



WHL · NEWSLETTER

News from the World Hypertension League (WHL).
A division of the International Society of Hypertension, and in official relations with the
World Health Organization.

No. 95, June 2004

WHL Focus edition

**Interview with Dr. Jochen Spranger
from the German Institute of
Human Nutrition, Potsdam-Rehbrücke,
Germany**



Dr. Jochen Spranger

► *The metabolic syndrome, the clustering of alterations in glucose metabolism, obesity, hypertriglyceridaemia, microalbuminuria and/or hypertension, is now playing a major role in clinical as well as in preventive medicine. What are the underlying mechanisms in the*

development of the metabolic syndrome?

Dr. Spranger: The common feature of all these diseases and their joint manifestation is a complex metabolic interplay among skeletal muscle, the liver and body fat. This results in local and systemic metabolic and hormonal changes including signs of subclinical inflammation. Although the exact mechanisms remain to be elucidated, it has become clear that the fat cells play a crucial role in this context.

► *Does this mean that hypertension and the other potential manifestations of the metabolic syndrome have similar or even the same risk factors?*

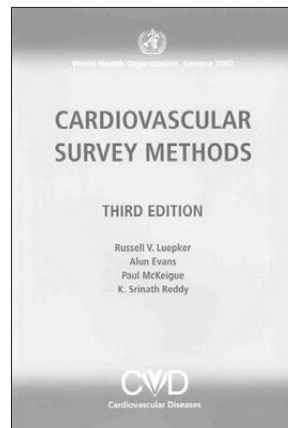
Dr. Spranger: Yes, it appears from both epidemiological, as well as from experimental data, that obesity is a key factor in the development of the metabolic syndrome. Only very few people have the metabolic syndrome without being obese.

Very recent study results underline this view. For example, in an experimental study it was described that human fat cells secrete an effective mineralocorticoid-releasing factor. This finding suggests a direct link between increased

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WHL Material

**Cardiovascular Survey Methods
WHO Publication**



“This new edition attempts to provide a broad picture of cardiovascular disease epidemiology appropriate for use in developed and developing countries. A compendium of methods and forms on a computer disk is included.”

Copies of the book may be obtained from:
WHO Marketing & Dissemination
CH-1211 Geneva 27, Switzerland
Cardiovascular Survey Methods
Third Edition with CD-Rom, 2004
Order No. 1150519; ISBN: 92 4 154576 3
E-mail: bookorders@who.int

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WHL News

Report on the WHL/Brazilian Hypertension Society Satellite Symposium

At the 20th Scientific Meeting of the International Society of Hypertension in Sao Paulo on February 15, 2004, the **WHL** and **Brazilian Hypertension Society (BHS)** sponsored a Satellite Symposium on the **Epidemiology of Hypertension, Diabetes and Obesity in Developing Countries**. Hypertension specialists from Nigeria, Egypt, Poland, Malaysia, Mexico, Argentina, Uruguay, Brazil, Costa Rica, Serbia & Montenegro, and China presented data from their countries. A number of investigators from other countries submitted abstracts that were displayed as posters.

It was clear from the presentations and discussions that hypertension is a serious worldwide health risk. Many hypertensive patients are obese and obesity is a major cause of hypertension. The disturbing factor is that obesity is on the rise worldwide and, as a consequence, hypertension and diabetes mellitus are increasing at an alarming rate. Risk factors, i.e., hypertension, obesity, diabetes, and dyslipidemia appear to cluster in patients and, as a result, severe cardiovascular disease develops. The bad news is that control of hypertension to goal levels is poor in nearly every country. The good news is that even small decreases in blood pressure can reduce the incidence of cardiovascular diseases in hypertensive patients.

Efforts to prevent obesity in populations, especially in the young, should have a high priority in the health plan of all countries.

The second part of the Symposium was on **Guidelines in Hypertension: Highlighting Similarities and Differences**. Dr. Claude Lenfant, President of the World Hypertension League, presented the recommendations of the Seventh Report of the Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure (JNC 7 Report USA). Professor Guisepppe Mancia of Italy presented the 2003 ESH/ESC Guidelines. Guidelines from Brazil, Latin America, and Sub-Sahara Africa, and the ISH/WHO statement on hypertension were also presented.

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There are many similarities among Guidelines of different countries, but there are also some

differences, e.g. blood pressure goal levels, when to start drug therapy and which drugs should be used first, are a few of those differences which exist. However, all the presenters recommended that each country or region should develop their own guidelines, since there are differences in environmental, genetic and other factors that alter the management of hypertension in different populations.



Dr. Patrick J. Mulrow,
Secretary General

WHL International Art Competition

As reported earlier this year, 24 posters were submitted to the jury of the WHL International Art Competition. With this issue we want to start with a new series showing more of the excellent contributions to the 2003 Art Competition:



'Hypertension'

Poster by Silvina Buffone from Argentina

For more information, please contact the editorial office in Berlin or the Argentine Society of Hypertension

e-mail: saha@saha.org.ar

phone (+54) 11-4961 6970

fax: (+54) 11-4961 8748

Interview continued

fat cell mass and hypertension [for details, see Ehrhart-Bornstein et al, 2003].

► *Besides obesity, are there other common risk factors, dietary factors, for example?*

Dr. Spranger: Of course, all dietary and life-style factors that promote the development of obesity are to be named; that is in addition to excessive high energy intake, low physical activity and a sedentary lifestyle. But also an issue like postprandial hyperglycaemia seems to play a role.

► *What is specifically known about postprandial hyperglycaemia?*

Dr. Spranger: Several study findings have demonstrated that postprandial hyperglycaemia is independently associated with cardiovascular morbidity and an increased mortality. These observations have also changed the therapeutic approaches in the management of diabetes and impaired glucose tolerance, namely, specific therapeutic approaches have been developed aiming to avoid postprandial hyperglycaemia. With respect to nutritive factors, diets with low glycemic index carbohydrates appear to be beneficial [for more details, refer to Heine et al, 2004].

► *In your research you have been studying inflammatory markers as risk factors for diabetes and the metabolic syndrome. Are dietary or other life style factors associated with the inflammatory reactions you have described in your research?*

Dr. Spranger: There are quite a few studies that have addressed this important question of the influence of lifestyle factors on subclinical inflammatory processes. To my knowledge alcohol, fatty acid composition of the diet, especially the intake of poly-unsaturated fatty acids, and the glycemic index have been suggested to affect the ongoing subclinical inflammation in obese individuals.

► *Are people who already exhibit manifestations of the metabolic syndrome at a higher risk to develop hypertension?*

Dr. Spranger: Yes, they are. People with diabetes, for example, have a two-fold higher risk to develop hypertension. The high prevalence rates of the metabolic syndrome, 20% on average as described in the data from the American National Health and Nutrition Examination Survey (NHANES) [Ford, 2002] clearly indi-

cate the relevance of the metabolic syndrome for the epidemiology of hypertension.

► *How can hypertension be prevented in these people?*

Dr. Spranger: Weight loss is of paramount importance. This can be achieved either through a modification in diet by reducing energy intake or an increase in physical activity, or ideally of both.

► *Would you recommend specific dietary changes in addition to reducing energy intake?*

Dr. Spranger: Recent interventions trials like the DASH Study or the Lyon Heart Study have shown that a diet rich in fruits and vegetables, like in the Mediterranean diet, appear to be beneficial. Specifically in the context with hypertension various quite convincing studies suggest that a reduction in salt intake reduces risk of hypertension.

► *On a population level, what would be the most effective measures to reduce the incidence of the metabolic syndrome?*

Dr. Spranger: As for individuals I see the reduction in the prevalence of overweight and obesity as the key measures. How this can be achieved is an issue that needs to be discussed in each society. The potential solutions to this problem clearly include decisions on a political level. Programs need to be developed that are culturally adequate and effective in that specific population. In Germany, for example, I could imagine that financial incentives might be a successful strategy, beside healthy life-style promoting advertisement strategies. Reduced health insurance subscriptions could be an option to promote and reward a healthy lifestyle. In addition, strategies that convince the food industry to offer healthy products like fibre enriched food, might help to combat obesity and the metabolic syndrome on a population level.

Dr. Spranger, thank you very much for this interview.

Conducted by Dr. Anja Kroke,
Editor

For a complete list of references, please refer to our website at <http://www.mco.edu/whl> or contact the editorial office in Berlin. ■

People

Dr. Armando Vidalón has been elected President of the **Peruvian Society of Hypertension**. Secretary General is Dr. Patricio Wagner. The address remains the same: José del Llano Zapata 331 Of. 704, Miraflores, Lima, Peru.

Tel. (+511) 441-7166
 Fax (+511) 440-5634
 E-mail: spehiper@terra.com.pe

Dr. Yuan-The Lee has been elected President of the **Taiwan Society of Cardiology** for the tenure of August 2003 to July 2005. Dr. Tsui-Lieh Hsu is Secretary General. The new address is: 7F, No. 27, Min-Chuan West Road, Taipei 104, Taiwan.

Tel. (+886) 2-259-76177
 Fax: (+886) 2-259-76180
 E-mail: tsoc@tsoc.org.tw

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, Department of Medicine
 3120 Glendale Avenue, Toledo, OH 43614-5809, USA
 Phone: (+1) 419 383-6016, Fax: (+1) 419 383 5360
 E-mail: gmonhollen@mco.edu
 Internet: <http://www.mco.edu/whl>

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 Jörg Pötsch (Berlin), Communications

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 Anja Kroke, Editor; Erika Pisch, Editorial Assistant

Editorial Office:

Max Delbrück Center for Molecular Medicine (MDC)
 Robert-Rössle-Strasse 10, 13125 Berlin-Buch, Germany
 Phone/Fax: (+49) 30 9406-2123
 E-mail: whl@mdc-berlin.de

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Calendar

2nd National CDC Prevention Conference on Heart Disease and Stroke:

Charting the Course

August 17–19, 2004

Atlanta, GA

Information: Charnequa Davis, PSA,
 2957 Clairmont Road, #480,
 Atlanta,
 GA 30329, USA
 Fax: (+1) 404-633-6477
 E-mail: ch_davis@psava.com

BHS Annual Scientific Meeting

September 13–15, 2004

Cambridge, UK

Information: Ms. Gerry McCarthy
 Hampton Medical Conferences Ltd.
 113-119 High Street
 Hampton Hill, Middlesex,
 TW12 1NJ, UK
 Fax: (+44) 20-8979 6700
 E-mail: hmc@hamptonmedical.com

14th World Congress of the International Society for the Study of Hypertension in Pregnancy

November 14–17, 2004

Vienna, Austria

Information: KUONI Congress Vienna
 Währingerstr. 2–4,
 A-1090 Vienna, Austria
 Fax: (+43) 1-319 1180
 E-mail: ISSHP2004@kuoni.ch

4th Genova Meeting on Hypertension, Diabetes and Renal Diseases

February 24–26, 2005

Genova, Italy

Information: Ms. Barbara Rossi
 ARISTEA
 Fax: (+390) 105 531 544
 E-mail: rossi@aristea.com

15th Congress of the European Society of Hypertension

June 17–20, 2005

Milan, Italy

Information: AISC & MGR – Aim Group
 Via A. Ristori 38, I-00197 Rome, Italy
 Fax: (+390) 6808 8491
 E-mail: esh2004@aisc.it