CONTENTS

Vol. 45, No. 1

JULY 1973


Vasopressor-induced natriuresis and altered intrarenal haemodynamics in cirrhotic man. R. A. Gutman, A. W. Forrey, W. P. Fleet and R. E. Cutler

A study of intravascular coagulation in immune complex glomerulonephritis by use of 131I-labelled fibrinogen and 125I-labelled antigen. E. N. Wardle

Measurement of concentrations of angiotensin I in human blood by radioimmunoassay. M. A. Waite

Studies on the blood fibrinolytic system in congestive cardiac failure. J. M. Rawles, D. Ogston and A. S. Douglas


Impairment of phenylalanine hydroxylation in chronic renal insufficiency. G. A. Young and F. M. Parsons

The ventilatory response to hypoxia during exercise in cyanotic congenital heart disease. M. R. H. Taylor


SHORT COMMUNICATION

Effect of low-density lipoprotein preparations on plasmin. Robyn J. Herbert, B. Bennett and D. Ogston

CORRESPONDENCE SECTION

The nature and excretion of biliary copper in man. K. O. Lewis and J. L. Gollan

MEDICAL RESEARCH SOCIETY (Meeting on 11 May 1973)

Demonstrations
Communications

Vol. 45, No. 2

AUGUST 1973

Determination of leg blood flow during exercise in man: an indicator-dilution technique based on femoral venous dye infusion. J. Wahren and L. Jorfeldt


xxxvi
Contents

Plasma noradrenaline and adrenaline in patients with thyrotoxicosis and myxoedema. N. J. CHRISTENSEN 163

Plasma volume decrease and elevated Evans Blue disappearance rate in essential hypertension. MILOS ULRYCH 173

Synthesis and release of parathyroid hormone by a renal carcinoma in cell culture. P. B. GREENBERG, T. J. MARTIN and HELEN S. SUTCLIFFE 183

The urinary excretion of 1-methylimidazole-4-acetic acid, a histamine metabolite, by healthy and asthmatic children. HAZEL THOM, JOYCE E. RICHARDSON and R. G. MITCHELL 193

Intestinal absorption of stereoisomers of dipeptides in the rat. A. M. ASATOOR, AMRIT CHADHA, M. D. MILNE and D. I. PROSSER 199

The inactivation by carbenoxolone of individual human pepsinogens and pepsins. N. B. ROBERTS and W. H. TAYLOR 213

Histamine metabolism in human gastric mucosa. H. DENCKER, G. KAHLSON, INGER KOCKUM, C. NORRYD and ELSA ROSENGREN 225

Retention of a single oral massive dose of vitamin A. SHEILA M. PEREIRA and ALMAS BEGUM 233


SHORT COMMUNICATIONS

Triiodothyronine concentration in cord and maternal sera at term. C. J. EASTMAN, J. M. CORCORAN, A. Jequier, R. P. EKINS and E. S. WILLIAMS 251

Altered bile acid metabolism during treatment with phenobarbitone. N. E. MILLER and P. J. NESTEL 257

Rapid dehydration as a measure of the ability of the kidney to concentrate the urine: comparison with the Pitressin–dehydration test. K. G. KOUTSAIMANIS and P. R. W. TASKER 263

Vol. 45, No. 3

September 1973

Left ventricular function in chronic obstructive pulmonary disease with and without cardiac failure. V. JEŽEK and F. SCHRIJEN 267

Peripheral vascular and sweat-gland reflexes in diabetic neuropathy. H. K. GOADBY and C. B. B. DOWNMAN 281


The effect of conjugated and unconjugated bile acids on water and electrolyte absorption in the human jejunum. R. I. RUSSELL, J. G. ALLAN, V. P. GERSKOWITCH and K. M. COCHRAN 301

The lipids and lipoproteins of human peripheral lymph, with observations on the transport of cholesterol from plasma and tissues into lymph. D. REICHL, L. A. SIMONS, N. B. MYANT, J. J. PFLUG and G. L. MILLS 313
Contents

Circadian variation in plasma iron concentration and reticuloendothelial iron release in the rat. S. R. Lynch, Monica Simon, T. H. Bothwell and R. W. Charlton 331

Maximum motor nerve conduction velocity in XYY males. M. O. Wright 337


Prediction of the physiological dead-space in resting normal subjects. E. A. Harris, Mary E. Hunter, Eve R. Seelye, Margaret Vedder and R. M. L. Whitlock (Errata, p. xviii) 375

Carbohydrate metabolism in patients with primary hepatocellular carcinoma. A. I. Vinik and W. Pooler 387


SHORT COMMUNICATIONS

Bile acid synthesis in the developing sheep liver. R. A. Smallwood, P. Jablonski and J. McK. Watts 403


A comparison of double-isotope derivative and radioimmunological estimation of plasma aldosterone concentration in man. R. Fraser, Sheena Guest and Jessie Young 411

MEDICAL RESEARCH SOCIETY (Meeting on 29 June 1973)

Demonstrations 9P

Symposium: Obesity 9P

Communications 12P

Vol. 45, No. 4  October 1973


The plasma kinin-forming system in labour. M. Malofiejew 429

The respiratory response to chronic metabolic alkalosis and acidosis in disease. C. Van Ypersele de Strihou and A. Frans 439

The bioassay of human endogenous pyrogen. E. S. Allison, W. I. Cranston, G. W. Duff, R. H. Luff and M. D. Rawlins 449


Free water clearance in patients with essential hypertension. E. J. Dohout Mees and H. de Graaf 469

The potentiation of platelet aggregation and adhesion by heparin in vitro and in vivo. C. Thomson, C. D. Forbes and C. R. M. Prentice

Urinary excretion of water and electrolytes in normal females during the follicular and luteal phases of the menstrual cycle: the effect of posture. Owen M. Edwards and R. I. S. Bayliss

Influence of albumin on the hepatic uptake of unconjugated bilirubin. J. R. Bloomer, P. D. Berk, J. Vergalla and N. I. Berlin

Influence of albumin on the extravascular distribution of unconjugated bilirubin. J. R. Bloomer, P. D. Berk, J. Vergalla and N. I. Berlin

The effect of ethanol on the cough reflex. H. Berkowitz, J. Reichel and C. Shim

Relationship between plasma cortisol and peak expiratory flow rate in exercise-induced asthma and the effect of sodium cromoglycate. P. Jaffe, P. König, O. Ijaduola, S. Walker and S. Godfrey


Turnover of cholesteryl esters in plasma low-density and high-density lipoproteins in familial hyperbetalipoproteinaemia. N. B. Myant, S. Balasubramaniam, C. D. Moutafis, M. Mancini and Joan Slack

SHORT COMMUNICATIONS

The effects of pre-existing loads upon detection of externally applied resistances to breathing in man. D. I. McCloskey

Suppression of plasma renin by atherogenic levels of serum cholesterol in rabbits. D. J. Campbell, S. L. Skinner and A. J. Day

Vol. 45, No. 5

A specific increase in cardiovascular reactivity related to sodium retention in DOCA-salt-treated rats. G. J. Dusting, G. S. Harris and M. J. Rand

Plasma lipid and lipoprotein abnormalities in patients with malabsorption. Gilbert R. Thompson and J. Paul Miller


Contents


The rate of sickling of cells containing sickle-cell haemoglobin. M. W. Rampling and J. A. Sirs 655

Spontaneous denaturation as a possible initial step in the breakdown of serum albumin in vivo. K. Wallenvik 665

Glucose tolerance and metabolic changes in human viral hepatitis. C. O. Record, K. G. M. M. Alberti, D. H. Williamson and R. Wright 677

Generation of angiotensin II at peripheral vascular level: studies using angiotensin II antisera. J. D. Swales and H. Thurston 691

Central and peripheral mechanisms in the maintenance of experimental hypertension in the rabbit. John L. Reid, Peter J. Lewis and Colin T. Dollery 701

SHORT COMMUNICATIONS


Absorption of amino acids from an amino acid mixture simulating casein and a tryptic hydrolysate of casein in man. D. B. A. Silk, T. C. Marrs, Jill M. Addison, D. Burstyn, M. L. Clark and D. M. Matthews 715

CORRESPONDENCE SECTION


Vol. 45, No. 6 December 1973


Renal handling of calcium, magnesium, inorganic phosphate and hydrogen ions during prolonged exposure to elevated carbon dioxide concentrations. S. P. Gray, J. E. W. Morris and C. J. Brooks 751


Decreased ouabain-sensitive adenosine triphosphatase activity in the erythrocyte membrane of patients with chronic renal disease. C. H. Cole 775

The effect of ethinyloestradiol on calcium and phosphorus metabolism of post-menopausal women with primary hyperparathyroidism. J. C. Gallagher and R. Wilkinson 785
Contents

The hydrolysis of glycine oligopeptides by guinea-pig intestinal mucosa and by isolated
brush borders. T. J. Peters 803

The mechanism of the entry of dye into neutrophils in the Nitroblue Tetrazolium (NBT)
test. A. W. Segal and A. J. Levi 817

The effect of protein loads on plasma amino acid levels. T. Palmer, Mary A. Rossiter,
B. Levin and V. G. Oberholzer 827

The effects of therapeutic decrease in packed cell volume on the responses to exercise of
patients with polycythaemia secondary to lung disease. B. D. W. Harrison, Jane
Davis, R. G. Madgwick and Marion Evans 833

Intestinal absorption of dipeptides containing glycine, phenylalanine, proline, β-alanine
or histidine in the rat. D. J. Boullin, R. F. Crampton, Christine E. Heading and
D. Pelling 849

Short Communication

Maximum bicarbonate response to intravenous infusion of 'GIH' secretin in man.
L. V. Gutterrez and J. H. Baron 859

Correspondence Section

Measurements of the metabolic component of the acid–base status in acute clinical
situations. C. T. Kappagoda, R. J. Linden, H. M. Snow, J. B. Stoker, D. G.
Lewis and J. C. Stoddart 863

Body potassium and fat-free mass. F. P. Muldowney, K. Boddy, Priscilla C. King,
J. Womersley and J. V. G. A. Durnin 865

Supplement No. 1

Proceedings of the Second Meeting of the International Society of Hypertension,
Milan, 20–23 September 1972

The First Volhard Lecture: Franz Volhard, 1872–1972. Sir George Pickering 1s

Studies on hypertension in spontaneously hypertensive rats. Kozo Okamoto, Yukio
Yamori, Shoichiro Nosaka, Akira Ooshima and Fumitada Hazama 11s

Studies on the New Zealand strain of genetically hypertensive rats. F. O. Simpson, E. L.

Blood pressure and ageing; results of a 15–17 year follow-up study in South Wales.
W. E. Miall and Susan Chinn 23s

Longitudinal change in blood pressure in individuals, families and social groups.
Benjamin C. Johnson, Thomas M. Karunas and Frederick H. Epstein 35s

Early consequences of screening for hypertension in a community. Ronald J. Prineas,
W. B. Stephens and R. R. H. Lovell 47s

Genetic ecology of hypertension. Ricardo Cruz-Coke, Hugo Donoso and Radek
Barrera 55s

The organization of a multi-centre randomized control therapeutic trial for mild to
moderate hypertension. W. S. Peart 67s
## Contents

European working party on high blood pressure in elderly (EWPHE): organization of a double-blind multicentre trial on antihypertensive therapy in elderly patients.  
A. AMERY and A. DE SCHAEPRDRIJVER  
A new look at the treatment of severe hypertension. PRISCILLA KINCAID-SMITH, P. FANG and M. C. LAVER  
Results of medical versus surgical treatment of renovascular hypertension. W. S. PEART  
Results of surgical treatment in comparison with medical treatment of renovascular hypertension. K. OWEN  
Effect of high-salt, high-carbohydrate, low-protein diet on hypertension in the rat. HIDEO UEDA  
An epidemiological study of hypertension. TAKESHI KIMURA  
Long-term study of relationships between blood pressure, age and body weight in steelmill workers. M. ULRYCH, J. TAUBER and A. P. SHAPIRO  
Electrolytes, environment and blood pressure. H. G. LANGFORD and ROBERT L. WATSON  
Importance of central catecholaminergic neurones in the development and maintenance of renal hypertension. P. J. LEWIS, J. L. REID, J. P. CHALMERS and C. T. DOLLERY  
Reversibility of baroreceptor adaptation in chronic hypertension. HELIO CESAR SALGADO and EDUARDO MOACYR KRIEGER  
Sympathetic activity in peripheral nerves of normo- and hypertensive subjects. B. G. WALLIN, W. DELIUS and K.-E. HAGBARTH  
Cardiovascular responses to acute mental ‘stress’ in spontaneously hypertensive rats. B. FOLKOW, MARGARETA HALLBÄCK and LILIAN WEISS  
Systemic haemodynamics in mild arterial hypertension before and after physical training. R. SANNERSTEDT, H. WASIR, R. HENNING and L. WERKÖ  
Importance of the adrenergic nervous system in the support of cardiac function in patients with primary arterial hypertension. M. GUAZZI, A. POLESE, C. FIorentini and F. MAGRINI  
Haemodynamic and blood volume studies in long-term haemodialysis patients, and in patients with successfully transplanted kidneys. J. TUCKMAN, J.-L. BENNINGER and F. REUBI  
Treatment of hypertension with large doses of the β-adrenergic blocking drug oxyprenolol, alone, and in combination with the vasodilatator dihydralazine. J. TUCKMAN, F. MESSERLI and J. HODLER  
Hypotensive effect of oxyprenolol in mild hypertension: a co-operative controlled study. G. MUIESAN, M. MOTOLESE and A. COLOMBI  
The effect of practolol (‘Eraldin’) in the long-term treatment of severe and moderate hypertension. R. M. FULTON, E. HILDA FULTON and K. G. GREEN  
Clinical and pharmacokinetic studies of minoxidil, a new antihypertensive agent. CHARLES A. CHIDSEY
Contents

The effect of oral diazoxide on hypertension and sodium excretion in chronic renal failure. H. THURSTON, J. E. F. POHL and J. D. SWALES 175s

Blood pressure over-shoot due to acute clonidine (Catapres) withdrawal: studies on arterial and urinary catecholamines and suggestions for management of the crisis. LENNART HANSSON and STEPHEN N. HUNYOR 181s

The effect of clonidine on plasma renin activity in human hypertension. A. SALVETTI, F. ARZILLI and G. C. ZUCCHELLI 185s

The natural history of hypertension with moderate impairment of renal function. G. E. BAUER and T. J. HUMPHERY 191s

The value of portable recorded blood pressures in the initiation of treatment of moderate hypertension. MAURICE SOKOLOW, DOROTHEE PERLOFF and RONALD COWAN 195s

Haemodynamic changes in long-term therapy of essential hypertension: a comparative study of diuretics, α-methyldopa and clonidine. P. LUND-JOHANSEN (Errata, p. xviii) 199s

Complications in treated arterial hypertension. H. STORM-MATHISEN, H. LÖKEN and U. RIAN 205s


Antihypertensive effect of spironolactone in essential, renal and mineralocorticoid hypertension. F. MANTERO, D. ARMANINI and S. URBANI 219s

The clearance of endogenous renin in the anhepatic anephric dog. R. FAGARD, E. EYSKENS, H. DELOOZ, E. FOSSION and A. AMERY 225s

Metabolism of renin activity in three canine models: isolated liver, acute hepatic necrosis and chronic toxic hepatitis. CAMERON G. STRONG, HUGO R. TAPIA and JAMES C. HUNT 229s

Metabolic clearance rate of angiotensin II in arterial hypertension. A. COLI and L. DONATO 235s

Synthesis of renin inhibitors. K. POULSEN, J. A. BURTON and E. HABER 239s

Renin release and renal vasomotor changes during stimulation of the brain stem in the cat. D. RICHARDSON, A. STELLA, G. LEONETTI, A. BARTORELLI and A. ZANCHETTI 243s

Effects of angiotensin II on adenylyclase activity, phosphodiesterase activity and on the level of cyclic AMP in rat uterus. G. ANGÈLES D'AURIAC and P. MEYER 247s

The vicious circle in acute malignant hypertension of rats. G. DAUDA, J. MÖHRING, K. G. HOFBAUER, E. HOMSY, ULRIKE MIKSCHE, H. ORTH and F. GROSS 251s

Angiotensin–salt hypertension. E. ERIC MUIRHEAD, BYRON E. LEACH and FRANK B. ARMSTRONG 257s

A new urinary assay for separate normetanephrine and metanephrine with application for the diagnosis of phaeochromocytoma. ROBERT L. WOLF, CORNELIA E. GHERMAN, JOHN D. LAUER, HAROLD L. FISH and BURT R. LEVEY 263s

Experimental studies on the mechanism of adrenocorticotropic hormone-induced hypertension in the sheep. B. A. SCOOGINS, J. P. COGHLAN, ELIZABETH J. CRAN, D. A. DENTON, S. K. FAN, J. G. MCDougALL, CATHERINE J. ODDIE, P. M. ROBINSON and A. A. SHULKES 269s
Contents

Age-dependent changes of plasma renin concentration in humans. K. HAYDUK, D. K. KRAUSE, W. KAUFMANN, R. HUENGES, U. SCHILLMÖLLER and V. UNBEHAU 273s


Plasma renin and angiotensin levels in human hypertension following treatment. C. I. JOHNSTON, N. ANAVEKAR, K. G. CHUA and W. J. LOUIS 287s

Increased plasma renin substrate concentrations in human malignant hypertension. E. ROSSET, J. R. SHERRER and R. VEYRAT 291s

Plasma renin activity and plasma renin substrate in hypertension associated with steroid excess. L. R. CRACKOFF and M. MENDLOWITZ 295s

On the pathogenesis of the secondary hyperaldosteronism of the Bartter syndrome. I. NIELSEN, J. G. JACOBSEN and K. H. OLESEN 301s

Ionic composition of arterial wall in experimental hypertension. G. L. F. J. RORIVE and H. VAN CAUWENBERGE 305s

Prognosis in arteriosclerotic renovascular hypertension. M. H. PINEDO, J. DE GRAEFF and A. STRUYVENBERG 309s

Divided renal and peripheral venous renin as a means of predicting operative curability of renal hypertension. KIKUO ARAKAWA, ZENZIRO MASAKI, YUKIO OSADA, JUNKO YAMADA and SHUNRO MOMOSE 311s

Improved technique for aorto-renal reconstruction: a haemodynamic approach. U. RUBERTI, A. VEGETO and E. MALAN 315s

Oral contraceptives and hypertension. J. O. LUND 317s

Renal prostaglandins: determinants of intrarenal distribution of blood flow in the dog. H. D. ITSKOVITZ, J. STEMPER, D. PACHOLCZYK and J. C. MCGIFF 321s

The effect of chronic sodium loading and sodium restriction on plasma and renal concentrations of prostaglandin A in normal Wistar and spontaneously hypertensive Aoki rats. R. M. ZUSMAN, B. H. FORMAN, G. SCHNEIDER, B. V. CALDWELL, L. SPEROFF and P. J. MULROW 325s

Author index 331s