Profile

The Canadian Coalition for High Blood Pressure Prevention and Control was established in 1985. It includes 17 member organizations, such as the Atlantic Canada Working Group in Hypertension, Canadian Cardiovascular Society, Canadian Dietetic Association, Canadian Heart Foundation and Canadian Hypertension Society. The Coalition’s principal task is the intensive education of the public, of patients and of the professionals. Furthermore, the Coalition plans to provide a support network in order to alleviate regional and socio-economic disparities. Another task is the development of consensus statements to bring about the exercise of consistent policies by all member organizations. The Coalition was established after the Canadian Hypertension Society had already been active for 10 years. During this period, the Canadian Hypertension Society had become a highly credible and respected body, promoting and facilitating research into the questions of hypertension. It was felt, however, that the Hypertension Society and other organizations needed a partner specifically concerned with the public health aspects of this disease. Initially, the Coalition started with five functional committees: education of the public, education of the patients, education of professionals, research, and data base development. During the first years of its function, it has contributed in a major way toward the implementation of these original goals. In particular, a set of guidelines for community surveys has been developed and an in-depth study of self-measurement of blood pressure carried out.

WHL News

The next WHL Council Meeting will take place in Leuven, Belgium, on May 10–11, 1990. All member leagues will be invited. (For more information please contact the WHL secretariat in Geneva.)

The US National Conference on High Blood Pressure Control was held in Florida, USA, on May 6–8, 1989, and gave up-to-date information about hypertension control. Emphasis was placed on the influence of sodium, potassium, calcium and overweight on blood pressure and the problems of minority groups and the elderly. Other topics included blood lipids and blood pressure monitoring devices.

The bilateral US/FRG Scientific Exchange Meeting took place on May 6, 1989, in Florida, USA. The activities of the German and US High Blood Pressure Programs were presented and discussed. Physician-patient workshops and 24-hour blood pressure monitoring were special features of the meeting.

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and published. A catalogue of educational aids has been compiled and evaluated. During the years 1986–1987 an increasing need was felt for answering inquiries as to recommendations for changes in lifestyle and behaviour of patients with hypertension and those normotensives who were concerned with the prevention of hypertension. While considering the state of our advisory activities, we realised that there are profound differences in opinion among Canadian experts as to the efficacy and effectiveness of various measures of non-pharmacological interventions. In 1988, it was decided that a consensus conference should be held to address a number of issues, ranging from dietary salt intake to physical exercise, to coordinate the major public health campaigns as well as the other educational aspects of the Coalition. The Consensus Conference was held March 21–23, 1989, in Halifax. Over 20 national and international experts presented materials to an independent Consensus Panel of 15 people. A Consensus document was issued at the end of this Conference on March 23, 1989, and a number of post-Conference meetings and other initiatives were planned. The Coalition is definitely entering a new and even more important phase. This new phase will be guided by Dr. Arun Chockalingam, who is succeeding Dr. J. George Fodor after 3½ years of chairmanship of the Management Committee, and who will also provide a link with the Canadian Hypertension Society as he is a board member. We believe that this Organization will fulfill a useful function that is not limited to Canada and will also be able to contribute its experience to the successful work of the World Hypertension League.

Scientific News

Genes: The future of hypertension research?

In the 1950s when Watson and Crick first discovered the complex structure of DNA, nobody could foresee the full implications of their work. Over the past three decades, scientists have been laboriously mapping human DNA, and a rough map of all the chromosomes has been constructed. Of the estimated 100,000 genes that comprise the genome, 4550 have been identified, and only a few of these have been completely deciphered. Experiments have shown that blood pressure is influenced by multiple genetic loci whose identities are largely unknown at present. As part of a programme to track down genes responsible for hypertension, a restriction fragment length polymorphism (RFLP) in the renin gene between Dahl salt-hypertension sensitive (S) and Dahl salt-hypertension-resistant (R) rats was reported: One copy of the S-rat renin allele was associated with an increment in blood pressure of approximately 10 mmHg and two copies were associated with an increase of 20 mmHg. It was concluded that in the rat, "the renin gene is either responsible for this phenotype or closely linked to a gene which is an important determinant in blood pressure control". The functional significance of the structural differences between the renin alleles of S and R rats is at present unknown. Further work has still to be done, but scientists hope someday to diagnose and perhaps to cure genetic diseases such as hypertension, diabetes, heart disease and cancer by gene therapy. With these advances in gene technology it is inevitable that many moral and ethical problems will be created, but used intelligently and responsibly the benefits to mankind will prevail.


Names and Notes

Robert Hodge, MD, Director of the National Heart Foundation, Canberra, Australia, Prof. Liu Lisheng, Chief of the Hypertension Department of the Cardiovascular Institute,

Arun Chockalingam, M.S., Ph. D. Chairman, Executive Committee Canadian Coalition for High Blood Pressure Prevention and Control
Peking, China, Edward Roccella, PhD, Coordinator of the National High Blood Pressure Education Program, Bethesda, USA, and Hirotsugu Ueshima, MD, National Cardiovascular Center, Osaka, Japan, are newly appointed regional editors of the WHL Newsletter.

**WHL Materials**

**Blood pressure measurement.**

**Practical guidelines from the AHA.**

Many decisions in clinical medicine depend on the accurate measurement of blood pressure. Since more than 85% of hypertensive patients have “mild hypertension” (diastolic 90–104 mmHg), it is important to have a reliable method to determine whether or not a patient is hypertensive. The indirect method for measuring blood pressure based on the occluding-cuff auscultatory technique by Korotkoff remains the most widely used procedure for the diagnosis of hypertension.

The fifth edition of the American Heart Association’s (AHA) recommendations for human blood pressure determination by indirect sphygmomanometry was recently published and describes the technique recommended by the AHA for indirect measurement of blood pressure, the common errors that may be encountered and methods for increasing its accuracy.

Some of the recommendations are:

- Accurate blood pressure measurement presumes a well-prepared patient and a specially trained observer. The presence of biological and environmental factors that affect blood pressure should be noted. The inflatable bladder should be of an appropriate width for the patient's arm circumference. The diastolic pressure should be determined at muffling in children (Korotkoff phase IV) and at cessation of sound in adults (Korotkoff phase V). The patient's position, cuff size and the arm used for measurement should be recorded. There should be a pause of 1–2 min before repeating the pressure measurement. At least three readings should be obtained on different days before an individual is classified as hypertensive.

- Videotaped or filmed blood pressure recordings may be used to standardise techniques, to test accuracy and to identify and correct observer errors.

After describing the basic approaches in detail, special problems such as the effect of arm position, cardiac dysrhythmias and the measurement of blood pressure in shock are discussed. A chapter on epidemiologic methods, home, self-monitored and ambulatory blood pressure measurement and blood pressure determination in infants, children and adolescents completes these recommendations.


**In Focus**

**Weight control in the management of hypertension — a position paper by the World Hypertension League**

Obesity presents today a major problem for all Western lifestyle populations, as about 10%–15% of the population is clearly overweight. In practice, obesity is defined as the excess (15%–20%) above the sex- and age-related ideal body weight or as an increased body mass index [BMI: weight (kg)/height² (m)]. Persons with a BMI over 25 are considered overweight.

In several studies an increase in blood pressure proportional to the gain in body weight has been observed, and it has been noted that over a period of 10–15 years at least 60% of overweight individuals become hypertensive. Hypertension and obesity increase the workload of the heart and, consequently, lead to a higher risk of coronary heart disease and sudden death.

A statement on weight control in the management of hypertension is now being published by the World Hypertension League. It suggests that weight control is, along with increased physical activities, moderation of salt and alcohol intake and cessation of smoking, part of a comprehensive programme for the management of hypertensive patients. For the practical aspects of weight control, the physician should be well acquainted with the principal methods of weight reduction, which are as follows:

1. Calorie restriction maintaining a balance in nutrients
2. Behaviour modification (mental attitude and stepwise education of the overweight patient)
3. Exercise (increased physical activity as an important adjunct to the treatment of obesity)

Teams consisting of a dietician, nursing assistant and health educator should work together with the treating physician. Group sessions offering mutual encouragement can play a major role in the successful maintenance of a treatment programme and improve compliance. Dentists, optometrists, pharmacists and other health workers can offer additional support to obese hypertensive patients. Health counselling should be backed up by teaching aids, like printed materials for dietary advice.

Weight control is the mainstay of non-pharmacological treatment, especially in mild hypertension, and should accompany drug treatment in all obese patients as well. The control of obesity is also a viable approach to the primary prevention of many cases of arterial hypertension. As recidivism in obesity is common, special attention should be paid to regular follow-up and continued reinforcement of motivation.


Requests for reprints should be sent to the Secretary General, World Hypertension League, 20 avenue du Bouchet, CH-1209 Geneva, Switzerland.

**Calendar**

**Meeting of the Swedish League against Hypertension**
June 8—9, 1989. Lund, Sweden
*Information*: Lund University, Health Science Center S-24010 Dalby, Sweden

**Fourth European Meeting on Hypertension**
June 18—21, 1989. Milano, Italy
*Information*: Centro di Fisiologia Clinica e Ipertensione, Ospedale Maggiore, Universita di Milano Via F. Sforza 35
I-20122 Milano, Italy

**2nd International Conference on Preventive Cardiology and the Annual Meeting of the AHA Council on Epidemiology**
June 18—22, 1989. Washington DC, USA
*Information*: 2nd International Conference on Preventive Cardiology 9650 Rockville Pike Bethesda, MD 20814, USA

**Journées de L’Hypertension Artérielle**
December 14—15, 1989. Paris, France
*Information*: Dr. Jacques Guédon Secrétaire Scientifique CONVERGENCES/Journées HTA 89 16, rue Jean-Jacques Rousseau F-75001 Paris

**European Congress of Cardiology**
September 10—14, 1989. Nice, France

**Denk’ an deinen Blutdruck, Adam!**

Frag’ deinen Arzt

Poster of the German National Blood Pressure Program. (Don’t forget your blood pressure, Adam!)