CONTENTS

Volume 85, part I    July 1993

RAPID COMMUNICATION

Ventricular expression and circulating levels of immunoreactive dynorphin in heart transplant recipients by A. ATIONU, K. SORENSEN, B. WHITEHEAD, D. SINGER and N. CARTER  1-4

PAPERS

Dose-response effects of adrenergic and cholinergic stimulation on atrial natriuretic peptide secretion from beating isolated guinea-pig atria by P. F. SPEAKE, S. C. PIRIE, J. D. KIBBLE, A. MUNEER, D. TAYLOR, S. BIRRING and R. GREEN  5-12


Early increase in glomerular leucocyte number after a reduction in renal mass: implications for the pathogenesis of glomerulosclerosis by K. P. G. HARRIS, F. BAKER, J. BROWN and J. WALLS  27-31

Separate effects of urinary chondroitin sulphate and heparan sulphate on the crystallization of urinary calcium oxalate: differences between stone formers and normal control subjects by D. K. Y. SHUM and M. D. I. GOHEL  33-39

Abnormal urate transport in erythrocytes of patients with idiopathic calcium nephrolithiasis: a possible link with hyperuricosuria by G. GAMBARO, M. VICENTI, F. MARCHINI, A. D’ANGELO and B. BAGGIO  41-44


Effect of chronic smoking on endothelium-dependent vascular relaxation in humans by M.-C. JACOBS, J. W. M. LENDERS, J. A. KAPMA, P. SMITS and T. THIEN  51-55

Mitogenic events induced by vasopressin in aortic fibroblasts from spontaneously hypertensive rats by D. L. ZHU, T. HEREMBERT and P. MARCHE  57-61


Pulmonary vascular reactivity and ischaemia–reperfusion injury in the rat by M. MESSENT, M. J. D. GRIFFITHS and T. W. EVANS  71-75


Lipid metabolism after liver transplantation from a living related donor by K. SANO, A. TANAKA, S. UEMOTO, K. HONDA, K. TANAKA and K. OZAWA  83-88

Venous blood arterialization and parameters from the minimal models of glucose disappearance and post-hepatic insulin delivery by I. F. GODSLAND, C. FELTON and V. WYNN  89-95

Hyperproinsulinaemia in impaired glucose tolerance by A. J. KRENTZ, P. M. CLARK, L. COX and M. NATTRASS  97-100
Changes in the anterior chamber of the eye during acute hypoglycaemia in humans by D. A. Hepburn, C. V. Clark, A. C. H. Pell, B. McIver and B. M. Frier 101-104

Abnormalities in skeletal muscle metabolism in cyanotic patients with congenital heart disease: a $^{31}$P nuclear magnetic resonance spectroscopy study by I. Adatia, G. J. Kemp, D. J. Taylor, G. K. Radda, B. Rajagopalan and S. G. Haworth 105-109

Diffusion of polyethylene glycol-400 across lipid barriers in vitro by T. H. Iqbal, K. O. Lewis and B. T. Cooper 111-115

SUPPLEMENT 29
Communications for the Spring Meeting of the Medical Research Society on 21 and 22 April 1993 at University College Hospital, Medical School 1P-42P

Volume 85, part 2 August 1993

GLAXO/MRS YOUNG INVESTIGATOR PRIZE
A novel recombinant adenovirus vector expressing a flavivirus non-structural protein protects against lethal flavivirus challenge by S. C. Jacobs 117-122

PAPERS
Renal functional response to ischaemic renal failure in chronic hypoxic rats by C. F. Chen 123-127
A novel computer-driven, servo-controlled fluid replacement technique and its application to renal function studies in conscious rats by W. J. Burgess, M. Shalmi, J. S. Petersen, J. Plange-Rhule, R. J. Balment and J. C. Atherton 129-137
Reduced renal papillary plasma flow in non-ascitic cirrhotic rats by N. M. Atucha, T. Quesada and J. Garcia-Estan 139-145
Haemodynamic and hormonal responses to losartan (DuP753/MK954) infusion during cardiac catheterization in conscious salt-deplete dogs by R. J. MacFadyen, M. Tree, A. F. Lever and J. L. Reid 157-163
Atrial natriuretic peptide in the pericardial fluid of patients with heart disease by J. Amano, A. Suzuki, M. Sunamori, M. Shichiri and F. Marumo 165-168
Magnesium sulphate reverses the carotid vasoconstriction caused by endothelin-1, angiotensin II and neuropeptide-Y, but not that caused by N$^{G}$-nitro-L-arginine methyl ester, in conscious rats by P. A. Kemp, S. M. GARDNER, T. BENNETT and P. C. RUBIN 175-181
Angiopeptin inhibition of myointimal hyperplasia after balloon angioplasty of large arteries in hypercholesterolaemic rabbits by M. H. Howell, M. M. Adams, M. S. Wolfe, M. L. Foegh and P. W. Ramwell 183-188
Independent, marked associations of alleles of the insulin receptor and dipeptidyl carboxypeptidase-I genes with essential hypertension by B. J. Morris, R. Y. L. Zee, L.-H. YING and L. R. Griffiths 189-195
Influence of counterregulatory hormones, independently of hypoglycaemia, on cognitive function, warning symptoms and glucose kinetics by D. Kerr, M. P. Diamond, W. V. Tamborlane, S. Kerr and R. S. Sherwin 197-202
Glutathione peroxidase activity and metabolism of arachidonic acid in peripheral blood mononuclear cells from elderly subjects by N. Meskini, G. Nemoz, P. Chapuy, P. Haond, J. F. Pageaux, E. Vercel, M. Lagarde and A. F. Prigent 203-211
Some pitfalls in the measurement of blood glutathione by D. Schofield, G. Mei and J. M. Braganza 213-218
Serum sialic acid and acute-phase proteins in hypertriglyceridaemic patients showing the Frederickson’s type IIb phenotype by S. Haq, P. Tutt, M. Haq and M. Crook 219-222
Modulation of the anabolic effect of synthetic human parathyroid hormone fragment-(1-34) in the bone of growing rats by variations in the dosage regimen by J.-L. Riond 223-228
Comparison between continuous and discrete measurements of breathlessness during exercise in normal subjects using a visual analogue scale by H. R. HARTY, P. HEYWOOD and L. ADAMS

Effect of glucocorticosteroid treatment on β-adrenoceptor subtype function in adipocytes from patients with asthma by S. REYNISDOTTIR, H. WARENBERG, G. BYLIN and P. ARNER

Volume 85, part 3 September 1993

Editorial

TECHNIQUES IN CLINICAL RESEARCH

Assessment of adipose tissue metabolism in man: comparison of Fick and microdialysis techniques by P. ARNER and J. BOLOW

GLAXO/MRS YOUNG INVESTIGATOR PRIZE

Defective enzyme-mediated receptor protection: novel mechanisms in the pathophysiology of hypertension by B. R. WALKER

RAPID COMMUNICATION

A possible role for protein kinase C in the regulatory differences between intra-abdominal and subcutaneous human adipose tissue by H.-L. VIKMAN, J. M. KAARTINEN, R. K. TUOMINEN and J. J. OHISALO

PAPERS


Bombesin reduces food intake after a preload in man by a cholecystokinin-independent mechanism by R. J. LIEVERSE, J. B. M. J. JANSEN, A. A. M. ASCLEE and C. B. H. W. LAMERS


Human pyruvate dehydrogenase complex as an autoantigen in primary biliary cirrhosis by J. M. PALMER, M. F. BASSENDINE, O. F. W. JAMES and S. J. YEAMAN

Gene expression of metalloproteinases and their inhibitor in renal tissue of New Zealand Black/White F1 mice by T. NAKAMURA, I. EBHARA, S. OSADA, T. TAKAHASHI, M. YAMAMOTO, Y. TOMINO and H. KOIDE

Dissolved urate promotes calcium oxalate crystallization: epitaxy is not the cause by P. K. GROVER, R. L. RYALL and V. R. MARSHALL

Effects of oral and intravenous calcitriol on serum calcium oxalate saturation in dialysis patients by M. MARANGELLA, C. VITALE, D. COSSEDU, M. PETRARULO and F. LINARI

Ionized and total magnesium levels in cyclosporin-treated renal transplant recipients: relationship with cholesterol and cyclosporin levels by M. S. MARKELL, B. T. ALTURA, R. L. BARBOUR and B. M. ALTURA


Relationship between insulin release, antinatriuresis and hypokalaemia after glucose ingestion in normal and hypertensive man by A. NATALI, A. QUINONES GALVAN, D. SANTORO, N. PECORI, S. TADDEI, A. SALVETTI and E. FERRANINI

Responses of tissue protein synthesis to nutrient intake in rats exposed to interleukin-1β or turpentine by P. E. BALLMER, M. A. McNURLAN, I. GRANT and P. J. GARLICK

1H-nuclear magnetic resonance studies of human synovial fluid in arthritic disease states as an aid to confirming metabolic activity in the synovial cavity by J. M. DUFFY, J. GRIMSHAW, D. J. S. GUTHRIE, G. M. MCNALLY, R. A. B. MOLLAN, P. L. SPEDDING, J. TROCHA-GRIMSHAW, B. WALKER and E. WALSH

Elevated serum superoxide dismutase levels correlate with disease severity and neutrophil degranulation in idiopathic pulmonary fibrosis by R. M. BORZI, B. GRIGOLO, R. MELICONI, L. FASANO, C. STURANI, M. FABBRI, T. PORSTMANN and A. FACCHINI
Vasodilatory action of the calcium antagonist amlodipine on large and resistance pulmonary arteries from normoxic and chronically hypoxic rats by P. A. Woodmansey, F. Zhang, K. S. Channer and A. H. Morice 361–366

Validity of peak expiratory flow rate variability for the diagnosis of asthma by J. P. Jamison and R. K. McKinley 367–371

Volume 85, part 4 October 1993

EDITORIAL REVIEW
Interpretation of oxygen and carbon dioxide exchange across tissue beds in vivo by K. N. Frayn, P. Lund and M. Walker 373–384

RAPID COMMUNICATION

PAPERS
Effect of inhalation of 30% nitrous oxide on spectral components of heart rate variability in conscious man by D. C. Galletly, P. D. Tobin, B. J. Robinson and T. Corfiatis 389–392

Is receptor cross-regulation in human heart caused by alterations in cardiac guanine nucleotide-binding proteins? by A. Ferro, C. Plumpton and M. J. Brown 393–399

Cardiovascular and sympatho-adrenal responses to mental stress in primary hypertension by M. Lindqvist, T. Kahal, A. Melcher and P. Hiemdaal 401–409


Expression of the three endothelin genes and plasma levels of endothelin in pre-eclamptic and normal gestations by L. P. Mcmahon, C. W. G. Redman and J. D. Firth 417–424


Effects of decreased glutamine supply on gut and liver metabolism in vivo in rats by S. Heeneman and N. E. P. Deutz 437–444


Effect of chronic low-dose arginine vasopressin infusion on body fluid homeostasis during adaptation from a high- to a low-sodium diet in normal man by M. Sutters, D. J. S. Carmichael, S. L. Lightman and W. S. Peart 465–470

Natriuretic response to head-out immersion in humans with recent kidney transplants by T. J. Rabelink, K. A. van Tilborg, R. J. Hené and H. A. Koomans 471–477

Determinants of the renal clearance of exogenous lithium in a large sample of a white male working population by F. P. Cappuccio and P. Strazzullo 479–485

Effect of noradrenaline on renal sodium and water handling in euhydrated and overhydrated man by C. C. Lang, A. R. Rahman, D. J. K. Balfour and A. D. Struthers 487–494

Can ultrafiltration occur with a hypo-osmolar solution in peritoneal dialysis?: the role for 'colloid' osmosis by C. D. Mistry and R. Gokal 495–500
TECHNIQUES IN CLINICAL RESEARCH
Culture techniques and their applications to studies of vascular smooth muscle by J. H. Campbell and G. R. Campbell 501–513

GLAXO/MRS YOUNG INVESTIGATOR PRIZE
CD45RA⁺ T cells: not simple virgins by L. Lightstone and J. Marvel 515–519

RAPID COMMUNICATION
A novel antiserum specific to apolipoprotein B-48: application in the investigation of postprandial lipidaemia in humans by A. S. Peel, A. Zampelas, C. M. Williams and B. J. Gould 521–524

PAPERS
Insulin resistance of stress: sites and mechanisms by L. S. Brandi, D. Santoro, A. Natali, F. Altomonte, S. Baldi, S. Frascerra and E. Ferrannini 525–535


Relationship between markers of endothelial dysfunction, oxidant injury and tubular damage in patients with insulin-dependent diabetes mellitus by M. Yaqoob, A. W. Patrick, P. McClelland, A. Stevenson, H. Mason, M. C. White and G. M. Bell 557–562

Tumour necrosis factor-α, resting energy expenditure and cachexia in cystic fibrosis by J. S. Elborn, S. M. Cordon, P. J. Western, I. A. Macdonald and D. J. SHALE 563–568

Induction of enhanced responsiveness of human articular chondrocytes to extracellular ATP by tumour necrosis factor-α by W. S. Leong, R. G. G. Russell and A. M. Caswell 569–575

Impact of treatment with acetylsalicylic acid on the proaggregatory effects of adrenaline in vitro in patients with stable angina pectoris: influence of the anticoagulant by N. H. Wallén, C. Held, N. Rehnqvist and P. Hjemdahl 577–583

Cell membrane microviscosity and Ca²⁺-Mg²⁺-ATPase activity do not contribute to hypertension in the spontaneously hypertensive rat model by R. I. Norman and N. Achall 585–591

Rat renal, aortic and pulmonary endothelin-1 receptors: effects of changes in sodium and water intake by H. Michel, A. Backer, H. Meyer-Lehnert, I. Migas and H. J. Kramer 593–597

Control of sodium excretion in patients with cranial diabetes insipidus maintained on desamino-[8-D-arginine]vasopressin by M. Sutters, C. Brace, E. Hatfield, A. Whitehurst, S. L. Lightman and W. S. ParT 599–606


Modulation of small-intestinal secretion and absorption in chronic vitamin E deficiency: studies in rat jejenum in vitro by K. J. Lindley, D. P. R. Muller and P. J. Milla 629–635

Physiological determinants of inspiratory effort sensation during CO₂ rebreathing in normal subjects by J. E. Clague, J. Carter, M. G. Pearson and P. M. A. Calverley 637–642

Extracellular volume expansion inhibits antiuretic hormone increase during positive end-expiratory pressure in conscious dogs by G. Kaczmarczyk, D. Jorres, R. Rossaint, M. Krebs, V. Unger and K. Falke 643–649


CORRESPONDENCE
Endothelin peptides as local hormones and their roles in health and disease? by A. Haq 659
EDITORIAL REVIEW
Non-angiotensin effects of angiotensin-converting enzyme inhibitors by W. Sunman and
P. S. Sever

GLAXO/MRS YOUNG INVESTIGATOR PRIZE
Role of α1-adrenoceptors and imidazoline-binding sites in the control of insulin secretion
by S. L. F. Chan

PAPERS
Indomethacin stimulates basal glucose production in humans without changes in concentrations
of glucoregulatory hormones by E. P. M. Corssmit, J. A. Romijn, E. Endert and
H. P. Sauerwein

Inhibition of nitric oxide synthesis in forearm vasculature of insulin-dependent diabetic patients:
blunted vasoconstriction in patients with microalbuminuria by T. G. Elliott,
J. R. Cockcroft, P. H. Groop, G. C. Viberti and J. M. Ritter

Occurrence of presyncope in subjects without ventricular innervation by J. T. Lightfoot,
S. A. Rowe and S. M. Fortney

Brisk walking and serum lipoprotein variables in formerly sedentary men aged 42–59 years
by D. J. Stensel, A. E. Hardman, K. Brooke-Wavell, D. Vallance, P. R. M. Jones,
N. G. Norgren and A. F. Winder

Hydrogen peroxide generation in a model paediatric parenteral amino acid solution
by V. Brawley, J. Bhattacharya and W. B. Karp

Renal uric acid handling in non-insulin-dependent diabetic patients with elevated glomerular
filtration rates by A. Golik, J. Weissgarten, D. Cotariu, N. Cohen, R. Zaidenstein,
Y. Ramot, Z. Averbukh and D. Modai

Role of haematocrit in mediating the actions of chronic erythropoietin treatment on blood
pressure and renal haemodynamics in the rat by C. Huang, G. Davis and E. J. Johns

Effects of haemodialysis and continuous ambulatory peritoneal dialysis on abnormalities of ion
transport in vivo in patients with chronic renal failure by C. J. Brearley, J. K. Aronson,
N. A. Boon and A. E. G. Rainie

Renal tubular protein degradation of radiolabelled aprotinin (Trasylol) in patients with chronic
renal failure by R. Rustom, J. S. Grime, P. Maltby, H. R. Stockdale, M. J. Jackson,
M. Critchley and J. M. Bone

Change in macromolecular composition of interstitial fluid from swollen arms after breast
cancer treatment, and its implications by D. O. Bates, J. R. Levick and P. S. Mortimer

Interactions of hydrogen peroxide with interleukin-6 and platelet-derived growth factor in
determining mesangial cell growth: effect of repeated oxidant stress by R. J. D'Souza,

Viral infection of bovine bronchial epithelial cells induces increased neutrophil chemotactic
activity and neutrophil adhesion by M. Raz, R. A. Robbins, C. L. Kelling, C. S. Stine,
G. D. Leikauf, S. I. Rennard and J. R. Spurzem

CORRESPONDENCE
Repeatability testing for transcranial Doppler sonography by D. G. Grosset, I. B. Squire,
D. Georgiadis and K. R. Lees

Repeatability testing for transcranial Doppler sonography: authors' reply by P. Demolis,
S. Chalon and J.-F. Guidicelli

AUTHOR INDEX
SUBJECT INDEX