News from The American Association of Cardiologists of Indian Origin

March 1997

What Made These Tests Obsolete?

Was It Progress or Programmed Extinction?

By Ivan A. D'Cruz, M.D., F.R.C.P. (Lond. & Edin.)
Professor of Medicine, University of Tenessee
Director, Echocardiography Laboratories, Memphis,
V.A. Medical Center and University Tenessee Hospital

As this century approaches its completion, those of us who began our medical careers during the mid-century decades can cast our memories back to those years, and marvel at changes in the practice of medicine and cardiology. It is as if exuberant proliferation of a modest village resulted eventually in a vast metropolis bristling with skyscrapers and massive edifices.

What was the cardiology scene like then, in the mid-twentieth century? Until the second World War, the electrocardiogram and chest X-ray were all the internist had to help diagnose heart disease. The ECG, an invention of experimental physiologists, had developed into a reliable reflection of the heart's electrical activation, a ready key to recognizing arrhythmias, infarction and chamber hypertrophy. An amazing range of diagnostic information could be read out of a few squiggly lines on a strip of paper. Fortunately, its pioneers had early standardized the nomenclature and precise location of the various ECG leads. Would that echocardiographers of the present era had likewise a universal uniformity in their terminology, anatomic specificity and number of ventricular segments for wall motion. This they have been unable to do in spite of a multitude of available experts and many well-organized national and international societies of cardiology and echocardiography. Meanwhile, an element of ambiguity and confusion in reporting wall motion continues to prevail.

Right heart catheterization was introduced in the nineteen-forties. Angiocardiography, left heart cath and coronary angiography evolved rapidly over the next two decades concomitantly with heart surgery. A great demand for equipment and cardiologists for these procedures followed. Thus were departments of cardiology created and thus did they thrive all through the Western World.

The same process of cardiac specialization occurred, at a more languid pace in third world countries its tempo painfully slow not only because of lean resources but also vicissitudes of government ignorance and institutional bureaucracy. Little formal training in cardiology was available then in India. Any internist who could buy an EGG machine could instantly announce he was a cardiologist and many did. Such pseudocardiologists, handicapped by lack of proper training and knowledge, perpetrated errors of ECG interpretation and thereby bungled the diagnosis of their unsuspecting patients.

The hot topics those years (late fifties, early sixties) were phonocardiography and vectorcardiography. Academic centers in Europe and the USA were busy correlating data from cath studies with a variety of time-intervals on phono and external pulse tracings. Cardiology journals on both sides of the Atlantic were full of such papers. Paul Wood, the oracle of British Cardiology until his untimely death in 1963, crystallized this "new cardiology", a felicitous marriage between cath data on one hand, and high-quality beside clinical examination on the other. His remarkable textbook was a bible for us and budding cardiologist all through the British Commonwealth. When I first met Dr. Pravin Shah in Chicago in the sixties, he was with Luisada researching the physiology of the heart sounds. Hemodynamic-phonocardiographic correlations elevated auscultation to a fine art, attaining heights of excellence from which a steady and regrettable decline ensued over the subsequent decades.

In the US, third party payers abruptly ceased paying for phonocardiograms-pulse recordings in the mid-I 970's, whereupon these tests promptly became obsolete for all practical purposes. This loss was a significant one not only for the science of cardiology but also for the teaching and learning of physical signs in teaching hospitals. Yet those who held high office in these institutions made little protest or outcry; they allowed these graphic instruments of instruction and diagnosis to sink silently into oblivion. Nor did the manufacturers of high tech electronic cardiac equipment have many regrets; they saw appetizing prospects of "bigger bucks" in the then new field of cardiac ultrasound. Although more esoteric and intellectually challenging than electrocardiography, vectorcardiography was certainly superior to the inner in resolving certain diagnostic problems, such as the distinction between ventricular hypertrophy and intraventricular conduction defects or between both and infarctions. However, in teaching hospitals, the VCG had an even more important role in helping cardiologists or Fellows to think in terms of 3-dimensional cardiac electrical forces, and thereby gain a deeper understanding of how various 12-lead ECG patterns are generated.

Lamentably, even if VCG were somehow to make a miraculous comeback, few cardiologists are now extant, even in prestigious university centers, who can read the VCG, let alone teach it to those in training.

Closer to the present decade, we have witnessed M-mode echocardiography succeeded and superseded by 2-D echo, Doppler, Color-Doppler, contrast perfusion echo, TEE, intravascular ultrasound, tissue characterization technology, 3-D echo, etc. The echo equipment manufacturers devise new gimmickry, introduced every six months at National Cardiology meetings, each of which augments the price of the echo machine by twenty to fifty thousand dollars. The younger generation of cardiologists, and cardiac Fellows new to the Cardiology scene, are dazzled by all this technical wizardry, extravagant claims of superior software which usually falls short of reality. The younger generation are left with the impression that M-mode echo is a primitive technique, unworthy of a 1997 Cardiologist. Thus they ignore (or are ignorant of) valuable M-mode clues, sometimes subtle, which provide diagnostic information otherwise obtainable only by invasive means.

The first echo equipment I used, in 1976, had ECG, M-mode, phone and external pulse channels, and cost about $17,000. Current state-of-the-art echo equipment costs 15 times that price; it contains M-mode, 2-D, Doppler of all kinds, electronic calipers and computerized paraphernalia controlled by a formidable array of probes and buttons.

No phono or pulse tracing channel will one find on these machines; these techniques have been consigned to medical oblivion. Along with vectorcardiography equipment, phono appliances are now to be found, where they exist at all, rusting away in dark storerooms, or in museums of medical history, relics of a dead but glorious and enlightening past.

NEWS

INTERNATIONAL CONFERENCE IN CARDIOLOGY, sponsored by the Medical Council of India, University of Alabama School of Medicine, AACIO, and various prominent institutions in India, was held December 21-22, 1996 in Rajkot The faculty included Dr. Gautam Dave, Rajkot; Dr. B.K. Goyal, Bombay; Dr. Rajendra Goyal, Bombay; Dr. Pramod K. Mohanty, Richmond; Dr. Navin Nanda (International Director), Birmingham; Dr. K. Ramaswamy, Boston; Dr. Rajendra N. Seth, Philadelphia, and Dr. Satyvan Sharma, Bombay. The conference was attended by over 500 participants, and was a success. Dr. Nanda was given a special award by the Mayor of Rajkot.

CONFERENCE ON UPDATE AND RECENT ADVANCES IN CARDIOLOGY PALACE ON WHEELS, INDIA. The palace on Wheels Tour and Conference was held December 25, 1996 - January 1, 1997 under the auspices of the University of Alabama at Birmingham CME Division and was cosponsored by the American Association of Physicians of India. Over 50 physicians participated. The faculty consisted of Drs. Manjit Singh Bains (New York), Navin Nanda (Birmingham, Conference Director), Kul Deep Chadda (New York), Madhukar Deshmukh (New York), Mohan Durve (Cleveland), Robert Kramer (New York), Krishna Ramaswamy (Boston) and Gulshan Sethi (Tucson). Many interesting topics were discussed, including newer approaches to diagnosis and management of cardiac arrhythmias (Dr. Chadda), modern therapy of congestive heart failure, influence of HMO's on cardiology practice in USA (Dr. Deshmukh), effects of alcohol in health and disease (Dr. Durve), clinical cardiac examination, heart blocks (Dr. Kramer), stress echocardiography, contrast and 3 and 4-dimensional echocardiography, valvular and congenital heart diseases, coronary artery disease in Asian Indians (Dr. Nanda), PTCA, stent placement and atherectomy, management of acute myocardial infarction, intravascular ultrasound (Dr. Ramaswamy), newer surgical approaches in the management of coronary artery disease, prosthetic valves, valve repair (Dr. Sethi). Dr. Bains gave lectures on esophageal and lung carcinoma and their impact on cardiac management. In addition, interesting cases brought by the participants were discussed by the faculty. Drs. Nanda and Deshmukh also took the opportunity, during the visit to Jaipur, to participate in the Golden Jubilee celebrations of the Sawai Mansingh Medical College (Jaipur University), where Dr. Nanda was given a special award and he gave an invited lecture on "Recent Advances in Echocardiography".

The next Palace on Wheels Conference is scheduled for December 17-24, 1997. For further information please contact Indira Patel, Sunland Travels, 2374-A Jericho Turnpike, Garden City Park, NY 11040, or phone 516-741-9555.

For information on the following conferences, contact Navin C. Nanda, M.D., University of Alabama at Birmingham, Heart Station SW/S102, Birmingham, AL 35233; phone: 205-934-8256; fax: 205-934-6747:

September 25-28, 1997 **10th Annual Recent Advances in Echocardiography.** Callaway Gardens Resort, Pine Mountain, GA, sponsored by the University of Alabama School of Medicine, UAB Division of Continuing Medical Education and the Georgia Heart Clinic, LaGrange, GA. Credits: CME to be arranged.

November 7-8, 1997 **Echocardiography - State of the Art.** Orlando, FL, just prior to the American Heart Association Meeting. Sponsored by the University of Alabama School of Medicine, UAB Division of continuing Medical Education. CME credits to be arranged.

YIA Competition

The presentation of the paper for the YIA award will be made by Sanjay Malhotra, MD and his colleagues from the University of Alabama, Birmingham, AL.

Title: Color Doppler Assessment of Intramyocardial Coronary Arteries

Co-authors are: M. Hsiung, Navin Nanda, D. Agarwal, L. Lamotte, M. Espinal, F. Jamil, C. Carvalho, and M. Koldal.

Announcement

We are pleased to announce that Ivan D'Cruz, MD, a Senior Associate Editor of Echocardiography, has been appointed to be in charge of the Image Section feature of the Journal. Dr. D'Cruz is Professor of Medicine, University of Tennessee, Memphis, and the Director of Echocardiography Laboratories at the VA Medical Center and William F. Bowld Hospital, Memphis.

— Navin C. Nanda, MD, Editor-in-Chief, Echocardiography

FLASH !

EARN FREE MILEAGE ON DELTA AIRLINES TOWARDS FREE TRAVEL (DOMESTIC, AND INTERNATIONAL)

AACIO is giving an incentive to the members for renewing their life memberships ($600, one time payment), or memberships ($60, payable yearly).

Under this program, if you become a life member, you will be given vouchers for 15,000 miles on Delta Airlines; and if you become a regular member, you will be given vouchers for 1500 miles on Delta Airlines (Delta gives you a free round trip ticket in the US and Canada for just 25,000 miles !). These miles then can be deposited in your Delta Sky Miles account, and will enable you to earn free trips all around the World. If you are not a member of the Delta Sky Miles Program, there will be instructions on the vouchers, which will enroll you instantly in the program.

AACIO therefore encourages very strongly its members to take advantage of this rare opportunity. We have bought from Delta Airlines a limited number of miles, so this offer is good only until the vouchers last! Remember, the miles are absolutely **FREE** to you!

Please send your membership dues by check (made payable to AACIO), or pay by Discover, Master Card, or VISA to the following address : 1216 North Claridge Way, Carmel, IN 46032, Tel 317-580-1241, FAX 317-580-1245.

Help Prevent

FIRST MI

Ask your Bristol-Meyers Squibb Representative about How to Prevent First MI.

Please plan on attending the AACIO meeting on Sunday, March 16, 1997 in Anaheim, during the ACC Conference.

Program sponsored through an educational grant from:

Bristol-Myers Squibb Company

Program for the Grand Rounds / Annual Meeting of AACIO / Dinner

AACIO is proud to announce the Grand Rounds to be given by Robert Rosenson, MD, Director of Preventive Cardiology Center, Rush Presbyterian Hospital, Chicago, IL. The topic will be "Recent Advances in the Role of HMG - CoA reductase inhibitors in the prevention of AMI". This activity is sponsored by an educational grant from the Bristol-Myers Squibb Company.

- Date: Sunday March 16, 1997 • Place: Anaheim Marriott • Time: 6:00 PM
- Reception - 6:45 to 7:30 PM • Grand Rounds - 7:30 to 7.45 PM Q & A, discussion
- 8:00 PM Dinner

Please FAX this information to the following number, prior to March 7, 1997 :

Atul R. Laddu, MD, PhD, FACC
Vice President, AACIO
FAX # 317-580-1245

Re : Grand Rounds by Robert Rosenson, MD, Sunday March 16, 1997 / AACIO Annual Meetings / Dinner
Place : Anaheim Marriott • Time : 6:45 p m

Atul Laddu, MD, PhD
1216 N. Claridge Way
Carmel, IN 46032