

Renal Hypertension

The subject of renal hypertension has probably never been considered in more scope and depth by as distinguished a group of international authorities as during 5-7 October 1966 at a meeting in Cleveland. The meeting was sponsored jointly by the Council for High Blood Pressure Research of the American Heart Association and the Cleveland Clinic Foundation on the occasion of the 20th anniversary of the Council for High Blood Pressure Research. Both organizations used the occasion also to honor Irvine H. Page who was responsible for the founding of the Council. His retirement as director of research at the Cleveland Clinic was announced recently but he will continue in an active role at the Clinic as consultant. In addition to a banquet in his honor, another was held for the first presentation of the Stouffer Award for outstanding achievement in research in the fields of arteriosclerosis and hypertension. The award of \$50,000 was made jointly to Harry Goldblatt and E. Klenk.

The meeting was limited to approximately 275 invited scientists, including 80 from more than 20 foreign countries. Thirty papers were presented; there were two panel discussions during the 3-day meeting.

The meeting commenced with a historical perspective of the problem of renal hypertension by Sir George Pickering. The program was organized so as to provide relatively thorough coverage of the entire problem of renal hypertension.

Among the numerous notable presentations, those of special general interest included a report from L. T. Skeggs that renin extracted from the kidneys of hogs exists in at least four different forms, rather than in only one as had previously been thought. It is not yet known whether all of them may appear at times in circulating blood or if they are the result of the extraction procedure. If the forms occur naturally in plasma, it may be significant to those who perform renin assays for diagnostic and investigative purposes. It was generally agreed that none of the present methods for measuring levels of plasma renin is vastly superior to the others but they have yielded useful information. Further improvement in methodology of renin assay is desirable, since all present methods have their shortcomings. It

was the consensus of a panel on the role of the renal pressor system in clinical hypertension that a renin assay should be done on all patients with hypertension.

For the first time, human angiotensin has been isolated in pure form. K. Arakawa reported that it is identical in composition and sequence of amino acids to angiotensin in horses and hogs. This provides an answer to the question of whether animal angiotensins are valid standards of measurement for human angiotensin, and also provides assurance that much investigative work on animal angiotensins also applies to human angiotensin.

Another significant report concerned a naturally occurring inhibitor to the action of renin. R. Smeby isolated the compound from kidney tissue and has shown that it is a phospholipid. In in vitro studies this phospholipid prevented completely the formation of angiotensin by renin. A single, daily injection of 2 to 6 mg/kg administered to rats with renal hypertension effectively lowered the pressure of all animals tested, thus suggesting a causative role for renin in renal hypertension. The inhibitor had no significant effect on arterial pressure of normotensive control animals, and there were no apparent toxic effects. It differs from the prostaglandins, which were discussed in detail by S. Bergstrom; these compounds have a brief, direct depressor action. E. E. Muirhead described another substance obtained from the kidney medulla; this antihypertensive material is a lipid but one that has no anti-renin activity.

Indirect evidence indicates that the phospholipid is present in circulating blood; its presence or absence there may have equal significance with levels of circulating renin and will need to be taken into account in diagnostic and investigative studies on renal hypertension.

A special and unique aspect of the meeting was the preparation of an authoritative text on renal hypertension. This was a project separate from presentations at the meeting. Approximately 60 participants started nearly 9 months prior to the meeting to prepare the text of the book. Each made a contribution to one or more chapters of the book in the area in which he is an expert. The chapters were then edited and made cohesive by the staff members of the Research Division of the Cleveland Clinic, and then recirculated among the contributors for fur-

ther comment and editing. The aim was to achieve a comprehensive, objective, and reliable text, rather than a collection of specialized and often biased essays. On the day before the meeting the contributors to the book met at the Cleveland Clinic to put finishing touches on the book and to iron out areas of discord. It is no small achievement that 60 experts in the field of renal hypertension, most highly opinionated, were able to reach an accord! The project, in essence, was an attempt to update the excellent text *Renal Hypertension* written 20 years ago by Braun-Menéndez and colleagues. An effort of this sort, in the field of renal hypertension at least, has not been attempted before. The book, written for experienced investigators, as well as for student and teacher, should serve a most useful function for a long while if the aim of its contributors and editors is met. Page is editor-in-chief and publication is scheduled for mid-1967.

The detailed proceedings of the symposium will be published in a supplemental volume of *Circulation Research* under the editorship of Edwin W. Wood, III. Both the meeting and preparation of the text on renal hypertension were supported in part by grant HE-10509 from the National Heart Institute.

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Forthcoming Events

April

1-5. American Soc. of **Planning Officials**, natl. planning conf., Houston, Tex. (The Society, 1313 E. 60 St., Chicago, Ill. 60637)

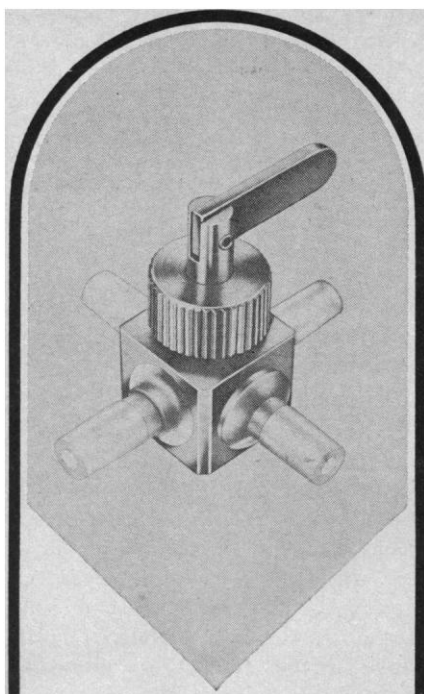
1-7. American **Concrete Inst.**, intern. symp., concrete bridge design, Toronto, Ont., Canada. (Shu-t'ien Li, South Dakota School of Mines and Technology, Rapid City 57701)

2-6. American Assoc. of **Cereal Chemists**, annual mtg., Los Angeles, Calif. (AACC, 1955 University Ave., St. Paul, Minn. 55104)

2-6. **Lister Centenary Conf.**, London, England. (Miss M. E. Douglas, Conf. Secretary, Royal College of Surgeons of England, Lincoln's Inn Fields, London, W.C.2)

2-8. European Soc. of **Radiology**, 1st congr., Barcelona, Spain. (Prof. Fros, Hospital Civil, Strasbourg, France)

2-8. International Symp. on **Tropical Root Crops**, St. Augustine, Trinidad. (Symp. Secretary, Dept. of Agriculture and



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Crop Production, Univ. of West Indies, Trinidad)

2-8. Latin Federation of **Medical Electro-Radiological** Soc., Barcelona, Spain. (F. Manchon, Aragon 290, Barcelona 9)

2-8. Seventh World **Petroleum** Congr., Mexico City, Mexico. (Amer. Petroleum Inst., 1271 Avenue of the Americas, New York 10020)

3-4. **Rubber and Plastics Industry**, 18th technical conf., Akron, Ohio. (Office of Technical Activities Board, 345 E. 47 St., New York 10017)

3-5. American Acad. of **Pediatrics**, spring session, San Francisco, Calif. (E. H. Christopherson, Executive Secretary, 1801 Hinman Ave., Evanston, Ill. 60204)

3-5. American **Hospital** Assoc., Boston, Mass. (E. J. Lanigan, 840 N. Lake Shore Dr., Chicago, Ill. 60611)

3-5. American Soc. of **Mechanical Engineers**, Washington, D.C. (Meetings Manager, The Society, 345 E. 47 St., New York 10017)

3-5. **Metals Engineering**, conf., Amer. Soc. of Mechanical Engineers, Houston, Tex. (Meetings Manager, The Society, 345 E. 47 St., New York 10017)

3-5. **Biometric** Soc., Eastern North American regional, Atlanta, Ga. (E. L. LeClerg, 6804 40th Ave., University Park, Hyattsville, Md. 20782)

3-5. British **Hydromechanics Research** Assoc., 3rd intern. conf., Cambridge, England. (H. Stephens, Information Officer, Cranfield, Bedford, England)

3-5. European Soc. of **Ballistocardiography** and **Cardiovascular Dynamics**, 6th congr., London, England. (D. C. Deuchar, Guys Hospital, London)

3-5. European Soc. of **Experimental Surgery**, Louvain, Belgium. (J. J. Haxhe, c/o Laboratoire de Chirurgie Experimentale, Univ. de Louvain, 69, rue de Bruxelles, Louvain)

3-5. Resistive and Dielectric **Properties of Thin Films**, Inst. of Physics and Physical Soc., Nottingham, England. (Meetings Officer, Inst. of Physics and Physical Soc., 47 Belgrave Sq., London, S.W.1, England)

3-5. Society for **General Microbiology**, 49th general mtg., London, England. (The Society, 19 Albermarle St., London, W. 1)

3-6. **Chemical Society**, anniversary mtg., Exeter, England. (The Society, Burlington House, Piccadilly, London, W.1, England)

3-7. **Education for Scientific Information Work**, intern. conf., London, England. (Aslib, 3 Belgrave Sq., London, S.W.1)

3-7. **Nonlinear Function Analysis and Computation Methods**, Atlanta, Ga. (Director, Dept. of Continuing Education, Georgia Inst. of Technology, Atlanta)

3-7. Containment and Siting of **Nuclear Power Plants**, symp., intern. **Atomic Energy Agency**, Vienna, Austria. (J. H. Kane, Chief, Conf. Branch, Div. of Technical Information, Atomic Energy Commission, Washington, D.C. 20545)

4-6. Strong Tough Structural Steels, British **Iron and Steel Research** Assoc., Scarborough, Yorkshire, England. (The Association, 24 Buckingham Gate, London, S.W.1, England)

4-6. Conference on **Molecular Sieves**, London, England. (Soc. of Chemical Industry, Honorary Sec., 14 Belgrave Sq., London, S.W.1)

4-6. Combustion in Advanced **Gas**

Turbine Systems, intern. symp., Cranfield, Bedfordshire, England. (I. E. Smith, Dept. of Aircraft Propulsion, College of Aeronautics, Cranfield)

4-6. **World Meteorological Organization**, 5th congr., Geneva, Switzerland. (WMO, 41 Avenue Giuseppe Motta, Geneva)

4-7. American Assoc. of **Anatomists**, Kansas City, Mo. (R. T. Woodburne, Executive Secretary, East Medical Bldg., Univ. of Michigan, Ann Arbor 48104)

4-7. International Conf. of **Chest and Heart** Assoc., Sussex, England. (Miss H. Walsh, Conf. Secretary, Tavistock House North, Tavistock Sq., London, W.C.1, England)

4-8. French Inst. of **Fuels and Energy**, 7th intern., Paris. (Institut Français des Combustibles et de l'Energie, 3, rue Henri-heine, Paris 16^e)

5. Institute of **Textile Science**, annual mtg., Montreal, P.Q., Canada. (J. E. Currah, c/o Millhaven Fibres Ltd., P.O. Box 10, Montreal)

5. **Nursing School Librarians of Midwest**, mtg., Chicago, Ill. (Medical Library Assoc., Inc., 919 N. Michigan Ave., Chicago)

5-6. First Rock Island Arsenal **Biomechanics** Symp., Rock Island, Ill. (RIA Biomechanics Symp., 1967, c/o J. E. Ekbal, Augustana College, Rock Island 61201)

5-7. **Ocean from Space**, symp., Amer. Soc. for Oceanography, Houston, Tex. (The Society, P.O. Box 53600, Houston 77052)

5-7. German **Concrete** Conf., Berlin. (Dilp.-Ing. Misch, Geschäftsführer, Deutscher, Beton-Verein, Bahnhofstr. 61, Postfach 543, 6200 Wiesbaden, West Germany)

5-7. Institute of **Electrical and Electronics Engineers**, 5th intern. conf., Washington, D.C. (Office of Technical Activities Board, 345 E. 47 St., New York 10017)

5-7. Institute of **Management Sciences**, Boston, Mass. (L. White, Sloan School, Massachusetts Inst. of Technology, Cambridge)

5-7. **Spark Discharges**, Inst. of Physics and Physical Soc., conf., Liverpool, England. (Meetings Officer, Inst. of Physics and Physical Soc., 47 Belgrave Sq., London S.W.1, England)

5-7. **Textile Research** Inst., 37th annual mtg., New York, N.Y. (H. J. Jansen, Textile Research Inst., Princeton, N.J.)

6-7. American Soc. for **Metals**, New York, N.Y. (C. R. Cupp, International Nickel Co., Inc., Paul D. Merica Research Laboratory, Sterling Forest, Suffern, N.Y.)

6-7. **Industrial Mineral Development**, Univ. of Kansas, Lawrence. (R. G. Hardy, Mineral Resources Section, State Geological Survey, Lawrence)

6-7. Society for **Biological Rhythm**, 9th intern. conf., Wiesbaden, West Germany. (W. Menzel, Amalie-Sieveling-Krankenhaus, Farmsener Landstrasse 73, Hamburg-Volksdorf, West Germany)

6-9. **Germfree Life Research**, intern. conf., Nagoya, Japan. (M. Miyakawa, Dept. of Pathology, Nagoya Univ. School of Medicine, Showa-ku, Nagoya)

7-8. Pennsylvania **Acad. of Science**, mtg., Selinsgrove, Pa. (B. Fried, Dept. of Biology, Lafayette College, Easton, Pa.)