European Journal of Clinical Investigation

Volume 1 August 1970 Number 2

Contents

E. Jéquier, C. Perret

A. M. Ganzoni

J. A. Wils, P. W. C. Kloppenborg

D. J. Galton, J. P. D. Wilson

V. Macchia, G. M. Claar, G. Vecchio, A. Tenore

J. Veleminsky, I. M. Burr, W. Stauffacher

Sv. Nilsson, T. Scherstén

P. Björntorp, M. Karlsson

N. A. Lassen, J. Trap-Jensen

Urinary Excretion of Catecholamines and their Main Metabolites after Myocardial Infarction; Relationship to the Clinical Syndrome

Reticulocytes and Plasma Iron Turnover in Man

Evaluation of the Trilodothyronine Suppression Test in the Treatment of Graves' Disease

The Effects of Starvation on Lipogenesis in Human Adipose Tissue

Metabolic Activities of Thyroid Glands from Tapazole Treated Rats

Comparative Study of Early Metabolic Events Resulting from the Administration of the Two Diabetogenic Agents Alloxan and Streptozotocin

Influence of Bile Acids on the Synthesis of Biliary Phospholipids in Man

Triglyceride Synthesis in Human Subcutaneous Adipose Tissue Cells of Different Size

The Validity of the Indicator Dilution Method for Measuring the Capillary Diffusion Capacity for ⁵¹Cr-EDTA in Hyperaemic Skeletal Muscle

Abstracts of the Fourth Annual Meeting of the European Society for Clinical Investigation, Scheveningen, The Netherlands, April 23–25, 1970



Published by
Springer-Verlag Berlin • Heidelberg • New York
on behalf of the
European Society for Clinical Investigation

The Journal of Endocrinology

Volume 47 Number 4 August 1970

CONTENTS

- PATRICIA M. NICHOLSON: Physiological variations in prolactin content of the mouse pituitary gland examined by disc electrophoresis and bioassay
- G. B. MAKARA, E. STARK AND M. PALKOVITS: Afferent pathways of stressful stimuli: corticotrophin release after hypothalamic deafferentation
- W. ELGER, H. STEINBECK, B. CUPCEANCU AND F. NEUMANN Influence of methyltestosterone and cyproterone acetate on Wolffian duct differentiation in female rat foetuses
- R. M. DAS AND G. K. BENSON: Effect of gonadotrophins on the oestrous cycle in the guinea-pig
- C. A. FINN AND L. MARTIN: The role of the oestrogen secreted before oestrus in the preparation of the uterus for implantation in the mouse
- J. P. WIEBE: The mechanism of action of gonadotrophic hormones in amphibians: the stimulation of Δ^5 -3 β -hydroxysteroid dehydrogenase activity in testes of *Xenopus laevis* Daudin
- K. J. BETTERIDGE; Homotransplantation of ovaries with vascular anastomoses in rabbits: response of transplants to human chorionic gonadotrophin
- A. CHADWICK: Pigeon crop sac-stimulating activity in the pituitary of the flounder (*Pleuronectes flesus*)
- SUSAN A. BARRETT AND J. B. BROWN: An evaluation of the method of Cox for the rapid analysis of pregnanediol in urine by gas-liquid chromatography
- A. P. LABHSETWAR: The role of oestrogens in spontaneous ovulation: evidence for positive oestrogen feedback in the 4-day oestrous cycle
- H. HELLER, ELENA FERRERI AND D. H. G. LEATHERS: The effect of neurohypophysial hormones on the amphibian oviduct in vitro, with some remarks on the histology of this organ
- M. M. FERGUSON, J. B. GLEN and D. K. MASON: Cortisol utilization by salivary gland, kidney and adrenal cortex

Short communications

- B. A. PANARETTO AND MARION R. VICKERY: The relation of cardiac output to plasma cortisol clearance rates in shorn sheep during exposure to a cold, wet environment
- P. D. PAPAPETROU, D. A. KOUTRAS and B. MALAMOS: Lactate, pyruvate and thyroid function
- B. F. CLARK: Retention of oestradiol- 17β applied locally in the uteri of ovariectomized mice treated with progesterone
- I. D. SMITH, J. M. BASSETT AND T. WILLIAMS: Progesterone concentrations in the peripheral plasma of the mare during the oestrous cycle

50s. net in U.K. (\$8.50 in U.S.A.)

Annual subscription £24 net in U.K. (\$84.00 in U.S.A.) for twelve issues

CAMBRIDGE UNIVERSITY PRESS

Bentley House, 200 Euston Road, London N.W.1

32 East 57th Street, New York, N.Y. 10022

VOLUME 49

OCTOBER 1970

NUMBER 10

The Journal of Clinical Investigation

EDITED FOR THE AMERICAN SOCIETY FOR CLINICAL INVESTIGATION, INC.

Announcement of Concise Publications

Announcement of Classified Advertisements

Effect of ethanol on ketone metabolism. André Lefèvre, Howard Adler, and Charles S. Lieber

The interaction of monosodium urate with connective tissue components. WARREN A. KATZ and MAXWELL SCHUBERT

Observations on the maturation of thyroid function in early fetal life. Arnold H. Greenberg, Paul Czernichow, Richard C. Reba, John Tyson, and Robert M. Blizzard

The effects of transport inhibitors on sodium outflux and influx in red blood cells: evidence for exchange diffusion. MICHAEL J. DUNN

The nature of transtubular Na and K transport in isolated rabbit renal collecting tubules. Jared J. Grantham, Maurice B. Burg, and Jack Orloff

Plasma lipoproteins in familial lecithin: cholesterol acyltransferase deficiency: lipid composition and reactivity in vitro. John A. Glomset, Kaare R. Norum, and Weilling King

Sodium chloride and water transport in the descending limb of Henle. JUHA P. KOKKO

Correlation of serum follicular stimulating hormone (FSH) and luteinizing hormone (LH) as measured by radioimmunoassay in disorders of sexual development. Robert Penny, Harvey J. Guyda, Alice Baghdassarian, Ann J. Johanson, and Robert M. Blizzard

Abnormal lipid composition of chylomicrons in broad-β disease (type III hyperlipoproteinemia). William R. Hazzard, Daniel Porte, Jr., and Edwin L. Bierman

The effect of physical training upon the mechanical and metabolic performance of the rat heart. Somsong Penpargkul and James Scheuer

Hereditary defect of intestinal iron transport in mice with sex-linked anemia. John A. Edwards and Robin M. Bannerman

Isotopic studies of therapeutic anticoagulation with a coagulating enzyme. W. R. Bell and E. Regoeczi

Metabolic studies of isolated human eccrine sweat glands. S. Wolfe, G. CAGE, M. EPSTEIN, L. TICE, H. MILLER, and R. S. GORDON, JR.

Hemodynamics, coronary blood flow, and myocardial metabolism in coronary shock; response to *l*-norepinephrine and isoproterenol. Hiltrud Mueller, Stephen M. Ayres, John J. Gregory, Stanley Giannelli, Jr., and William J. Grace

Short-term measurement of catabolic rates using iodine-labeled plasma proteins. A. S. McFarlane and A. Koj

A new method for the measurement of thyroidal iodine release in man. JOHN T. NICOLOFF

The role of glucocorticoids in the regulation of thyroid function in man. John T. Nicoloff, Delbert A. Fisher, and Milo D. Appleman, Jr.

Male pseudohermaphroditism due to 17α-hydroxylase deficiency. Maria I. New

The in vitro inhibition of insulin secretion by diphenylhydantoin. J. Stephen Kizer, Mario Vargas-Cordon, Klaus Brendel, and Rubin Bressler

The biosynthesis of phosphatidylinositol in human platelets. Charles T. Lucas, Frank L. Call II and William J. Williams

Yearly subscription rates: \$45.00 payable in U.S. funds may be obtained from

THE JOURNAL OF CLINICAL INVESTIGATION
The Rockerfeller University, New York 10021, U.S.A.

THE QUARTERLY JOURNAL OF MEDICINE

EDITED BY

D. A. K. BLACK W. B. MATTHEWS P. HUGH-JONES
J. D. N. NABARRO

E. M. McGirr A. G. W. Whitfield

CONTENTS

NEW SERIES. Vol. XXXIX. No. 154. APRIL, 1970

(Vol. LXIII of the continuous series)

Hyperthyroidism and Hypercalcaemia. By A. M. Parfitt and C. E. Dent

Chronic Interstitial Nephritis as a Consequence of Heatstroke. By M. C. Kew, C. Abrahams, and H. C. Seftel. With Plates 14 to 18

Carbohydrate Metabolism in Renal Disease. By I. M. Spitz, A. H. Rubenstein, I. Bersohn, C. Abrahams, and C.

The Haemolytic Uraemic Syndrome in Adults. By A. R. Clarkson, J. R. Lawrence, R. Meadows, and A. E. Seymour. With Plates 19 to 21

Some Observations on the Effects of Treatment with Lactulose on Patients with Chronic Hepatic Encephalopathy. By R. Zeegen, J. E. Drinkwater. J. C. B. Fenton, A. Vince, and A. M. Dawson

Assessment and Significance of Bacterial Overgrowth in the Small Bowel, By J. D. Hamilton, N. H. Dyer, A. M. Dawson, F. W. O'Grady, A. Vince, J. C. B. Fenton, and D. L. Mollin

Prestomal Ileitis: Clinical and Pathological Findings in Five Cases. By R. P. Knill-Jones, B. Morson, and Roger Williams. With Plates 22 to 24

Drug-Induced Secondary Hyperaldosteronism in Patients with Pulmonary Tuberculosis. By A. M. Holmes, C. M. Hesling, and T. M. Wilson

Price 25s. 0d. net.

Subscription price 75s. per annum.

OXFORD UNIVERSITY PRESS

ELY HOUSE, 37 DOVER STREET, LONDON, W.1

New Books from Blackwell —

Statistical Methods in Medical Research

P. Armitage M.A. PH.D. 1970. 500 pages, 65 illustrations. £5 10s.

This book is intended primarily for the medical research worker wishing to use statistical methods in the design and analysis of numerical data. It will serve both as a reference book and as an adjunct to courses in medical statistics. The aim has been to explain the concepts underlying statistical methodology and to describe the techniques with a minimum of mathematical argument, and with illustrations from medical research. The book covers most of the techniques likely to be needed by the research worker, including those required for particular types of medical investigation such as clinical trials, epidemiological surveys and biological assays.

Clinical Haematology in Medical Practice

G. C. de Gruchy M.D. (Melb.) F.R.A.C.P. M.R.C.P. (Lond.) M.C.P.A. F.R.C.P. Third Edition, November 1970. 850 pages, 88 illustrations. 90s.

'In preparing a new edition of this well-known and excellent book the author has made a complete revision of the text; it is now 61 pages longer. Professor de Gruchy's presentation of clinical haematology, with his sound common-sense approach to the use of tests and interpretation of results, is a pleasure to read... The author is to be congratulated on maintaining the high standard he has set himself in producing this first-class work on blood disorders, which all who are interested in haematology will want to possess.' The Practitioner (on the second edition).

BLACKWELL SCIENTIFIC PUBLICATIONS

Oxford and Edinburgh -

THE BIOCHEMICAL JOURNAL

Published by THE BIOCHEMICAL SOCIETY

Vol. 119, No. 4

OCTOBER, 1970

Incorporation of [³H]uridine into the ribonucleic acid of rat uterus during pseudo-pregnancy and in the presence of I.C.I. 46 474 [trans-1-(p-β-dimethylamino-ethoxyphenyl) -1,2-diphenylbut-1-ene]. J. E. O'Grady, P. J. Heald & A. O'Hare Nitrite and hydroxylamine reduction in higher plants. Fractionation, electron donor and substrate specificity of leaf enzymes, principally from vegetable marrow (*Cucurbita pepo L.*). D. P. Hucklesby & E. J. Hewitt

Amino acid requirement for the growth-hormone stimulation of incorporation of precursors into protein and nucleic acids of liver slices. M. J. CLEMENS & A. KORNER

Studies on a testosterone glucuronyltransferase from the cytosol fraction of human liver. G. S. RAO, M. L. RAO & H. BREUER Effect of actinomycin D, cycloheximide, and acute blood loss on ferritin synthesis in rat liver. J. A. Millar, R. L. C. Cumming, J. A. Smith & A. Goldberg

Studies on bound trans-4-hydroxy-L-proline in sandal (Santalum album L.). R. KUTTAN & A. N. RADHAKRISHNAN

Differences between the biliary excretion of tri[14C]methyl -1-(3-hydroxyphenyl) ammonium iodide in Wistar and Gunn rats. T. N. Calvey, S. M. Somani & A. Wright

Histone-acetylating enzyme of brain. S. C. BONDY, S. ROBERTS & B. S. MORELOS

The stereochemistry of hydrogen transfer from reduced nicotinamide-adenine dinucleotide phosphate in the reduction of ethylenic linkages during cholesterol biosynthesis. D. C. WILTON, I. A. WATKINSON & M. AKHTAR

Properties and substrate specificities of the phenylalanyl-transfer-ribonucleic acid synthetases of Aesculus species J. W. Anderson & L. Fowden

Properties and substrate specificity of the leucyl-, the threonyl- and the valyl-transfer-ribonucleic acid synthetases from Aesculus species. J. W. Anderson & L. Fowden

Characterization of messenger-like ribonucleic acid from Saccharomyces cerevisiae by the use of chromatography on methylated albumin-kieselguhr. R. JOHNSON

The release of radioactive nucleic acids and mucoproteins by trypsin and ethylenediaminetetra-acetate treatment of babyhamster cells in tissue culture. C. SNOW & A. ALLEN

Structural and functional relationships of enzyme activities induced by nitrate in barley. J. L. WRAY & P. FILNER

Conversion of 5-(1,2-epoxy-2,6,6-trimethylcyclohexyl)-3-methylpenta-cis-2-trans-4-dienoic acid into abscisic acid in plants. B. V. MILBORROW & R. C. NODDLE

Immunochemical studies with soluble and mitochondrial pyruvate carboxylase activities from rat tissues. F. J. BALLARD, R. W. HANSON & L. RESHEF

Phospholipid metabolism during regeneration of rat liver. G. Fex

Free and membrane-bound polyribosomes in normal and Rauscher-virus-infected mouse spleen cells. J. Th. M. Burghouts, A. L. H. Stols & H. Bloemendal

Creatine regulation in the embryo and growing chick. O. RAMIREZ, E. CALVA & A. TREJO

Biosynthesis of the carbohydrate portion of immunoglobins. Kinetics of synthesis and secretion of [3H]leucine-, [3H]galactose- and [3H]mannose-labelled myeloma protein by two plasma-cell tumours. F. Melchers

Effects of oestradiol-17\(\beta\) and progesterone on total and nuclear-protein synthesis in epithelial and stromal tissues of the mouse uterus, and of progesterone on the ability of these tissues to bind oestradiol-17\(\beta\). I. A. SMITH, L. MARTIN, R. J. B. KING & M. VERTES

SHORT COMMUNICATIONS

The effect of prostatic metabolites of testosterone and other substances on the isolated deoxyribonucleic acid polymerase of the canine prostrate. M. E. Harper, C. G. Pierrepoint, A. R. Fahmy & K. Griffiths

The apparent inhibition of phosphofructokinase by reduced nicotinamide-adenine dinucleotide: a problem of coupled-enzyme assays. E. A. Newsholme & P. H. Sugden

A method for the analysis of phosphate and calcium in small samples of plasma by atomic absorption spectrophotometry. J. A. Parsons, B. Dawson, E. Callahan & J. T. Potts, Jun.

The distribution of two chromatographically distinguishable forms of phosphofructokinase in the tissues of the rat. C. B. TAYLOR & M. BEW

Residual activity in carboxymethylated liver alcohol dehydrogenase. C. H. REYNOLDS & J. S. MCKINLEY-MCKEE

Reduction of 5β-androstane-3,16-dione by a crystalline 20β-hydroxy steroid-nicotinamide-adenine dinucleotide oxido-reductase preparation. T. Pocklington, J. Jeffery, B. S. Middleditch & C. J. W. Brooks

Subscription price per volume £9 net; \$22.00 in U.S.A.

Orders may be placed with a bookseller, or sent direct to Biochemical Society (Publications); 7 Warwick Court, London W.C.1