



INTERNATIONAL SOCIETY OF HYPERTENSION

# Hypertension News

Opus 13

July 2007

**Recruit a new  
member!**

[www.ish-world.com](http://www.ish-world.com)



Dear ISH Member,

This issue of Hypertension News deals with the following.

- **Membership Drive** - an opportunity for all members to contribute
- **Council activities update** - from the President - there's a lot happening
- **Reducing 'tension' in the Middle East:** co-operation at one level at least
- **World Hypertension Day** - by Arun Chockalingam from the World Hypertension League
- **Hypertension and the Kidney** - a succinct summary of vascular factors by Gerard London

A handwritten signature in black ink, appearing to read 'L. Beilin', with a horizontal line underneath.

**Lawrie Beilin**  
**Editor Hypertension News**



## **PRESIDENT'S ADDRESS**

**Lars H Lindholm, Sweden**

### **Recruit a new member to ISH!**

The list of ISH members was in great need of revision. Altogether, the Society had around 950 regular members at the end of 2006, many of them were no longer active in the field of cardiovascular disease, several had retired, and some had died. Emails and letters to them were repeatedly returned as undeliverable. The Membership Committee found around 250 members who had not paid for 2005 and 2006 (most of whom had, in fact, not paid for several years before that) and hence, they were removed from the membership list by the Executive Committee on 15 February 2007. This could be done without any formality according to the old ISH By-laws (Article III p.7.0) as well as the new ISH Constitution (adopted on 8 May 2007) since they had not paid for two consecutive years (2005 and 2006). We have kept the possibility open for them to re-enter the ISH without any formality until the end of 2007. Hence, the ISH now has 721 members, including Regular and Emeritus Members.

On 14 June, the Membership Committee looked at (i) some former members who could be offered Emeritus status and (ii) at 40 new applicants for regular membership who have been recruited since the Fukuoka meeting. All 40 were approved and the applicants were made acting members until the ISH General Meeting in Berlin in 2008 when their applications will be formally endorsed. Needless to say, the *recruitment of new and younger members of both sexes is of the greatest importance for the ISH* and we need assistance from every one of you! Please recruit new members to ISH!

The updated membership list (with addresses, telephone and fax numbers, as well as e-mail addresses) is now available on the ISH website in the Members Only Area. To print and distribute a membership booklet would be rather expensive so at present we will try to use the website instead of an address book. The website is certainly easier to keep up to date.

Today, 83% of ISH members have paid their dues for 2007. Our Secretariat at Hampton Medical Conferences recently sent out a reminder to those of you who have not yet paid.

#### *Corporate members*

The ISH now has eleven Corporate members (in alphabetical order: Astellas, AstraZeneca, Bayer Schering Pharma, Boehringer Ingelheim, Daiichi-Sankyo, Merck/MSD, Novartis, Omron, Pfizer, Servier and Takeda). Spengler has expressed interest but not yet applied formally. For help with this, we express our sincere thanks to: Robert Fagard (Spengler), Stephen Harrap (Omron), Tony Heagerty (Daiichi-Sankyo), and Kazuaki Shimamoto (Astellas Pharma, Takeda). The recruitment of new Corporate Members is very important indeed for the ISH and all members are encouraged to assist. Our Secretariat at Hampton Medical Conferences has put together a brochure on what it means to be a Corporate Member.

Moreover, a full 5-page Report of the current ISH activities (The President's Report) has been sent to all current ISH members. If you have not received it, please contact our Secretariat at Hampton Medical Conferences (Email: [secretariat@ish-world.com](mailto:secretariat@ish-world.com)).

Lars H Lindholm  
**President of ISH**



## ***The Israeli Forum for Prevention of Cardiovascular Diseases***



**Ministry of Health ♦ Israeli Medical Association ♦ Sick Funds ♦**

**Barzilai Medical Center, Ashkelon 78306, Israel**

### **HYPERTENSION CONTROL IN ISRAEL AND NEIGHBOURING COUNTRIES**

**Prof. J.R. Viskoper**- Chair "The Israeli Forum for Prevention of Cardiovascular Diseases", Ashkelon, Israel

**And Prof. Z. Abdeen** – Director – Al-Quds Nutrition & Health Research Institute, Abu-Dies, West Bank

Community control of hypertension and other cardiovascular risk-factors has been a major topic in Israel. The main partners for this have been the Israeli Society of Hypertension, 4 Sick funds and the Israeli Forum for Prevention of Cardiovascular Diseases

"The Israeli Forum for Prevention of CVD", was founded following the publication of:

1. The "Ashkelon hypertension detection and following program": a 10 years project for detection of high risk subjects among 12202 subjects with treatment of all their risk-factors. There was a subsequent reduction of standardized mortality ratio in the area for acute MI, from 100 to 76, for CV disease from 129 to 107.
2. "The Israeli Blood Pressure Control" (IBPC) program to improve the quality of care of high risk subjects. This is a general practitioner based intervention program involving 30 General Practitioners and encompassing 4948 subjects. After 1 year a significant improvement of all risk-factors was observed and the program was shown to be cost effective.

Subsequent to these two studies "The Israeli Forum for Prevention of CVD", was established to enhance primary prevention of CVD in a frame work of Sick funds applying the techniques developed in former studies and using worksite based intervention programs.

In a survey that was performed in 2005, 6483 subjects from all over Israel were known examined: 12% were known hypertensives, 62% were known normotensive, 16% did not know their blood pressure status, 52% of females and 58% of known hypertensives males still had elevated blood pressure levels. Also from, so called, normotensive of 18% females and 28% of males had elevated blood pressure, 30% of those who did not know their blood pressure status.

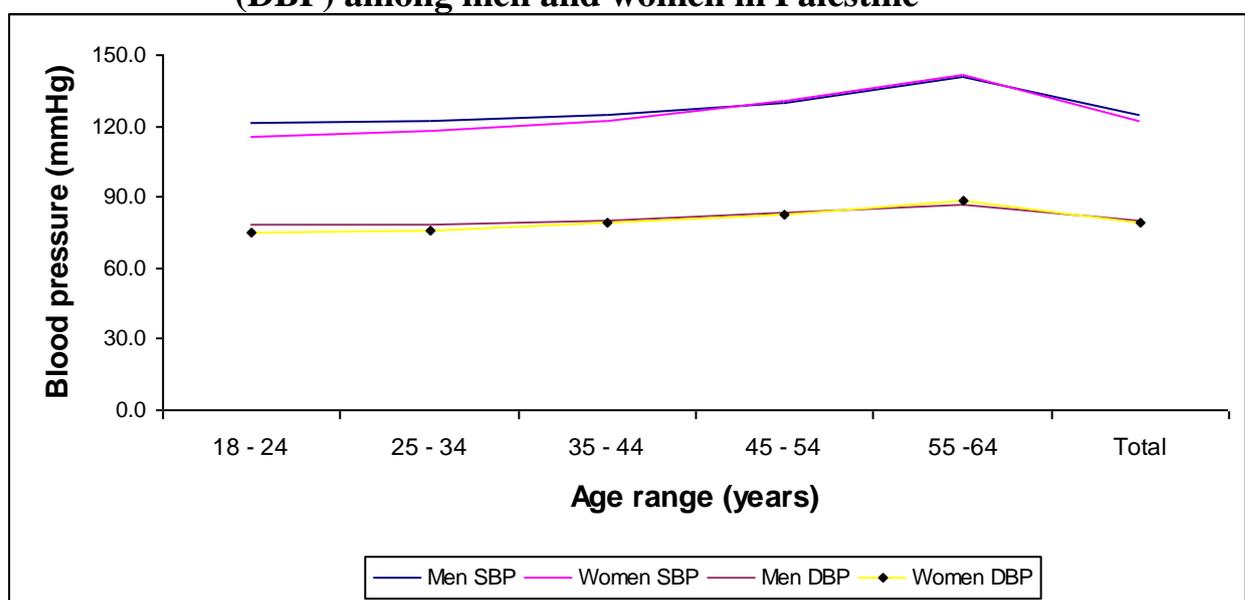
An attempt has been made to set up a combined Israeli – Palestinian effort in the field of primary prevention of CVD with help of medical teams of physicians for human rights. In addition a collaboration has been developed with our Palestinian partner- Prof. Z. Abdeen.

**J.R. Viskoper**

There can be no doubt that we are witnessing major changes in the health profile of many countries in the Middle East. The control of many infectious and parasitic diseases and the sharp decline in infant mortality have increased the average life expectancy in these countries. Since people live longer, they are exposed to diseases of old age such as hypertension and cardiovascular disease. Cardiovascular diseases are now the main cause of death, being responsible for 42.5% of all deaths, while 20 years earlier they accounted for only 12.4% of mortality [1]. According to the National Hypertension Project data 26% of adult Egyptians suffer from high blood pressure.

According to the First National Health and Nutrition Survey data which was conducted in 2000, 9.4% of adult Palestinians are hypertensive, with similar prevalence by gender (9.7% in male and 9.1% in female but different prevalence by region (West Bank 11.2% and Gaza 6.4%). Furthermore, only 8% of the sampled population (n = 4500) were told by their doctor that they suffer from high blood pressure (male 5.5%; female 10.2%). In Lebanon, the rate is 14.4% in male and 7.2% in female.

### Distribution of systolic blood pressure (SBP) and Diastolic blood pressure (DBP) among men and women in Palestine



Data from Scotland and the New Zealand showed that correction of risk factors contributed to about 60% of the total CHD mortality fall. Detection, prevention and control of the previous modifiable cardiovascular risk factors is a very important measure in order to slow or combat the cardiovascular epidemic in the Middle East.

**Prof. Z. Abdeen**

**Chair: Prof. J.R. Viskoper**

**Secretary: Dr. D. Dicker**

**Tel: 6745-08-972550/1. Fax: 972-6745552-08**

**E-mail: [reuenv@barzi.health.gov.il](mailto:reuenv@barzi.health.gov.il)**

epidemiology of hypertension in middle east :רופאים לזכויות אדם



**The World Hypertension Day  
Dr. Arun Chockalingam, Secretary General,  
World Hypertension League**



The World Hypertension Day (WHD) is an initiative of World Hypertension League (WHL). The WHD was first inaugurated in May 2005 and has become an annual event ever since. The purpose of the WHD is to promote public awareness of hypertension and to encourage citizens of all countries to prevent and control this silent killer, the modern epidemic. Nearly 1 billion adults around the world live with hypertension and about one half of them are not even aware of their condition.

The WHL in collaboration with all its national member societies/leagues celebrate WHD. As in the past two years, WHD 2007 was a great success.

Many countries have successfully carried out WHD using different formats. The theme of this year "Healthy Diet...Healthy Blood Pressure" was well received by all countries. Many countries employed media campaigns, political advocacies, public seminars and public rallies including blood pressure screening clinics to promote awareness. Special publications and editorials were released around WHD in several countries. There were overwhelming partnerships between public, private, non-governmental and professional organizations in several countries around the world. The WHL issued a News Release on May 17th the day of WHD 2007 via global wire service to reach newspaper/radio/TV/internet media worldwide. The coverage reached millions of individuals in several countries.

May 17th is dedicated to be the WHD every year. The WHL is affiliated with the International Society of Hypertension and is in official relations with the World Health Organization. For more information about WHL and WHD please visit [www.worldhypertensionleague.org](http://www.worldhypertensionleague.org).



## **PRESSURE OVERLOAD IN CHRONIC KIDNEY DISEASE**

**G rard M. LONDON**

Centre Hospitalier F.H. MANHES, 8 rue Roger Clavier, Fleury-M rogis, 91712, France  
Tel: +33 169256485; Fax: +33 169256525; E-mail: [glondon@club-internet.fr](mailto:glondon@club-internet.fr)

Cardiovascular complications are the leading cause of mortality in patients with chronic kidney disease (CKD) and end-stage renal disease (ESRD). The high risk for cardiovascular disease (CVD) results from the additive effect of hemodynamic overload and several metabolic and endocrine abnormalities more or less specific to uremia. CVD includes left ventricular hypertrophy (LVH) resulting from a combined pressure and volume overload, and disorders of the vascular system. The disorders of the vascular system such as atherosclerosis are responsible for occlusive ischemic lesions, and arteriosclerosis associated with stiffening of arterial system. Arterial stiffening is associated with predominant or exclusive systolic hypertension, the most typical form of hypertension in CKD/ESRD patients. More recent prospective studies have directed attention to SBP as a better guide than DBP to evaluate CV and all mortality, and in parallel these study demonstrated that pulse pressure is an independent CV risk factor.

In ESRD patients, increased pulse pressure is associated with cardiovascular mortality and morbidity. Increased pulse pressure in this population results not only from higher systolic pressure but is tightly associated with normal and frequently lower diastolic pressure. Low diastolic pressure is by itself associated with poor clinical outcome. Systolic as well as pulse pressure are surrogate markers of pressure load, and result from the interaction between cardiac factors (stroke volume, ejection velocity) and arterial factors opposing LV ejection: (a) peripheral resistance; (b) stiffness of the aorta and large central arteries; (c) intensity and timing of wave reflections. With the progression of anemia, decreased blood viscosity, and creation of arteriovenous shunts the peripheral resistances are usually normal or lower in uncomplicated CKD/ESRD, and the principal « pressure » factors opposing ventricular ejection are arterial stiffness and stiffness-associated early return of wave reflections. Increased arterial stiffness of elastic type arteries is associated with reduced creatinine clearance and is already observed in subjects with mild-to-moderate impairment of renal function and in patients with CKD. Aortic stiffness and early wave reflections are independent predictors of all-cause and cardiovascular mortality in ESRD patients. Arterial stiffening in ESRD patients are associated with many factors including non-specific factors such as: age, gender, smoking, blood pressure, diabetes. Arterial stiffening is in CKD/ESRD patients due to abnormal intrinsic properties of the biomaterials of arterial walls associated with presence of arterial calcifications and increased calcium deposits in the arterial media. Arterial calcification (AC) is a common complication in metabolic syndrome, diabetes and chronic kidney disease (CKD), and the extents of AC were predictive of subsequent CVD and mortality beyond established conventional risk factors in general population and CKD patients. For many years, AC was considered to be the result of passive mechanisms due to elevated phosphate levels and high calcium–phosphate ion product resulting in super-saturated plasma. Recent studies have shown that AC is a regulated process with plasma constituents maintaining minerals in solution and inhibiting their deposition in tissues, and evidence indicates that many proteins involved in bone metabolism can be expressed in arterial tissue, reflecting transdifferentiation of vascular smooth-muscle cells. In CKD/ESRD

the calcifications are tightly related to mineral metabolism abnormalities such as hyperphosphatemia. Arterial calcification occurs in two forms: intimal and medial. Intimal calcification occurs within atherosclerotic plaque in the intima and is a feature of common atherosclerosis. Medial calcification (Mönckeberg's sclerosis) is characterized by diffuse mineral deposits within the medial wall of the arteries. Diffuse medial wall calcification influence morbidity and mortality by promoting arterial stiffness and a progressive loss of the cushioning function of blood vessels.

It has been shown that drug treatment of HTA frequently results in an adequate control of DBP ( $\leq 90$  mmHg in 80% cases), whereas the ability to control SBP ( $\leq 140$  mmHg in 60% cases) is achieved to a much smaller extent. This is observed in CKD/ESRD and the control of systolic pressure ( $< 140$  mmHg before dialysis ultrafiltration) is rarely achieved. The "resistance" of systolic pressure to therapeutic intervention is intrinsic to its cause, i.e. the calcified vessel walls. With rare exceptions, the calcification is not reversible and the therapeutic challenge is to stop or slow-down the progression of calcification. The usual antihypertensive drugs do not influence the calcification process, and the prevention of hyperphosphatemia is essential. Systolic blood pressure and arterial stiffness could be normalized or improved with all classes of antihypertensive drugs in the absence of arterial calcifications, but the presence of calcified arteries is a cause of resistant hypertension.

## Literature

- USRD: US Renal Data System. Annual report Bethesda, MD, The National Institute of Diabetes and Digestive and Kidney Diseases. *Am J Kidney Dis* 32(Sup1),S81-88,1998
- London GM, Guerin AP, Pannier B, Marchais SJ, Benetos A, Safar ME: Increased systolic pressure in chronic uremia: Role of arterial wave reflections. *Hypertension*, 20:10-19, 1992.
- Klassen PS, Lowrie EG, Reddan DN, DeLong ER, Coladonato JA, Szczech CH, Lazarus JM, Owen WF Jr: Association between pulse pressure and mortality in patients undergoing hemodialysis. *JAMA* 287: 1548-55, 2002
- Briet M, Bozec E, Laurent S, Fassot C, London GM, Jacquot C, Froissart M, Houillier P, Boutouyrie P: Arterial stiffness and enlargement in mild-to-moderate chronic kidney disease. *Kidney Int* 2002;69:350–357, 2006
- Blacher J, Guérin AP, Pannier B, Marchais SJ, Safar ME, London GM: Impact of aortic stiffness on survival in end-stage renal disease. *Circulation* 99,2434-2439,1999
- London GM, Blacher J, Pannier B, Guérin AP, Marchais SJ, Safar ME: Arterial wave reflections and survival in end-stage renal failure. *Hypertension* 38:434-438, 2001.
- Blacher J, Guérin AP, Pannier B, Marchais SJ, London GM : Arterial calcifications, arterial stiffness, and cardiovascular risk in end-stage renal disease. *Hypertension* 38 :938-942,2001.
- Guérin AP, London GM, Marchais SJ, Métivier F : Arterial stiffening and vascular calcifications in end-stage renal disease. *Nephrol Dial Transplant* 15 :1014-1021,2000.
- Kannel WB, Gordon T, Schwartz MJ: Systolic versus diastolic blood pressure and risk of coronary heart disease: The Framingham Study. *Am J Cardiol*;27:335-346,2001
- Guerin A, Blacher J, Pannier B, et al. Impact of aortic stiffness attenuation on survival of patients in end-stage renal disease. *Circulation* 103: 987-92, 2001.
- Black HR. The paradigm has shifted to systolic blood pressure. *Hypertension* 34:386-387,1999
- Giachelli CM: Vascular calcification mechanisms. *J Am Soc Nephrol* 15:2959-2964,2004



## UPCOMING MEETINGS

### 2007

#### **26-28 October 2007**

2<sup>nd</sup> International Conference on Frontiers in Vascular Medicine  
Melbourne, Australia

[www.frontiers-in-vascular-medicine.info](http://www.frontiers-in-vascular-medicine.info)

#### **16 - 19 November 2007**

6<sup>th</sup> Meeting of the Asian Pacific Society of Hypertension  
Beijing, China

[www.apsh2007.com](http://www.apsh2007.com)

#### **29 November - 2 December 2007**

ISN Nexus Symposium on Hypertension and the Kidney  
Vienna, Austria

<http://www.associationhq.com/ISN/nexus/hypertension/>

### 2008

#### **7-10 February 2008**

International Conference on Fixed Combination in the Treatment of Hypertension and  
Dyslipidemia

Budapest, Hungary

[www.paragon-conventions.com/fixed](http://www.paragon-conventions.com/fixed)

#### **2 - 5 April 2008**

1<sup>st</sup> International Congress on Prehypertension & Cardiometabolic Risk  
Prague, Czech Republic

[www.kenes.com/prehypertension](http://www.kenes.com/prehypertension)

#### **14 - 19 June 2008**

Hypertension 2008

Berlin, Germany

[www.hypertension2008.com](http://www.hypertension2008.com)



#### **17 – 20 September 2008**

2<sup>nd</sup> International Symposium on Pheochromocytoma  
Queens' College, Cambridge, UK

[www.isp2008.ukevents.org](http://www.isp2008.ukevents.org)

#### **30 October - 2 November 2008**

2<sup>nd</sup> World Congress on Controversies in Diabetes, Obesity and Hypertension (CODHy)  
Barcelona, Spain

[www.codhy.com](http://www.codhy.com)



## GENERAL SOCIETY INFORMATION

### Membership

If you have not yet renewed your ISH membership for 2007 now is the time to do so to ensure you continue to receive copies of the Journal of Hypertension and subsequent copies of the Newsletter.

Payment can be made on-line by visiting the membership section of [www.ish-world.com](http://www.ish-world.com). Please note: **You will be required to quote your membership number** (if you do not know this, it can be obtained by emailing Helen Horsfield at [secretariat@ish-world.com](mailto:secretariat@ish-world.com)).

We would like to take this opportunity to remind you of the Society's Constitution concerning Membership. *"Members shall pay annual dues in the amount and within the time period determined by the Executive Committee. Membership shall automatically cease upon failure to pay the annual subscription fee for two consecutive years."*

### Members Only Area of the Website

The Members' Only Area on the ISH website ([www.ish-world.com](http://www.ish-world.com)) is now active. To view these pages you will need to register, again using your membership number. (If you do not know this, it can be obtained by emailing Helen Horsfield at [secretariat@ish-world.com](mailto:secretariat@ish-world.com)).

Current information in this section includes the following.

- Past copies of the ISH Newsletter
- A list of ISH Members
- Access to the Journal of Hypertension for those who are eligible for free online access. This free online access is available for new members (since 2006) who reside or work in one of the resource poor countries, zones and territories defined by HINARI).

### Recruit New Members

**We would welcome your assistance** to help us recruit new members to the Society. The Society welcomes applications for membership from individuals working in the field of hypertension and cardiovascular disease.

If you have a colleague who would like to become a member of ISH please ask them to complete the downloadable Application Form that can be found in the Membership section of the Society's website: [www.ish-world.com](http://www.ish-world.com). Applications must also be accompanied by:

1. A written statement by two members of the Society (names of regional/national members can be provided by the Secretariat) as to the qualifications of the nominee;
2. A list of the nominee's academic degrees, professional positions, and a list of five best and five most recent publications relating to hypertension or allied fields.

Nominations are initially considered by the Membership Committee and ultimately approved by the Society at its Biennial Scientific Meetings.

**If you have any questions regarding your membership or recruiting new members, please do not hesitate to contact us.**

Fax: +44 (0)20 8979 6700 / Email: [secretariat@ish-world.com](mailto:secretariat@ish-world.com)



## CONTACT UPDATE FORM

PLEASE FILL IN AND RETURN TO THE ISH SECRETARIAT AT THE ADDRESS BELOW

International Society of Hypertension Secretariat  
Hampton Medical Conferences Ltd  
113-119 High Street, Hampton Hill  
Middlesex, TW12 1NJ, UK  
**Fax: +44 (0)20 8979 6700**  
Email: [secretariat@ish-world.com](mailto:secretariat@ish-world.com)  
Website: [www.ish-world.com](http://www.ish-world.com)

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<b>Any additional details</b>	