



INDIAN SOCIETY FOR ATHEROSCLEROSIS RESEARCH - NEWS BULLETIN

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for atherosclerosis Research.

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INDIAN SOCIETY FOR ATHEROSCLEROSIS RESEARCH

Executive Council 2005-2007

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President-Elect.

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Vice President

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Dr. S. K. Biswas
Dr. Lal Chandra
Dr. Manjari Mukherjee
Dr. K. V. Pugalendhi

Advisors (from NRI Members)

Dr. Kamlesh Ashotra
Dr. Jay Kalra
Dr. Rajavashisth Tripathi

Past President

Dr. Gowri Chandrakasan



PRESIDENT'S MESSAGE

Dear Colleagues,

It gives me great pleasure to communicate few lines to you .I have taken over as president of our society during the last annual conference held at New Delhi. I take this opportunity to assure you that the new executive will put all efforts to strengthen the association further both in numerical strength and academic / research activities. To achieve this I request every member of the society to encourage at least one new life member to join the society.

Dr.S.R.Gupta
President ISAR
Cardiologist
Tirupati



SECRETARY'S MESSAGE

Dear Members,

Thank you all for confirming your faith on me to run the Secretariat. I shall do my best that's my promise to you.

Our main objective at this juncture is to increase the membership number in our societies and have permanent membership (life) from ISA for all our willing member instead of yearly renewal.

Many member's addresses have changed. Students have left the institution after final the course. We need to have an upto date of postal addresses / E mail addresses of all members who had ever taken membership in this Society. My earnest request to all members is to send their address to me and also try to get their known members' addresses. We intend to have a Members Directory.

The last Annual Conference at New Delhi was a grand success with International symposium on Atherosclerosis. Quite a few delegates came from USA/Canada. They have expressed their eagerness to become life member of our society and hence decision was taken in general body meeting to have one executive representative from NRI members.

The brief report of the last conferences has been published in this bulletin.

Our next conference will be held in Chennai. It has been decided in the general body meeting.

Details of the next conference will be given at the website and also published in the bulletin.

Dr. Jayashree Bhattacharjee
Secretary ISAR



Report of XVIIIth Annual Conference

The XVIIIth Annual Conference of the Indian Society of Atherosclerosis Research and International Symposia / CME on Atherosclerosis was organized by the department of Biochemistry, Lady Hardinge Medical College, New Delhi. (Nov 25-27th, 2005). The organizing Secretary was Dr. Jayashree Bhattacharjee, Dir. Professor, and Head of the Department of Biochemistry, Lady Hardinge Medical College.

The Organizing Committee was honoured to receive encouraging messages from Dr. Anbumani Ramadoss, Minister of Health and Family Welfare, Govt. of India, Madam Shiela Dikshit, Chief Minister of Delhi and Prof. G. K. Sharma, Principal and Medical Supdt., Lady Hardinge Medical College., Dr. Gowri Chandrakasan, President ISAR, and Dr. N. Nalini, Secretary ISAR.

The Conference was well attended by national and international faculty and the scientific deliberations provided a virtual update on the latest developments on atherosclerosis Research across the world. The focus of the conference was women and atherosclerosis and the factors beyond dyslipidemias which could be playing an important role in etiopathogenesis of atherosclerosis.

The conference was inaugurated on 25th Nov. 2005 by Dr. N.K. Ganguly, Director General, ICMR. Dr. (Prof.) M. Khallilullah gave an inaugural address on Cardiology in the 21st century wherein he highlighted the tremendous progress in cardio-vascular sciences particularly invasive and interventional cardiology in the last two decades.

The plenary lectures were given by renowned international and national scientists in this field.

Professor Rajavashishth Tripathi (University of Medicine and Science) California talked in detail about the Molecular Basis of Therapies to favourably modify chronic inflammation and atherosclerosis whereas Professor Jawahar Kalra (College of Medicine, Saskatoon, Canada) gave an interesting plenary lecture on cell proliferation in atherosclerosis

.The Symposias on Day I were on Pathophysiology of lipids and lipoproteins, Genomics and Women and atherosclerosis. The Symposia sessions were followed by eight talks in Short Symposias and thirty poster and free paper sessions. The conference went on till 8.30 p.m.

On the second day of Conference, the first plenary lecture was given by Prof. Dr. Rai Ajit Srivastava (Dept. of Atherosclerosis, Bristol, U.S.A.) on the targeting of Reverse Cholesterol Transport pathways to treat atherosclerosis. This was followed by a very interesting lecture on the non-surgical management of coronary artery disease by Prof. D.S. Gambhir, Dir. of Cardiology, Kailash Heart Institute, The Symposias on this day were on Epidemiology of Atherosclerosis, Paediatric Cardiology and Pharmacological control of Lipids and Lipoproteins. This day had seven lectures in short symposia and thirty two free paper and poster presentations run in parallel sessions.

On the final day of the conference, Prof. Yamini Tripathi gave the Prof. K.A. Kurup Oration on BHUX, a Polyherbal formulation for atherosclerosis and hyperlipidemia. The plenary lecture of this day was delivered by Dr. Kamlesh Ashotra of the Tobacco Research Development Project, USA. The Symposias of this day were on Obesity, hypertension and atherosclerosis; Prevention of Atherosclerosis and Basic Sciences.

This was followed by the Validictory Function and Award Presentation.

Dr. S.K. Biswas presented five Travel grants to selected free paper presentations and the Balaji Endowment medal and certificate was also awarded.

Due to the high research standard of presentations and the enthusiastic participation of doctors and scientists from India and abroad, the ISARCON 2005 was very successful and academically fruitful.

The Conference was also attended by Media Personnel and highly appreciated in the Times of India (Delhi, Main Newspaper dated 6th April 2006, Pg. 6).



Announcement

All the speakers of 2005 conference are requested to send to the Secretariat their full paper latest by 30th June by e-mail as well as a hard copy and C.D. for incorporation in the Proceedings of ISARCON 2005 .

' ADVANCES IN ATHEROSCLEROSIS '

Forthcoming Conference

XIV INTERNATIONAL SYMPOSIA ON ATHEROSCLEROSIS
June 18-22, Rome, Italy

76th EAS Congress
EUROPEAN ATHEROSCLEROSIS SOCIETY (EAS)
10-13, June 2007, Helsinki, Finland

7th INTERNATIONAL CONGRESS ON CORONARY ARTERY DISEASE
Venice, Italy, October 7-10, 2007

ISARCON 2006

Next Annual Conference

Is

Scheduled at

Department of Biochemistry ,University of Madras
Gundy Campus, Chennai

Organizing Secretary :

Dr. Niranjali Devaraj

Professor and head ,Department of Biochemistry
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Babies before and after birth, Mother and Onset Of Cardiovascular disease

Dr. Anita Khalil, Consultant Pediatrician

Former Director Professor of Pediatrics, Maulana Azad Medical College, New Delhi

Introduction

Undernutrition and micro nutrient deficiencies continue to affect mothers and children of developing countries and remain the major focus of nutrition intervention efforts. In addition, low birth weight and retarded fetal growth are twice as common and they reflect on poor maternal nutrition and also on maternal smoking.

Concurrently obesity and other diet related chronic diseases (eg) Cardiovascular diseases and non-insulin dependent diabetes mellitus are increasing by leaps and bounds in countries undergoing economic transition.

Fetal origins of chronic diseases

Dr. David Barker and his colleagues surveyed development charts on newborns (1914-1935) and followed them to adulthood in counties of Sheffield and Hertfordshire. Esther Margaret Burnside, mid wife and county health visitor carried out this monumental task. The analysis of the survey revealed that 73% of the men and 48.5% of the women died due to cardiovascular diseases.

At this time Dr. Barker made a landmark statement : - “Blueprint of cardiovascular health is established before birth” with inverse associations with size at birth, which include birth weight , length and ponderal index (WT/HT³X 100) with CAD, hypertension and insulin resistance syndrome which have been reported from all continents.

Undernutrition is implicated in 60% of the 12 million deaths annually of school children (WHO 2000). In India post natal nutrition has improved, but pre-natal

nutrition has not, because mean birth weight still remains between 2.7 to 2.8 mg. When Indians migrate to other countries, CAD rates rise still higher.

Fetal Programming (Imprinting)

Programming a process where by an insult or stimulus at a critical period of development has a lasting and life long significance.

During fetal growth, changes in nutrient and hormonal milieu of the conceptus at birth, brings about permanent changes in structure and physiological functions of sensitive organs.

Animal studies have established 3 principles

1. Undernutrition in early life brings about permanent effects by reducing number of cells, altering organ structure and resetting the hormonal feedback.
2. Undernutrition in early gestation brings about fatter offspring
3. Undernutrition in late gestation, impairs glucose tolerance as well as fetal growth. Rapidly growing infants are more vulnerable to under nutrition

Nutritional programming of CVS is steroid dependent because there is resetting of hypothalamus pituitary axis. IGF I and II, (insulin like growth factor) both promote growth during gestation whereas growth hormone is responsible for post natal growth.



DOWN'S SYNDROME



The Times of India, New Delhi
Thursday, April 6, 2006

Kids with Down's less prone to heart diseases

By Vividha Kaul/TNN

New Delhi: Here's a silver lining for kids affected by Down's Syndrome. Doctors at Lady Hardinge Medical College (LHMC) have found that despite possessing all the risk factors that predispose people to cholesterol deposits, hardening of arteries and heart attacks, children with Down's do not develop the condition due to high levels of an enzyme.

The study was conducted among 46 children suffering from the condition. The children have high lipid levels, triglycerides and diabetes, which in the ordinary population lead to hardening of arteries or atherosclerosis. Atherosclerosis eventually restricts flow of blood to the heart and causes heart attack.

The study was presented at ISARCON, an international conference on atherosclerosis held at LHMC recently. Dr Ritu Singh, associate professor, department of biochemistry, who conducted the study explained, "We found that the levels of an enzyme called superoxide dismutase in these children were almost two-and-a-half times more. This may be due to the presence of three sets of the 21st chromosome which Down's Syndrome children have as against two sets in others."

Atherosclerosis is primarily caused due to three factors — high level of lipids, oxidative stress (OS) and inflammation. Superoxide dismutase works by reducing the oxidative stress of an individual. "So far, however, only high level of lipids has been considered as a major risk factor for atherosclerosis. The focus of drug use too has also been on lowering lipid levels with not much stress being given to OS and inflammation," says Dr Singh.

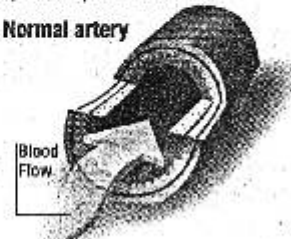
Says head of department of biochemistry Dr Jayashree Bhattacharjee, "Atherosclerosis is increasing rapidly. Indians are at increased genetic risk and changes in lifestyle and diet are additive risk factors."

Ups And Downs

A recent research finding states that despite possessing all the risk factors of atherosclerosis, which makes people prone to heart attacks, kids with Down's Syndrome don't develop the condition due to high levels of an enzyme. The study is considered a breakthrough as it is going to help develop new medicines

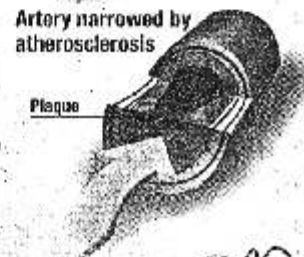
What is Atherosclerosis? Normal artery

Atherosclerosis comes from Greek words athero (meaning gruel or paste) and sclerosis which means hardness. It is caused by deposits of fatty substances, cholesterol, cellular waste products and calcium inside the artery. This eventually restricts the flow of blood to the heart and causes a heart attack



Why Down's Syndrome children don't develop it?

Kids with Down's Syndrome have high levels of lipids, triglycerides and diabetes. But they don't develop atherosclerosis, probably due to the high levels of an enzyme called superoxide dismutase



What is Down's Syndrome?

Down's Syndrome is a condition in which extra genetic material causes delays in the way a child develops, and often leads to mental disability. It affects one in every 800 babies born

Structure of superoxide dismutase



Why is this study so important?

Apart from leading doctors to develop newer drugs to combat atherosclerosis more effectively, the study reinforces that cutting down on smoking, stress and reducing cholesterol levels help lead more healthy lives as all these factors are known to increase oxidative stress



APPLICATION FORM FOR MEMBERSHIP

1. Full Name: Dr./Mr./Mrs.
Surname Middle Name First Name
2. Designation
3. Office Address
.....
..... Pin.....
Phone No. Fax..... E.Mail
5. Academic Qualifications
6. Student Yes/No
7. Experience in the field of Atherosclerosis Research
.....
.....
8. Recommended by
(with office address designation and signature)

Date Signature of the Applicant.....

Note: Membership of the society shall be open to qualified person working in the field of Atherosclerosis Research. Student Members should be recommended by Head of the Department or Equivalent Authority.

Membership	Fees
Life Membership	Rs. 1000/-
Ordinary Membership	Rs. 100/- (annual)
Student Membership	Rs. 50/- (annual)
Patron Membership	Rs. 5000/-
NRI Membership	Rs. 200 \$

Life Members are very kindly requested to send the International Atherosclerosis Society annual subscription of Rs.150 every year. (equivalent of US\$ 3.00)

Membership fees may kindly be sent along with this form by Demand Draft in the name of Secretary / Treasurer , Indian Society for Atherosclerosis Research, payable at New Delhi.

Address for correspondence;

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Glimpses of ISARCON-2005

