its publication.

We hope you will give us your thoughts and comments over the next months. We welcome them.

Hilton M. Hudson II, M.D., F.A.C.S., F.C.C.P
Chief of Cardiothoracic Surgery, Reid Health System,
Richmond, IN
President and CEO, Hilton Publishing Company, Inc.
President, Health Literacy Foundation, Richmond, IN

THE ABC DIGEST OF URBAN CARDIOLOGY

A PUBLICATION OF THE ASSOCIATION
OF BLACK CARDIOLOGISTS, INC.

VOL. II, No. 1
JANUARY/FEBRUARY 2004

CONTENTS

The Stroke Treatment and Ongoing Prevention Act	8
Legislative Update	9
Deep-Vein Thrombosis: Advancing Awareness to Protect Patient Lives	16
Lipoprotein(A): A Risk Factor Among Elderly Men	22

Cover: Inset Illustration
by Joel Gresham

To "Talk Back" write to:

URBAN CARDIOLOGY
6849-B2 Peachtree Dunwoody
Rd., N.E.
Atlanta, GA 34328
678-302-4222



THE “STROKE TREATMENT AND ONGOING PREVENTION ACT” NEEDS YOUR SUPPORT

Call your political representatives right now and “educate” them about the importance of prevention and effective treatment in the further reduction of strokes in the United States, particularly as it relates to African Americans. A bill (H.R. 3658), addressing these issues, unanimously passed the House of Representatives Subcommittee on Health of the House Energy and Commerce Committee, Chaired by Michael Bilirakis (R-FL), and now will be considered by the full committee, the House of Representatives and the Senate before being sent to President Bush for his signature.

No doubt, this bill was a sympathetic recognition of former Congressman Paul Coverdale of Georgia who died of a stroke at the age of 61 years in 2000. The CDC then established the Coverdale Registry and Clearinghouse in 2001 and currently fund programs in Georgia, Ohio and North Carolina. The program designs and tests prototypes to measure the delivery of acute stroke care.

The Bill will allocate \$95 million over five years to improve stroke awareness, prevention and improving the care of stroke victims. In addition, the bill will provide for the development and implementation of continuing education programs in the use of new diagnostic approaches, technologies and therapies for the prevention and treatment of stroke.

The champions of this cause include Representatives Lois Capps (D-CA) and Charles “Chip” Pickering (R-MS) and over 80 co-sponsors in the House of Representatives. There is broad support for this bill but let’s not

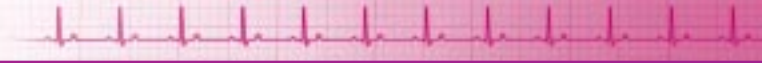
take any chances, let’s push for its approval. Your officers will be working with our friends in the Congressional Black Caucus but each member of the ABC should make an effort to assure its passing. Call your representatives in Congress. A similar effort is being discussed in the Senate, as you may know, and a stroke bill passed in the Senate in early 2002 but failed in the House.

Each year, about 700,000 Americans suffer from strokes (brain attacks). The rate per 100,000 for African American men is 272.6 compared to 249.4 for white men; 192.5 for Black women and 152 for white women.

It was ABC member Dr. Edward Cooper (after he was elected the first African American President of the American Heart Association) who made stroke a priority for the American Heart Association that led to the founding of the American Stroke Association. He and Dr. Edgar Kenton were also instrumental in putting stroke on the front burner for the ABC. We have been active with both the National Stroke Association as well as the American Stroke Association for the past ten years. Dr. Anne Taylor recently met with Mrs. Laura Bush at the White House to educate her about the ABC Women’s Center and about the devastating effect of CVD in the African American community.

While you are “educating” your representatives, another bill that is making its way through the Senate is the Health Care Equality and Accountability Act (S-1833), sponsored by Senators Tom Daschle, Ted Kennedy and oth-

continued on page 13



LEGISLATIVE UPDATE

Greetings.

In follow-up to our opening letters for 2003, dealing with the crises of declining Medicare reimbursement and tort reform, I would like to update you all on some of the legislative initiatives and physician/patient-advocacy issues discussed at the recent American Medical Association Interim Meeting, where I serve as a Delegate for the American College of Cardiology and a Representative of the American Society of Nuclear Cardiology.

Two years ago, the AMA delegates voted to confine the Interim meetings to the consideration of current advocacy issues. The 2003 Interim meeting began with the announcement that one of its two major legislative advocacy priorities for 2003 had been achieved. At the annual meeting in 2002, the House of Delegates voted to make the liability insurance crisis and Medicare reimbursement the AMA's main foci of advocacy. On the opening day of the interim meeting, we heard that President Bush has signed the Medicare Reform Act of

On the opening day of the interim meeting, we heard that President Bush has signed the Medicare Reform Act of 2003 into law. This bill allocates \$400 billion over the next 10 years to overhaul the system, improving reimbursement to physicians, and providing a prescription drug benefit to seniors.

2003 into law. This bill allocates \$400 billion over the next 10 years to overhaul the system, improving reimbursement to physicians, and providing a prescription drug benefit to seniors. The major immediate effect of this legislation was to stop the impending 4.5% cut in physician reimbursement, converting it to an

continued on the next page

TABLE 1

Type of Procedure	Change in Fees With Medicare Reform	Without Congressional Action	Difference
Echocardiography	1.8%	-4.2%	6.0%
Heart rhythm	0.2%	-6.4%	8.4%
Nuclear	1.9%	-4.3%	6.2%
Thoracic surgery	2.0%	-4.0%	6.0%
Invasive	3.8%	-2.4%	6.2%
General	3.2%	-3.9%	7.1%

TABLE 2. AMA PROJECTED IMPACTS OF SECTIONS 601, 412 AND 413 OF THE MEDICARE PRESCRIPTION DRUG BILL CHANGE IN MEDICARE PHYSICIAN PAYMENTS

	SGR update (Sec.601) 2004-2005 impact average per physician	SGR update (Sec. 601) 2004-2005 impact total per state (\$ millions)	Work GPCI floor (Sec. 412) 2004-2006 impact total per state (\$ millions)	Shortage area bonus (Sec. 413) 2005-2007 impact total per state (\$ millions)
Alabama	\$22,000	\$179	\$42	\$17
Alaska	\$7,000	\$8	\$0	NA
Arizona	\$16,000	\$149	\$9	\$11
Arkansas	\$22,000	\$100	\$52	\$13
California	\$12,000	\$886	\$0	\$4
Colorado	\$8,000	\$78	\$12	\$1
Connecticut	\$14,000	\$149	\$0	\$0
Delaware	\$22,000	\$37	\$0	\$2
District of Columbia	\$10,000	\$127	\$0	\$0
Florida	\$26,000	\$960	\$150	\$64
Georgia	\$17,000	\$254	\$48	\$14
Hawaii	\$9,000	\$29	\$1	\$0
Idaho	\$14,000	\$30	\$13	\$1
Illinois	\$15,000	\$400	\$50	\$17
Indiana	\$20,000	\$216	\$43	\$13
Iowa	\$22,000	\$103	\$45	\$11
Kansas	\$17,000	\$88	\$35	\$6
Kentucky	\$20,000	\$156	\$50	\$12
Louisiana	\$17,000	\$156	\$39	\$9
Maine	\$16,000	\$49	\$16	\$4
Maryland	\$16,000	\$162	\$7	\$1
Massachusetts	\$12,000	\$233	\$0	\$2
Michigan	\$23,000	\$438	\$6	\$31
Minnesota	\$12,000	\$133	\$14	\$8
Mississippi	\$22,000	\$97	\$46	\$13
Missouri	\$19,000	\$200	\$62	\$26
Montana	\$15,000	\$29	\$16	\$2
Nebraska	\$16,000	\$57	\$32	\$3
Nevada	\$17,000	\$59	\$0	\$1
New Hampshire	\$14,000	\$38	\$5	\$0
New Jersey	\$19,000	\$426	\$0	\$6
New Mexico	\$11,000	\$39	\$11	\$3
New York	\$15,000	\$865	\$5	\$12

Table continued on the next page

Table continued

North Carolina	\$18,000	\$298	\$93	\$30
North Dakota	\$17,000	\$25	\$13	\$2
Ohio	\$18,000	\$408	\$50	\$25
Oklahoma	\$21,000	\$114	\$39	\$12
Oregon	\$9,000	\$69	\$20	\$3
Pennsylvania	\$17,000	\$500	\$38	\$24
Puerto Rico	\$14,000	\$107	\$160	NA
Rhode Island	\$12,000	\$35	\$0	\$0
South Carolina	\$20,000	\$153	\$42	\$12
South Dakota	\$19,000	\$29	\$20	\$2
Tennessee	\$20,000	\$240	\$64	\$18
Texas	\$18,000	\$641	\$143	\$28

estimated 1.5% increase. The American College of Cardiology estimates that the overall impact on reimbursement for cardiac procedures is shown in table 1.

Another plank of this landmark legislation was an effort to improve the regional variation in physician payment, giving more funds to physicians in rural areas and regions with physician shortages. In this regard, the AMA estimates that physicians in each state will benefit as shown in table 2.

It should be realized that this “fix” is temporary, and will require more legislation prior to drastic cuts in physician fees scheduled for 2006. But in the meantime, this leaves the challenge of passing meaningful liability reform through Congress as the major advocacy issue for organized medicine.

After this auspicious beginning, there were many other important issues considered by the reference committees and the House of Delegates (HOD). These deliberations were summarized and extracted and can also be found at: <http://www.ama-assn.org/ama/pub/category/11023.html>.

Reference Committee on Amendments to Constitution and Bylaws

The Reference Committee on Constitution and Bylaws adopted a Council on Ethics and Judicial Affairs (CEJA) Report 5, which considered physician health and wellness. It encourages physicians to address occupational stressors, to select a personal physician and to view a physician’s own health and well-being as an important way of providing safe and effective medical care to patients.

The HOD also called upon the AMA to straighten existing policy related to the qualifications and conduct of expert witnesses, as part of its broad tort reform. Also, the Reference Committee addressed two governance matters; the HOD ultimately agreed to freeze the size of the specialty representation in the HOD for one year, and to review and improve the specialty society designation mechanism. In response to the proposal to require a two-thirds majority vote to adopt CEJA reports, the Bylaw amendment that would have effected the change was defeated.

continued on the next page

TABLE 3. AMA PROJECTED IMPACTS OF SECTIONS 601, 412 AND 413 OF THE MEDICARE PRESCRIPTION DRUG BILL CHANGE IN MEDICARE PHYSICIAN PAYMENTS

	SGR update (Sec.601) 2004-2005 impact average per physician	SGR update (Sec. 601) 2004-2005 impact total per state (\$ millions)	Work GPCI floor (Sec. 412) 2004-2006 impact total per state (\$ millions)	Shortage area bonus (Sec. 413) 2005-2007 impact total per state (\$ millions)
Utah	\$12,000	\$48	\$12	\$1
Vermont	\$11,000	\$18	\$5	\$0
Virgin Islands	\$7,000	\$1	\$0	NA
Virginia	\$17,000	\$191	\$32	\$9
Washington	\$12,000	\$155	\$20	\$4
West Virginia	\$22,000	\$74	\$29	\$9
Wisconsin	\$15,000	\$169	\$33	\$10
Wyoming	\$12,000	\$11	\$4	\$0
Total	\$16,000	\$10,216	\$1,603	\$504

NOTES

Impacts are reported over varying time periods depending on when each provision will be in effect. Impacts are totals over the time periods involved (not per year impacts).

Pay changes are relative to current law. Current law pay change for 2004 is -4.5% and is assumed to be -1.7% for 2005 (2003 Medicare Trustees' Report).

Impacts shown are changes in allowed charges (i.e., impacts include both federal government outlays and patient cost sharing) on a calendar year basis. These estimates will differ from federal budget scoring estimates.

Impacts are for Medicare Physician Payment Schedule services only, and do not include potential spillover effects from private, Medicaid and other plans that tie payments to Medicare rates.

Totals for DC include Maryland and Virginia counties included in the DC payment locality. These counties are excluded from the Maryland and Virginia totals.

Per physician impacts will vary considerably within a state depending on physicians' Medicare patient load and utilization.

* The impact of the shortage are bonus provision (sec 413) was not estimated for Alaska, Puerto Rico and Virgin Islands due to a lack of county-level data for these areas. NA = not available

Source: American Medical Association, Center for Health Policy Research, December 2003

Reference Committee on the Board of Trustees

The HOD adopted Board of Trustees' Report 14, Strategic Membership Plan, which changes the AMA vision statement, making it explicit that AMA is a "member-centered organization, whose members' presence and voice drive the AMA and are central to its overall success and effectiveness." The Report includes 10 strategic action items, which include: building a balanced, focused set of

advocacy activities in which the AMA can be distinctive; streamlining the existing member benefit portfolio; and identifying high-profile ways to involve members in shaping the AMA's agenda and policy. The HOD applauded the work of the AMA's Board of Trustees and management for substantially improving the financial position of our AMA in 2003 and the budget for 2004 projects that the AMA will continue to have a positive bottom line. The HOD has asked the AMA to examine the inap-

appropriate use of physician prescribing data and its use by pharmaceutical representatives.

Reference Committees on Private Sector Advocacy

The Council on Medical Service Report 1, Medical Care for Patients with Low Incomes, yielded seven new policy recommendations. The most significant recommendation calls for replacing the medical care portion of the Medicaid program with refundable and advanceable tax credits to purchase private health insurance with little or no cost sharing. Two important recommendations came out of Council on Medical Service Report 5, Restructuring Medicare for the Long Term. The first recommendation will support the Federal Employees Health Benefit Program as a model for restructuring Medicare; the second will support the shifting of funding for Medicare from the current tax-financed, pay-as-you-go system, to one of mandatory, individually owned private savings.

The HOD also recommended adoption of Council on Scientific Affairs Report 1, the AMA National Disaster Life Support Program. This report recommends that physicians

become prepared in disaster life support techniques. (In fact, the AMA's Center for Disaster Preparedness and Emergency Response offered an eight-hour Basic Disaster Life Support course for Continuing Medical Education credit during the 2003 AMA Interim Meeting.) A variety of medical student issues were discussed; in particular, strategies to help medical students manage their debt. For example, Resolution 847 called for a study of the merits of a cap on medical student tuition.

Reference Committee on Legislation

One of the most significant recommendations to emerge at this meeting centered on the debate surrounding strategies for medical liability reform. The HOD reaffirmed policy providing the AMA Board of Trustees with flexibility to work with members of Congress and other medical professional societies in seeking proven medical liability reforms at the federal level. The AMA will continue to work with state and national medical specialty societies in developing a strategic plan for 2004 and beyond.

Best Regards,
Kim A. Williams, MD, FABC, FACC, FAHA,
FCCP

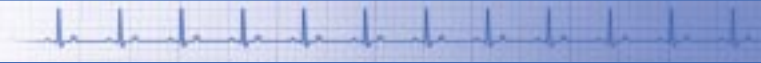
Message from the President *continued from page 8*

ers. At the urging of the ABC, a provision to establish an office of Minority Affairs at the Food and Drug Administration was included in this legislation. The issue of health care disparities will receive increased attention this year. If we are ever going to eliminate disparities in the treatment of the diseases that disproportionately affect African Americans, we need this focused effort. The ABC has been a proponent of this proposition and inclusion in this important legislation is a promising indication that it will take effect. Please do what you can.

Both the public and private sectors must work together to put prevention first and to increase health literacy across the United States. We must learn the facts from research and then empower people to make the right choices for themselves and others. Stroke is a preventable condition.

One of my favorite quotes that I have come to believe is something said by Margaret Mead: "Never doubt that a small group of thoughtful committed citizens can change the world; indeed it is the only thing that ever has." If not us, who?

Malcolm P. Taylor, M.D.
President



DEEP-VEIN THROMBOSIS

ADVANCING AWARENESS TO PROTECT PATIENT LIVES

Public Health Leadership Conference on Deep-Vein Thrombosis

Washington, D.C. • February 26, 2003

“The disconnect between evidence and execution as it relates to DVT prevention amounts to a public health crisis.”

—Samuel Z. Goldhaber, M.D.,
Associate Professor of Medicine, Harvard
Medical School

Introduction

Every year, an estimated 200,000 up to 600,000 Americans will suffer from deep-vein thrombosis (DVT) and pulmonary embolism (PE).^{1,2,3} Deep-vein thrombosis and PE are collectively known as venous thromboembolism (VTE). For the 60,000 to 200,000 individuals who develop PE, their condition will be fatal.^{1,2} In the United States, more people die each year from PE than motor vehicle accidents, breast cancer or AIDS.^{3,4,5,6}

Deep-vein thrombosis is a common but under-diagnosed medical condition that occurs

when a thrombus (blood clot) forms in one of the large veins, usually in the lower limbs, leading to either partially or completely blocked circulation.¹ The condition may result in health complications, such as PE, if not diagnosed and treated in a timely and effective manner. Pulmonary embolism can occur when a fragment of a blood clot breaks loose from the wall of the vein and migrates through the heart to the lungs, where it blocks a pulmonary artery or one of its branches.¹ When that clot is large enough to completely block one or more of the vessels that supply the lungs with blood, it can result in sudden death.¹

Surprisingly, almost three-quarters (74 percent) of adults have little or no awareness of DVT, according to a national survey conducted on behalf of the American Public Health Association (APHA).⁷ Of the respondents aware of DVT, more than half (57 percent) were unable to name any common risk factors or pre-existing conditions that could lead to the development of DVT. And, 95 percent of adults surveyed reported that their physician had never discussed this medical condition with them.⁷

The APHA and the Centers for Disease Control and Prevention (CDC) convened 60 of the nation’s leading medical experts and patient advocates in Washington, D.C. in early 2003.

This event, the Public Health Leadership Conference on Deep-Vein Thrombosis, brought into the spotlight the urgency for increased diligence related to prevention on

SOME CAUSES OF DEATH IN THE U.S.	ANNUAL DEATHS
Pulmonary embolism ^{2,3}	Up to 200,000
AIDS ⁶	14,499
Breast cancer ⁵	40,200
Highway fatalities ⁴	42,116

the part of the healthcare community—as well as the need to raise awareness of DVT and its complications among the public.

Conference participants addressed two critical issues: awareness and prevention. Physicians and other healthcare providers must be aware of risk factors and risk stratification. Moreover, they must take more aggressive action in screening patients for risk factors and in prescribing preventive interventions. In the case of prophylaxis with anticoagulants, well-controlled studies have shown that the use of these medications can reduce the risk of DVT and PE by two-thirds.¹ Unfortunately, a study also shows that only about 30 percent of patients at risk for DVT receive this type of prophylaxis.⁸ Based on these findings, conference participants also urged the American public to become more aware of DVT, its symptoms, and risk factors.

This “White Paper” is based on the initiatives suggested by the participants and attendees at the Public Health Leadership Conference on Deep-Vein Thrombosis. The goal of this communication is to create a better understanding of both the high incidence of DVT and PE and the availability of preventive options for these conditions.

Deep-Vein Thrombosis: Advancing Awareness to Protect Patient Lives

1. Describing Deep-Vein Thrombosis

A deep-vein thrombus (blood clot) is an intravascular deposit that is composed of fibrin and red blood cells with a variable platelet and leukocyte component. Deep-vein thrombosis occurs when a thrombus forms (usually in regions of slow or disturbed blood flow) in one of the large veins, usually in the lower limbs, leading to either partially or completely blocked circulation.¹ The condition may result in health complications, such as fatal PE, if not diagnosed and treated in a timely and effective manner.¹

Pulmonary embolism can occur when a fragment of a blood clot breaks loose from the wall of the vein and migrates to the lungs, where it blocks a pulmonary artery or one of its branches. When that clot is large enough to completely block one or more vessels that supply the lungs with blood, it can result in sudden death. Deep-vein thrombosis and PE are collectively known as venous thromboembolism (VTE).¹

2. Outlining the Scope of the Problem

Published studies estimate that the annual incidence of DVT and PE ranges from 200,000 up to 600,000 cases, and may contribute to 60,000 to 200,000 deaths.^{1,2} Many of these deaths can be prevented through routine use of simple preventive measures. Medical experts say that it is critical to warn patients about the risks, and for physicians and other healthcare providers to employ preventive measures.

Venous thromboembolism is the number-one cause of unexpected hospital death, according to Samuel Z. Goldhaber, M.D., of Harvard Medical School, who directs the VTE Research Group at Brigham and Women’s Hospital in Boston. Additionally, Dr. Goldhaber has reconfirmed the finding that VTE is a major national health problem, especially among hospitalized patients.

3. Measuring DVT Awareness

Most Americans are unaware of DVT, its symptoms, and its risk factors, according to a nationwide survey conducted on behalf of the APHA.⁷ At the Public Health Leadership Conference on Deep-Vein Thrombosis (“Conference”), Georges C. Benjamin, M.D., F.A.C.P., the Executive Director of the APHA presented key findings.⁷

Conference panelist Rear Admiral Kenneth P. Moritsugu, M.D., M.P.H., Deputy Surgeon General of the United States, stated that DVT is

continued on the next page

a condition that does not discriminate—it affects young and old, the very fit (e.g., Olympic athletes), as well as public figures, such as former Vice President Dan Quayle. Less than two months after the Conference, acclaimed journalist David Bloom died as a result of VTE while on assignment in Iraq. His death raised awareness and questions among the public about DVT.

- Almost three-quarters (74%) of those surveyed have little or no awareness of DVT.
- Of the respondents aware of DVT, more than half (57%) were unable to name any common risk factors or pre-existing conditions that could lead to the development of DVT.
- 95% of adults surveyed report that their physician has never discussed DVT with them.⁷

4. Listening to a Silent Epidemic

Fatal PE may be the most common preventable cause of hospital death. “Two-thirds of those individuals who die from PE do so unnecessarily,” maintains Dr. Goldhaber. “Routine use in hospitals of simple, well-established and effective methods of DVT prevention would save the lives of thousands of Americans each year. Unfortunately, however, the management of PE has been characterized by a failure to use preventive measures that are known to be effective.” According to Dr. Goldhaber, the failure to administer preventive measures, or to “prophylax,” is an established practice pattern with significant adverse consequences.

To illustrate that the silent epidemic of DVT remains unacknowledged, a recent study in hospital patients with DVT, known as DVT-FREE, found that 71 percent of patients with DVT did not receive prophylaxis within 30 days prior to diagnosis. Surgical patients were much more likely than nonsurgical patients to receive prophylaxis for this condition. These findings indicate that proven regimens for the prevention of DVT are underutilized. Clinical trials and guide-

lines for prophylaxis and treatment have progressed further and faster than “real-world” preventive efforts and outpatient therapy.⁸ “The disconnect between evidence and execution as it relates to DVT prevention amounts to a public health crisis,” says Dr. Goldhaber.

5. Understanding DVT Risk Factors

The following information summarizes the risks and symptoms for DVT. About half of the time, however, the condition causes no symptoms.^{1,10}

WHO IS AT RISK?

Top risk factors and triggering events for DVT:

- Increasing age
- Prolonged immobility
- Stroke
- Paralysis
- Previous VTE
- Cancer and its treatment
- Major surgery (particularly operations involving the abdomen, pelvis and lower extremities)
- Respiratory failure
- Trauma (especially fractures of the pelvis, hip or leg)
- Obesity
- Varicose veins
- Congestive heart failure and myocardial infarction
- Indwelling central venous catheters
- Inflammatory bowel disease
- Nephrotic syndrome
- Pregnancy, oral contraceptives or post-menopausal hormone replacement
- Inherited predisposition for clotting^{11,12}

WHAT ARE THE SYMPTOMS OF DVT AND PE?

Neither DVT nor PE may present any obvious symptoms. DVT most commonly occurs in just one leg. Symptoms for both conditions include any or all of the following:

DVT OF THE LEG OR ARM

- Tenderness
- Pain
- Swelling
- Discoloration or redness^{1,13}

PE

- Unexplained shortness of breath
- Chest pain or palpitations
- Anxiety and/or sweating
- Coughing up blood

6. Barriers in DVT Prevention

“Deaths resulting from PE, a complication of DVT, can be prevented; however, physicians and other healthcare professionals must routinely assess a person’s risk for the disease in the same way they currently look for risk factors for heart disease,” states APHA’s Georges Benjamin, M.D., F.A.C.P. “Furthermore, we need to encourage more physicians to routinely prophylax patients who may be at risk for DVT.” Yet, assuming knowledge of the risk factors for DVT does not necessarily result in prescribing prophylaxis for this condition.

Indeed, participants at the Conference acknowledged that prophylaxis is underused. These experts identified various factors that may create barriers in DVT prevention, including a lack of awareness of DVT risk, perceived differences in risk assessment and perceived risks of bleeding with prophylaxis.

7. Using Available Prophylaxis

Traditional non-pharmacological prophylaxis measures for DVT include early mobilization and the use of sequential compression devices to prevent blood clotting.

However, there are many drugs available to prevent DVT. Anticoagulants, or blood-thinning drugs, work by impairing the body’s normal blood-clotting process, and help to prevent

DVT and PE. The most commonly used anticoagulants include unfractionated heparin, low-molecular-weight heparin and warfarin sodium.^{12,14}

8. Moving Forward for DVT Prevention

In addressing DVT awareness and prevention, Conference participants agreed that improving standards of care and enhancing physician training are two key strategies for reducing death and disability due to this condition and its complications. According to Maureen Connors Potter, the Executive Director for disease-specific care certification for the Joint Commission on Accreditation of Healthcare Organizations (JCAHO), one initiative to support these strategies is a new certification program at JCAHO. This approach aims to increase the use of evidence-based medicine as a focal point for disease-specific patient-care services or programs. As a strategy to improve clinical outcomes for patients with DVT, this certification offers a framework for practitioners to implement practice guidelines that impact this condition. However, experts are urging that JCAHO consider a stronger step beyond certification and make DVT prevention a component of accreditation.

Another initiative, the American Medical Association’s (AMA) Physician Consortium for Performance Measurement, aims to become a leading source for evidence-based performance measures and outcomes reporting tools for physicians. This organization’s secretary/treasurer, John Nelson, M.D., offered the AMA’s assistance in developing an evidence-based performance measure for prevention of DVT.

The Conference identified areas in need of immediate attention for educating the professional community about DVT awareness and prevention. Participants were urged to take action to:

continued on the next page

- Create a national coalition to advocate for greater awareness of DVT and PE among healthcare professionals and the general public.
- Enlist the support of medical professional and patient advocacy organizations to make DVT and PE awareness part of their agenda.
- Develop a public awareness campaign to educate consumers about the risk factors, symptoms and prevention measures for DVT.
- Develop communications tools (printed materials, public service announcements, Websites) to serve as patient educational materials about risk factors, symptoms and prevention for DVT.
- Encourage state medical licensing boards to include DVT and PE prevention in their CME/CE licensing renewal requirements.
- Encourage academic centers to incorporate DVT and PE education into curricula for all medical professionals.
- Close the gap between clinical practice guidelines for DVT prophylaxis and actual practice through the creation and implementation of institutional standards.
- Ask accreditation and “standardization” institutions to ensure that healthcare providers and institutions implement clinical practice guidelines for DVT prevention.
- Encourage the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) to make adherence to DVT prevention guidelines part of its accreditation process.
- Educate policy-makers about cost-effectiveness of DVT and PE prevention and treatment.
- Encourage policy-makers to support reimbursement of DVT and PE prevention and treatment.

9. Reducing the Threat of DVT: Two Paths Toward Change

Conference participants recommended two paths to improve outcomes related to DVT and PE:

Educate the public and healthcare community to raise awareness of DVT and encourage proven methods for preventing deaths from PE.

Public education can take the form of direct-to-consumer outreach or it can involve arming public health organizations with the information necessary to best serve their members. Healthcare professionals can benefit from the best practices of organizations and institutions that have successfully implemented prophylaxis and assessment programs to make best use of preventive therapies, both mechanical and pharmacological.

Work with policy-makers to make DVT a public health priority.

The policy issues include: ensuring appropriate levels of reimbursement for medications available to prevent fatal PEs, motivating

adherence to established clinical guidelines, ensuring that treatment and prevention guidelines capture all at-risk populations, and allocating the resources necessary to further investigate ways to prevent long-term complications from DVT and fatalities from PE.

Summary

“Deep-vein thrombosis is preventable,” said Bruce Evatt, M.D., Chief of the Hematologic Diseases branch at the CDC. “We can reduce the risks of its serious and life-threatening complications if we raise education and awareness among the public and urge all healthcare providers to institute standard preventive measures.”

To this end, experts convened at the Public Health Leadership Conference on Deep-Vein Thrombosis to move forward knowledge about this life-threatening condition. This “White Paper” summarizes the key learnings about DVT and PE with the goal of educating physicians and other healthcare providers, public health advocates and consumers about these conditions. Given the high incidence of DVT

and PE, clarifying the risk factors, prophylaxis strategies and policy initiatives to help prevent them is a public health priority.

Understanding the gap in awareness of DVT and PE, as illustrated by the recent national survey, should motivate both professionals and consumers to learn more about these conditions. Moreover, the recognition and acceptance of treatment guidelines and prophylaxis should encourage all physicians and other healthcare providers to prophylax at-risk patients. In doing so, prevention will become an accepted practice and policy.

Advancing awareness of DVT and PE requires physicians and other healthcare providers, as well as patients, to seek more information about these serious conditions. Reviewing symptoms and risk factors, such as those outlined in this paper, will help elevate DVT awareness. For example, whereas surgical patients may be more likely to receive prophylaxis, medical patients with restricted mobility should also be considered at risk for this condition. In addition, greater knowledge is needed about the drugs available to prevent and treat DVT, including anticoagulants. This is critical in the hospital setting, as evidenced by the recent DVT-FREE Registry. The investigators emphasize the need for a new and better understanding of the urgency of providing prophylaxis, "Intensified education is needed to bridge this gap between clinical trial data and everyday clinical practice."⁸

A Call to Action

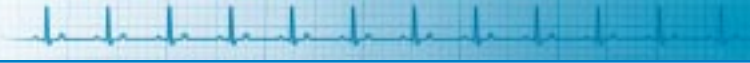
Deep-vein thrombosis and pulmonary embolism constitute major health problems in the United States. Physicians and other healthcare providers, public health advocates and consumers must regard DVT as a life-threatening condition because more people die each year from PE than motor vehicle accidents, breast cancer or AIDS. Furthermore, the need for

advancing awareness goes beyond a greater acknowledgement of the incidence of DVT—it must incorporate a better understanding of the preventability of the condition. These constituencies must act now, each in their own sphere of influence, to create a heightened level of awareness and to take more aggressive steps to utilize the existing prophylaxis measures.

Bibliography

1. Hirsh J, Hoak J. Management of deep-vein thrombosis and pulmonary embolism. A statement for healthcare professionals from the Council on Thrombosis (in consultation with the Council on Cardiovascular Radiology), American Heart Association. *Circulation*. 1996;93:2212-2245.
2. Anderson FA Jr., Wheeler HB, Goldberg RJ, et al. A population-based perspective of the hospital incidence and case-fatality rates of deep-vein thrombosis and pulmonary embolism: The Worcester DVT study. *Arch Intern Med*. 1991;151:933-938.
3. Silverstein M, Heit J, Mohr D, et al. Trends in the Incidence of Deep-Vein Thrombosis and Pulmonary Embolism: A 25-Year Population-Based Study. *Arch Internal Med*. 1998;158:585-593.
4. National Highway and Traffic Safety Association. Fatality Analysis Reporting System (FARS) Web-Based Encyclopedia. Available at: <http://www-fars.nhtsa.dot.gov>. Accessed January 31, 2002.
5. American Cancer Society. Breast cancer facts and figures, 2001-2002. Available at: http://www.cancer.org/eprise/main/docroot/stt/content/STT_1x_Breast_Cancer_Facts_and_Figures_2001-2002. Accessed January 31, 2002.
6. Centers for Disease Control Report. *HIV/AIDS Surveillance Report* 2001. Volume 13, Number 2.
7. APHA Deep-Vein Thrombosis Omnibus Survey. Conducted by Wirthlin Worldwide 2002.
8. Goldhaber SZ, Tapson VF, for the DVT-FREE Steering Committee. DVT-FREE: A prospective registry of 5451 patients with confirmed deep-vein thrombosis. International Society of Thrombosis and Haemostasis, Birmingham, UK, July 2003.
9. Heit JA, et al. Incidence of venous thromboembolism in hospitalized patients vs community residents. *Mayo Clin Proc*. 2001;76:1102.
10. White RH. The Epidemiology of Venous Thromboembolism. *Circulation*. 2003; 107:I-4-I-8.

continued on page 23



LIPOPROTEIN(A)

A RISK FACTOR AMONG ELDERLY MEN

Abraham A. Ariyo, M.D., M.P.H., F.A.C.C.

*Interventional Cardiologist and Chairman,
Center for Cardiovascular Disease Prevention and Intervention
HeartMasters, Dallas, Texas*

Lipoprotein(a) [Lp(a)] is a genetic variant of low-density lipoprotein (LDL) particle in which apolipoprotein B-100 (apo B-100) is linked to apoprotein(a)[apo(a)] by a single interchain disulfide bridge.^{1,2} Results from basic laboratory research suggest that Lp(a) plays a vital role in pathologic thrombus formation. The presence of Lp(a) has been identified in coronary bypass grafts at autopsy, pathologic specimen from atherectomy debris after coronary intervention, and in the aorta and cerebral arteries.³ These findings strongly implicate Lp(a) in the formation of atherosclerosis. However, earlier data from prospective studies from largely middle-aged population have yielded inconclusive results.^{4,5} Recently, there are new indications that Lp(a) may exert its atherogenic effect depending on the age, sex, and ethnic origin of an individual.

The elderly constitute the fastest growing segment of our population.⁶ They have the highest morbidity and mortality burden from vascular diseases. Yet, relatively little risk factors for vascular diseases are known in them, compared to the middle-aged population. Nevertheless, emerging data suggest that Lp(a) may carry significant vascular and mortality risk among the elderly than in the middle-aged population, and thus, may be a good predictor of vascular events in the elderly.

In this regard, our group recently reported¹

a finding that is consistent with the pathogenic effect of Lp(a) among elderly men. We conducted a prospective study of 5,888 men and women who were 65 years of age or older, and we followed them for 7.4 years. The participants provided blood samples at the beginning of the study. We assessed these samples for their respective Lp(a) levels, and we tracked these participants for the development of vascular diseases and death. In the analyses, we divided the participants into five groups (quintiles) according to their Lp(a) levels. Among elderly men, we found that those participants in the highest Lp(a) group had three times the risk of developing stroke, almost three times the risk of death associated with vascular diseases and nearly twice the risk of death from all causes. These significant risks persisted in adjusted models that controlled for other risk factors.

Several possible mechanisms have been proposed to explain this association. Lp(a) has been suggested to play a role in atherosclerotic plaque formation. Second, because of the structural similarities of apo(a) and plasminogen, Lp(a) may compete, bind, and deactivate the tissue factor pathway inhibitors, which could potentially cause thrombus formation by its interference with body fibrinolysis. Third, Lp(a) causes endothelial dysfunction which could interfere with normal endothelial

vasodilatory responses to stress. Fourth, Lp(a) colocalizes with plaque macrophages, stimulates smooth muscle cells and generates inflammation.

The importance of this study lies in the fact that relatively little is known on risk factors among the elderly, and the applicability of the current traditional risk factors to the elderly has been questioned. Yet, by the year 2030, it is projected that one in four persons in the United States will be 65 years of age or older.⁶ The elderly are most vulnerable to and suffer the highest mortality from vascular diseases, but the predictors of these events in them are poorly understood. Thus, the finding that among elderly men, Lp(a) predicts vascular and mortality risks up and beyond the current traditional risk factors may identify some elderly in whom aggressive risk management needs to be explored.

The data from this study¹ support the consideration of serum measurement of Lp(a) as a screening tool for predicting adverse vascular outcome among elderly men. Further studies

will address whether the screening of Lp(a) will aid in reducing vascular events among these subjects.

References

1. Ariyo AA, Thach C, Tracy R. Lp(a) Lipoprotein (a), Vascular Disease, and Mortality in the Elderly. *N Engl J Med* 2003; 349:2108-15
 2. Loscalzo J. Lipoprotein (a) : a unique risk factor for atherothrombotic disease. *Arteriosclerosis* 1990; 10:671-9.
 3. Cambillau M, Simon A, Amar J, et al. and the PCVMETRA Group. Serum Lp(a) as a discriminant marker of early atherosclerotic plaque at three extracoronary sites in hypercholesterolemic men. *Arteriosclerosis and Thrombosis* 1992; 12:1346-52.
 4. Ariyo AA, Hennekens CH, Stampfer MJ, Ridker PM. Lipoprotein(a), lipids, aspirin and risk of myocardial infarction in the Physicians' Health Study. *Journal of Cardiovas Risk*. 1998 (5); 4:273-8.
 5. Ridker PM, Hennekens CH, Stampfer MJ . A prospective study of lipoprotein (a) and the risk of myocardial infarction. *JAMA* 1993; 270:2195-2199.
 6. Spencer G. Projections of the population of the United States by age, sex, and race: 1988-2080. Current population reports, population estimates and projections. Series p-25. No. 1018. Washington, D.C.: Bureau of the Census, 1989.
-
- Deep-Vein Thrombosis**
continued from page 21
11. Anderson FA, Spencer FA. Risk Factors for Venous Thromboembolism. *Circulation*. 2003;107:I-9-I-16.
 12. Geerts WH, Heit JA, Clagett GP, et al. Prevention of venous thromboembolism. *Chest*. 2001;119:132S-175S.
 13. Deep-Vein Thrombosis Recognition and Treatment Fact Sheet. Aventis approval code 0460B1.
 14. Clagett GP, Anderson FA Jr, Heit J, et al. Prevention of venous thromboembolism. *Chest*. 1995;108(4):312S-334S.
- Additional sources**
- Bratzler, et al. Underuse of venous thromboembolism prophylaxis for general surgery patients: physician practices in the community hospital setting. *Arch Intern Med*. 1998;158:1909-12.
- Crowther MA, Kelton JG. Congenital thrombophilic states associated with venous thrombosis: A qualitative overview and proposed classification system. *Ann Intern Med*. 2003;138:128-134.
- Kearon C. Natural History of Venous Thromboembolism. *Circulation*. 2003;107:I-22-I30.
- Merriam-Webster's Collegiate Dictionary, 10th Edition, Merriam-Webster, Inc.; 275.
- Making Health Care Safer: A Critical Analysis of Patient Safety Practices. Evidence Report/Technology Assessment No. 43. Rockville, MD: Agency for Healthcare Research and Quality, U.S. Department of Health and Human Services. AHRQ Publication 01-E058. July 2001.
- American Academy of Family Physicians
Web site: <http://familydoctor.org>
- American Academy of Orthopedic Surgeons
Web site: <http://orthoinfo.aaos.org>
- American Heart Association
Web site: <http://www.americanheart.org>



ASSOCIATION OF BLACK CARDIOLOGISTS, INC.

6849 B-2 Peachtree Dunwoody Road NE Atlanta, GA 30328

Phone: 678-302-4222 Fax: 678-302-4223 Web: www.abccardio.org

Credentialing Office
APR _____
APA _____
D _____
CM _____
ID # _____
Date Entered _____

PROFESSIONAL MEMBERSHIP APPLICATION

Complete all fields. A resume and photo are required to complete application process (please print)

Date of Application _____ Are you a Clinician? Yes No

Specialty _____ SS# _____

If Cardiology (check one)

- Interventional Invasive Noninvasive FID# _____
- Nuclear Adult Cardiology *If Applicable*
- Pediatric Cardiology Electrophysiology Surgery

NAME / DEMOGRAPHIC DATA

Last name _____ First name _____ Middle Initial _____

Degrees _____

Institution Affiliation _____ Academic Title _____

Office Contact Name and Number _____

Office Address _____

City _____ State _____ Zip _____

Phone _____ Fax _____ E-mail _____

Home Address _____

City _____ State _____ Zip _____

Phone _____ Fax _____ E-mail _____

NAME / DEMOGRAPHIC DATA

Preferred Mailing Address Work Home Please List in Membership Directory Do Not List in Directory

Medical School Attended _____ Year of Graduation _____

Internal Medicine Training _____ Year of Completion _____

Cardiology Training Program _____ Year of Completion _____

Board Certification (1) _____ Year _____ (2) _____ Year _____

Board Eligibility (1) _____ Year _____ (2) _____ Year _____

Practice Type Group Hospital Private Academic Other _____

application continued on next page

MEMBERSHIP CATEGORIES

- Full Membership (Faculty of the ABC)\$295.00
Renewing Members, all physicians, scientists, epidemiologists, scholars and professors
- Associate Membership\$150.00
Non-physicians who are committed to the mission of the ABC
- Cardiologists in Training.....\$76.00
- Institutional MEMBERSHIP\$1,000.00
- Life Membership (Payable in 3 years).....\$4,425.00

RACE/ETHNIC BACKGROUND

Completion of this information is strictly voluntary. The information provided will not be used for any purpose other than to provide the ABC with statistical information concerning the level of participation in our programs.

Please check one of the following:

- African American Asian//Indian Caucasian Hispanic Other _____
- Male Female

METHOD OF PAYMENT

Check (drawn on US bank in US dollars) Business Personal Institution

Credit Card MasterCard Visa American Express

Card number _____ Expiration date _____

Name as it appears on card _____

Signature _____

OFFICIAL USE ONLY

CC-Approval Code# _____

\$ _____ Date _____ Initial _____

CK-# _____ CK-Date _____

Mail completed form to:

Association of Black Cardiologists, Inc.
6849 B-2 Peachtree Dunwoody Road
Atlanta, GA 30328