Scientific News

Highlights from the 6th International Symposium on Hypertension in the Community

The 6th International Symposium on Hypertension in the Community was held in Geneva on February 8–11, 1998. It was organized by Professor Talma Rosenthal, Past President of the Israel Society of Hypertension.

Epidemiology of Hypertension

Black Populations in South Africa (SA) and the USA

Seedat (SA) reported that adult blacks with mild hypertension have a two-fold greater prevalence of left ventricular hypertrophy documented with echocardiography compared with matched white subjects. Hypertension in blacks is often associated with cerebral and aortic atherosclerosis, while coronary heart disease is uncommon in sub-Saharan blacks. Martha N. Hill and her group from Baltimore, USA, analyzed socio-economic and lifestyle factors in urban black men. They found a high percentage to be unemployed with a low annual income, no health insurance, and no antihypertensive medication for high blood pressure medication. In addition, alcoholism and cigarette smoking were highly prevalent. Hypertension was found to be the most common cause of End Stage Renal Disease (ESRD), both in the USA and South Africa (Seedat). Factors other than hypertension probably also contribute to the progression of nephrosclerosis, such as ethnicity, socio-economic status, misdiagnosis, inadequate control of BP and possibly other factors, e.g. genetics. It was concluded that the lack of reduction in ESRD may be due to the fact that currently accepted standards for BP control are not adequate and that different antihypertensive agents affect glomerular haemodynamics in different ways.

New WHL Members

The WHL is pleased to welcome three new members who joined recently the World Hypertension League:

The Taiwan Society of Cardiology, Dr. Philip Yu-An Ding, President, Veterans General Hospital - Taipei, 4F, SZ-Yuan Building, 201, Sec. 2, Shih-Pai Road, 112 Taipei, Taiwan, Republic of China
Fax: (+ 886) 2-2873-8316

The National Hypertension Association, Dr. William M. Manger, Chairman, 324 East 30th Street, New York, NY 10016, USA.
Fax: (+1) 212-447-7032

The Paraguayan Society of Hypertension, Dr. Miryan Ayala, President, Pitintuta 613 esq. Juan de Salazar, Asuncion, Paraguay, South America.
Fax: (+595) 21-212044

The total number of WHL members has thus increased to 78.

Scientific News continued

Venezuela: Sulbaran from Maracaibo compared hypertensives under 40 years of age with patients over 60 years and showed less use of antihypertensive medication, less knowledge of their condition and better control in the treated continued on page 2

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group of the younger hypertensives. He concluded that educational and medical programs should address the specific problems of compliance and education in that age group.

**Greece:** A survey reported by Efstratopoulos lasted for one year. 187 physicians participated in the study. It was found that the majority of doctors start antihypertensive therapy when systolic BP is > 140 mmHg and when diastolic BP is above 90 mmHg. Eleven to 20% of physicians discontinued treatment when blood pressure was almost normalized.

Zarifis et al. investigated the effectiveness of an informational campaign on the prevention of atherosclerosis. They delivered a questionnaire to 567 people attending the out-patient clinic of preventive cardiology in their district hospital. They received 378 (67%) completed questionnaires; 225 (59.5%) were answered by women and 153 (40.5%) by men. It was found that although patients seem (through their answers) to be well informed about atherosclerosis, they don’t comply with the advice of their physicians to change their lifestyle. Risk factors for atherosclerosis were studied by Adamopoulos in 2328 random subjects, 11–12 years old. They were significantly higher in urban than in rural inhabitants. Systolic blood pressure was positively correlated with weight and living in an urban area.

**Poland:** Zdrojewski T et al. conducted in 1994 a cross sectional survey based on a questionnaire interview in a sample of 2080 men and women, aged 19 years and over, to estimate the awareness and treatment of hypertension in Poland. Awareness was much higher and the control of high BP was significantly better in women than in men. A Polish hypertension survey regarding the relation between systolic and diastolic blood pressure and body mass index in a large database was described by Leszek Bieniaszewski. The database included 308,361 (F:M ratio=1.24) persons. The findings indicated that the effect of body mass index on blood pressure decreased with age.

**Israel:** Three years after reaching consensus on guidelines for treatment, the most commonly prescribed medication in monotherapy were calcium channel blockers (33.7%), followed by beta blockers (29.6%) and ACE inhibitors (24.3%). Diuretics as single drugs were prescribed to 9.4% of patients. The guidelines recommended diuretics and beta blockers as first choice. (Reuveni).

Tabenkin conducted a retrospective descriptive survey in a primary care rural practice with 1400 listed patients in the North of Israel. She observed that HT does not shorten life span compared to normotensives since the majority of patients died at the age of 80 and older. However, the majority of hypertensives suffered and died from cardiovascular and/or cerebrovascular disease. Yosef from Ashkelon reported on a health education program in Israeli public schools. One hundred and thirty medical students worked with 12–16 year old pupils from 35 schools throughout the school year and led weekly discussions on a wide range of topics: smoking, drugs, sex education, physical fitness and other preventive health issues. One hundred and twenty-one subjects in the intervention group showed improvement in their knowledge and attitude towards various health issues compared to a 128 similar subjects from the control group.

**Germany:** A random sample of 2150 German general practitioners was selected from the physicians’ registry of Berlin and Bonn by Schorr et al. Questionnaires were used to examine the attitude and approach of general practitioners and internists to non-pharmacological management of hypertension. It was found that physicians are aware of non-pharmacological measures for the management of hypertension, but the emphasis put on these measures is insufficient.

**Italy:** The Hypertension Optimization Program (HOP) is an ongoing observational study using a computer-program to prospectively collect epidemiological, clinical and therapeutic data of hypertensive patients referred to Italian Units of Internal Medicine. Data from 2784 patients (50.5% men, 49.5% women), were available on November 1997. The preliminary results show that the computer program used in the frame of the HOP project allows the systematic collection of data from hypertensive patients referred to Hospital Centers.

**Blood Pressure Measurement**

Brueren recommended the use of validated self-measuring devices for home measurement of blood pressure and Machado pointed out that the wrist device is a good option. According to Efstratopoulos, self-home-BP measurements highly correlate with those of 24h-ABP measurements in treated and untreated patients with essential hypertension.

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According to Subbaran, an increased Waist-Hip-Ratio in 10–18 years old adolescents, even in the absence of obesity, is an important risk factor for hypertension; therefore this value should be determined in the routine physical exam of adolescents.

**Ambulatory Blood Pressure Monitoring**

Using ambulatory blood pressure monitoring equipment, Subbaran established normal values in males aged 10 to 18. Contrary to other studies, no differences were found between casual BP and ABPM values, which implies that adolescents whose casual BP is higher than ABPM values (awake period) should be considered abnormal.

CE Machado from Bragance Paulista, Brazil, analyzed data from 479 randomly selected children from public schools aged 6 to 12 years. He found 103 children (21%) who presented blood pressure levels above the 95th percentile and 43 children (9%) above the 99th percentile according the Second Task Force on Blood Pressure Control in Children. From the “hypertensive” group 16 children aged 7–11 years, were referred to a pediatrician for follow up. Seven of the children kept tensional levels above the 95th percentile and 9 had normal blood pressure levels. In order to identify true high blood pressure in children, it is mandatory to obtain subsequent periodic clinical evaluations to avoid stressing the family resulting from false diagnoses.

Brueren found seasonal influences on office and ambulatory blood pressure in borderline hypertensive patients. According to him it is unnecessary to modify antihypertensive treatment of borderline hypertensives according to the season. These data are in contrast to earlier findings.

Portman compared BP levels in actual sleep-wake periods to arbitrary default day/night definitions provided by ABPM software and to arbitrary definitions of sleep-wake periods in children. Using wrist actigraphy he defined the actual sleep-wake periods in 56 patients with essential hypertension on various treatment regimens, mean age of 43 years (7–90 years). There were big differences (8–45%) between actual sleep-wake and both default & arbitrary definitions for BP load. He concluded that accurate determination of sleep and wake periods for analysis of ABPM data must be based on actual time periods. Reliance on arbitrary definitions fails to accommodate for individual variations and inaccurately categorized patients as hypertensives or normotensives.

Yetman described blood pressure patterns in patients with glycogen storage disease (GSD). Long term close follow-up for complications of hypertension is indicated in these young patients for preservation of renal function and for monitoring for atherosclerotic complications. 24-hour ABPM identified diurnal and/or nocturnal hypertension in the GSD patients diagnosed with one of the three types of liver glycogenopathies.

**Relationship between Maternal and Paternal Blood Pressure and Offspring Blood Pressure**

Long term effects on blood pressure in offspring of mothers with diabetes or hypertension in pregnancy were described by Nilsson. Males were shorter and born two weeks earlier than those of healthy mothers. Their weight and systolic blood pressure were elevated at the age of 18.

Beilin, Burke and Dunbar from Perth, Western Australia, presented a paper indicating the importance of paternal blood pressure in predicting higher blood pressures in 18 year old offspring. The effect was most marked in young males and appeared to be related to parental lifestyle, particularly paternal drinking and smoking habits. Associations between SBP in offspring and father’s BMI and lifestyle suggest an important role for screening for prevention of hypertension in young adults.

Another paper from Perth by Blake, Beilin et al. showed tracking of blood pressures from age one to six years in a cohort of 3,000 children studied from birth. Even at this age blood pressures were related to body mass index. Normative data for blood pressures in children aged 1,3 and 5 years were presented.

The topic of postmenopausal blood pressure was raised by Portaluppi who concluded that aging and increased BMI account for most of the BP changes observed in menopause.

**Salt Sensitivity**

De Leeuw discussed the topic of sodium sensitivity. He suggested that the decline in blood pressure during sodium restriction in sodium sensitive people may be regarded as an adaptive
reaction to protect the individual against excessive volume loss. Thus, sodium sensitivity may even be a homeostatic mechanism rather than a primary abnormality.

Talma Rosenthal
Past President, Israel Society of Hypertension

Highlights on multinational trials will be published in the forthcoming issue of the WHL NEWSLETTER. The Conference's book of abstracts includes 149 pages of original abstracts.

For further information contact the Israel Society of Hypertension, Hypertension Unit, Soroka Medical Centre, Beer Sheba, Israel.

Fax: (+972) 7 640-3102

Impressum

The objectives of the WHL are to promote the detection, control and prevention of arterial hypertension in populations. The World Hypertension League (WHL) is a federation of leagues, societies and other national bodies devoted to this goal. Individual membership is not possible. The WHL is a division of the International Society of Hypertension (ISH), and is in official relations with the World Health Organization (WHO).

Secretariat:
Medical College of Ohio, Dept. of Medicine, P.O. Box 10008, 3000 Arlington Ave, Toledo, OH 43699-0008, USA
Phone: (+1) 419 383-6016, Fax: (+1) 419 383 5360
E-mail: whlsec@magnum.mco.edu
Internet: http://www.mco.edu/whl

Board:
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M.M. Ibrahim (Cairo), Adviser, Developing Countries

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J. Pötzsch, Editor; E. Pisch, Editorial Assistant

Editorial Office:
Max Delbrück Center for Molecular Medicine (MDC) Robert-Rösle-Str. 10, 13125 Berlin-Buch, Germany
Phone: (+49) 30 9489 4533, Fax: (+49) 30 9489 4589
E-mail: poetzsch@mdc-berlin.de

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Calendar

6th International Congress on Non-invasive Cardiology
December 20–22, 1998
Jerusalem, Israel
Information: Organizing Secretariat, 6th ICNC
PO Box 50006, Tel Aviv, 61500, Israel
Fax: (972) 3-517 5674

2nd International Symposium on Angiotensin II Antagonism
February 15–18, 1999
London, UK
Information: The Secretariat, Hampton Medical Conferences Ltd., 127 High Street Teddington, Middlesex, TW11 8HH, UK
Fax: (+44) 181-977-0055
e-mail: hmc@btinternet.com

VI Asian Pacific Congress on Cardiac Rehabilitation
February 20–22, 1999
Bangkok, Thailand
Information: Dr. K. K. H. Siddiqui, Chairman, APSC, 11 Balu Hakakk Lane Calcutta 700 017, India
Fax: +91-33-247 0859

11th Congress of the South African Hypertension Society
March 21–24, 1999
Durban, South Africa
Information: Dr. D. P. Naidoo, President, SA Hypertension Society University of Natal Mecial School Dept. of Medicine, Private Bag 7 Congella, Durban 4013, South Africa
Fax: +27-31-260-4420

4th Scientific Meeting of the Hypertension in Diabetes EASD Study Group (HID)
April 23–24, 1999
Katowicze, Poland
Information: Dr. Peter T. Sawicki, Dept. of Metabolic Diseases Heinrich-Heine University of Düsseldorf PO Box 10 10 07, 40001 Düsseldorf, Germany
Fax: +49-211-811-8772
e-mail: Sawicki@med.uni-duesseldorf.de