CONTENTS

Volume 89, part I    July 1995

Editorial                                            1

EDITORIAL REVIEW
Pathophysiology of microvascular disease in non-insulin-dependent diabetes by A. J. Jaap and J. E. Tooke 3–12

GLAXO/MRS YOUNG INVESTIGATOR MEDAL
Functional organization of human nuclei by A. B. Hassan 13–18

PAPERS
High water intake combined with low sodium intake abolishes the antidiuretic effect of angiotensin II in conscious dogs by G. Kaczmarczyk, W. Boemke, D. Zahreifard and H. Braun 19–25
Renal handling of lithium and the effects of mannitol and arginine vasopressin in man by F. H. Noormohamed and A. F. Lant 27–36
Effect of dietary salt restriction on renal sensitivity to vasopressin in man by M. Sutters, R. Duncan and W. S. Peart 37–43
Ventricular expression and circulating levels of insulin-like growth factor I in heart transplant recipients by A. Ationu, M. Burch, D. Singer, M. de Leval, B. Whitehead and N. Carter 53–57
EMD 57033 enhances arrhythmias associated with increased wall-stress in the working rat heart by S. J. Evans, A. J. Levi, J. A. Lee and J. V. Jones 59–67
Type I collagen biosynthesis by skin fibroblasts from patients with idiopathic juvenile osteoporosis by A. E. Pocock, M. J. O. Francis and R. Smith 69–73
Tissue inhibitor of metalloproteinase-1 and interstitial collagenase expression in autoimmune chronic active hepatitis and activated human hepatic lipocytes by J. P. Iredale, S. Goddard, G. Murphy, R. C. Benyon and M. J. P. Arthur 75–81
Lipopolysaccharide induces upregulation of neutral endopeptidase 24.11 on human neutrophils: involvement of the CD14 receptor by C. Fagny, A. Marchant, E. de Prez, M. Goldman and M. Deschodt-Lanckman 83–89
Longitudinal studies of platelet cyclic AMP during healthy pregnancy and pregnancies at risk of pre-eclampsia by E. H. Horn, J. A. Cooper, E. Hardy, S. Heptinstall and P. C. Rubin 91–99
Insensitivity of the Hering–Breuer reflex to spontaneous changes in metabolic rate in the infant by J. P. Mortola, C. Saiki and G. Fox 101–105
CORRESPONDENCE

SUPPLEMENT 33
Communications for the Joint Medical Research Society/European Society of Clinical Investigation Meeting on 2-5 April 1995 at the University of Cambridge 1p–50p

Volume 89, part 2  
August 1995

EDITORIAL REVIEW
Insulin resistance, hypertension and the insulin-responsive glucose transporter, GLUT4 by C. LIVINGSTONE, A. F. DOMINICZAK, I. W. CAMPBELL and G. W. GOULD 109–116

RAPID COMMUNICATION
Luminal epidermal growth factor is trophic to the small intestine of parenterally fed rats by T. MARCHRANK, R. A. GOODLAD, C. Y. LEE and R. J. PLAYFORD 117–120

PAPERS
Biliary excretion of chylomicron remnant cholesterol in the rat: responses to the expansion of their plasma pool and promoting role of stimulated bile-acid synthesis by M. CARRELLA, A. CSILLAGHY, R. DE MERCATO and A. D’ARIENZO 121–128


Human gastrin and vasoactive intestinal polypeptide responses to endurance running in relation to training status and fluid ingested by D. P. MACLAREN, N. M. Raine, A. M. O’CONNOR and K. D. BUCHANAN 137–143


Sympathetic stimulations by exercise-stress testing and by dobutamine infusion induce similar changes in heart rate variability in patients with chronic heart failure by M. PIEPOLI, S. ADAMOPOULOS, L. BERNARDI, P. SLEIGHT and A. J. S. COATS 155–164

Adverse effects of hypoxaemia on diastolic filling in humans by R. I. CARGILL, D. G. KIELY and B. J. LIPWORTH 165–169


Contribution of vascular nitric oxide to basal blood pressure in conscious spontaneously hypertensive rats and normotensive Wistar Kyoto rats by N. MINAMI, Y. IMAI, J.-i. HASHIMOTO and K. ABE 177–182

Non-invasive measurement of microvascular permeability to a small solute in man: validation of the technique by C. Cousins, N. D. Jonker, L. M. Banks, S. Mohammadtaghi, M. J. Myers and A. M. Peters

Intracranial pressure at high altitude and acute mountain sickness by A. D. Wright, C. H. E. Imray, M. S. C. Morrissey, R. J. Marchbanks and A. R. Bradwell

Volume 89, part 3
September 1995

EDITORIAL REVIEW

GLAXO/MRS YOUNG INVESTIGATOR PRIZE
t(8;21) breakpoints are clustered between alternatively spliced exons of MTG8 by J. E. Tighe and F. Calabi

PAPERS
Role of x-adrenoceptors in the maintenance of core temperature in humans by S. M. Frank, N. el-Gamal, S. N. Raja, P. K. Wu and O. Affi
Vasodilatory responses of isolated arteries of cirrhotic rats by S. S. Lee, J.-M. Pak, S. M. Medlicott and A. Bomzon
Cutaneous vasoconstrictor response induced by inspiratory gasp in relation to sex and age by Y.-T. Lau, C.-F. Liu and C. C. Tsai
Effects of endopeptidase 24.11 inhibition on plasma and tissue concentrations of vasoactive intestinal peptide by K. A. Duggan, D. M. Jones, V. Z. C. Ye, R. E. Davis and G. J. Macdonald
Effect of hypoxia and beta2-agonists on the activity of the renin–angiotensin system in normal subjects by E. A. Millar, R. M. Angus, J. E. Nally, R. Clayton and N. C. Thomson
Effect of oral digoxin, topical ouabain and salbutamol on transepithelial nasal potential difference in patients with cystic fibrosis by D. G. Peckham, A. Conn, C. Chotai, S. Lewis and A. J. Knox
Isogravitational heterogeneity of perfusion after unilateral lung transplantation by D. J. Ross, S. K. Koerner, J. Elashoff, A. D. Waxman and Z. Moheisenfar
Effect of the transmembrane gradient of magnesium and sodium on the regulation of cytosolic free magnesium concentration in human platelets by M. Yoshimura, T. Oshima, H. Matsuura, M. Watanabe, Y. Higashi, N. Ono, H. Hiraga, M. Kambe and G. Kajiyama
Effect of water-loading on the performance of polyethylene glycol as a marker of small intestinal permeability by T. H. Iqbal, M. A. Cox, K. O. Lewis and B. T. Cooper
Effect of water restriction during adaptation to a low-sodium diet in man by M. Sutters and W. S. Peart 305–310

Protein synthesis in isolated enterocytes from septic or endotoxaemic rats: regulation by glutamine by T. Higashiguchi, Y. Noguchi, T. Meyer, J. E. Fischer and P.-O. Hasselgren 311–319

β-Cell function in hypopituitary adults before and during growth hormone treatment by S. A. Beshyah, S. V. Gelding, C. Andres, D. G. Johnston and I. P. Gray 321–328

Total antioxidant capacity and lipid peroxidation during liver transplantation by H. F. Galley, N. Richardson, P. D. Howdle, B. E. Walker and N. R. Webster 329–332

Volume 89, part 4 October 1995

EDITORIAL REVIEW
Smoking and plasma lipoprotein metabolism by D. J. Freeman and C. J. Packard 333–342

PAPERS
Lack of effect of vitamin E administration on basal nitric oxide function in male smokers and non-smokers by D. Green, G. O’Driscoll, B. Blanksby and R. Taylor 343–348


Antecedent hypoglycaemia in non-diabetic subjects reduces the adrenaline response for 6 days but does not affect the catecholamine response to other stimuli by A. M. Robinson, H. M. Parkin, I. A. Macdonald and R. B. Tattersall 359–366


Cholecystokinin is a satiety hormone in humans at physiological post-prandial plasma concentrations by A. Ballinger, L. McLoughlin, S. Medbak and M. Clark 375–381

Effect of dietary restriction on protein synthesis and wound healing after surgery in the rat by P. W. Emery and P. Sanderson 383–388

Whole-body protein turnover and hepatic protein synthesis are increased by vaccination in man by M. Cayol, I. Tauveron, F. Rambourdin, J. Prugnaud, P. Gachon, P. Thieblot, J. Grizard and C. Obled 389–396

Expression and regulation of glycosyltransferases for N-glycosyl oligosaccharides in fresh human surgical and murine tissues and cultured cell lines by M. Li, V. Andersen and P. Lancet 397–404


High-affinity interaction of long-chain fatty acids with serum albumin in nephrotic syndrome by B. Leriche, B. Moulin, C. Delpero, R. Purgis, M. Olmer and J. Boyer 417–420

Effects of weight reduction on the regulation of lipolysis in adipocytes of women with upper-body obesity by S. Reynisdottir, D. Langin, K. Carlstrom, C. Holm, S. Rossner and P. Arnér 421–429


Effect of breathing, pressure and posture on palatoglossal and genioglossal tone by R. Mathur, I. L. Mortimore, M. A. Jan and N. J. Douglas 441–445

Effects of treadmill exercise and high-fat feeding on muscle degeneration in mdx mice at the time of weaning by A. Mokhtarian, J. P. Lefaucheur, P. C. Even and A. Sebille 447–452
Systemic treatment with epidermal growth factor induces anaemia in Goettingen minipigs

CORRESPONDENCE
Endothelium-mediated vascular dysfunction in diabetes by E. N. Wardle 459

Volume 89, part 5 November 1995

PAPERS
Abnormal left ventricular diastolic function during cold pressor test in uncomplicated
insulin-dependent diabetes mellitus by O. Götzsche, A. Darwish, L. P. Hansen
and L. Götzsche 461–465

Microvascular response to tissue injury and capillary ultrastructure in the foot skin of Type I

Effect of acute and chronic caffeine use on the cerebrovascular, cardiovascular and hormonal
responses to orthostasis in healthy volunteers by K. Debrah, R. Haigh, R. Sherwin,
J. Murphy and D. Kerr 475–480

Potent inhibitory effect of SR 49059, an orally active non-peptide vasopressin V1a receptor
antagonist, on human arterial coronary bypass graft by J. J. Liu, J. R. Chen,

Differences in transcription and translation of long and short Gα, the stimulatory G-protein,

Effects of fish oil supplementation on atherosclerosis in different regions of the aorta of
rabbits with diet-induced hypercholesterolaemia by M.-F. Chen, H.-C. Hsu and Y.-T. Lee
497–504

Clinical remission is associated with restoration of normal high-density lipoprotein cholesterol
levels in children with malignancies by S. Dessi, B. Batetta, O. Spano, F. Sanna,
M. Tonello, M. Giacchino, L. Tessitore, P. Costelli, F. M. Baccino, E. Madon and
P. Panì 505–510

Effects of different lipoproteins on the proliferative response of interleukin-2-activated T
lymphocytes and large granular lymphocytes by J. B. de Sanctis, I. Blanca and
N. E. Bianco 511–519

Intracolonic release in vivo of interleukin-1β in chronic ulcerative colitis by F. Casellas,
521–526

Atrial natriuretic factor and angiotensin II stimulate nitric oxide release from human
proximal tubular cells by J. S. Mclay, P. K. Chatterjee, S. K. Mistry, R. P. Weerakody,
A. G. Jardine, N. G. McKay and G. M. Haskeworth 527–531

The urinary F1 activation peptide of human prothrombin is a potent inhibitor of calcium
oxalate crystallization in undiluted human urine in vitro by R. L. Ryall, P. K. Grover,

Acute effects of central neuropeptide Y injection on glucose metabolism in fasted rats by
J. P. H. Wilding, Y. T. Kruszynska, P. D. Lambert and S. R. Bloom 543–548

A flow cytometric method to measure shape change of human neutrophils by A. T. Cole,
N. M. Garlick, A. M. Galvin, C. J. Hawkey and R. A. Robins 549–554

CORRESPONDENCE
Power spectral analysis of heart rate variability and baroreflex gain by A. Malliani,
M. Pagani and F. Lombardi 555–556

Power spectral analysis of heart rate variability and baroreflex gain: author’s reply by
P. Sleight, M. T. la Rovere, A. Mortara, G. Pinna, R. Maestri, S. Leuzzi, B. Bianchini,
L. Tavazzi and L. Bernardi 556
PAPERS

On the quantification of heart rate changes in autonomic function tests: relations between measures in beats per minute, seconds and dimensionless ratios by TH. J. C. FAES, N. N. D. DE NEELING, R. KINGMA, B. J. TENVOORDE and J. M. KAREMAKER

557–564


565–573

Differential effects of a novel non-peptide endothelin receptor antagonist (bosentan) in rat liver and vasculature by P. A. PHILLIPS, J. RISVANIS, K. ALDRED, L. M. BURRELL and B. BARTHOLOMEUSZ

575–579

Calf muscle mitochondrial and glycogenolytic ATP synthesis in patients with claudication due to peripheral vascular disease analysed using 31P magnetic resonance spectroscopy by G. J. KEMP, L. J. HANDS, G. RAMASWAMI, D. J. TAYLOR, A. NICOLAIDES, A. AMATO and G. K. RADD

581–590

Relationship between serum tryptophan and tryptophan metabolite levels after tryptophan ingestion in normal subjects and age-related cataract patients by R. J. W. TRUSCOTT and A. J. ELDERFIELD

591–599

Septic patients in multiple organ failure can oxidize infused glucose, but non-oxidative disposal (storage) is impaired by C. J. GREEN, I. T. CAMPBELL, E. O'SULLIVAN, S. UNDERHILL, D. P. M. MCLAREN, L. J. HIPKIN, I. A. MACDONALD and J. RUSSELL

601–609

Insulin-like growth factor I is a major fibroblast mitogen produced by primary cultures of human airway epithelial cells by A. D. CAMBREY, O. J. KWON, A. J. GRAY, N. K. HARRISON, M. YACOUB, P. J. BARNES, G. J. LAURENT and K. F. CHUNG

611–617


619–624

The cost of breathing in stable chronic obstructive pulmonary disease by O. HUGLI, Y. SCHUTZ and J.-W. FITTING

625–632

Intravenous magnesium sulphate relieves migraine attacks in patients with low serum ionized magnesium levels: a pilot study by A. MAUSKOP, B. T. ALTURA, R. Q. CRACCO and B. M. ALTURA

633–636

Low selenium status in the elderly influences thyroid hormones by C. OLIVIERI, D. GIRELLI, M. AZZINI, A. M. STANZIAL, C. RUSSO, M. FERRONI and R. CORROCHER

637–642

Metabolic acidosis does not contribute to chronic renal injury in the rat by D. THROSSELL, J. BROWN, K. P. G. HARRIS and J. WALLS

643–650


651–658

AUTHOR INDEX

SUBJECT INDEX