

BRITISH JOURNAL OF PHARMACOLOGY

Contents

- | | |
|-------------|---|
| <i>Page</i> | Systematic Pharmacology |
| 437 | DHASMANA, K. M. and SPILKER, B. A. On the mechanism of L-DOPA-induced postural hypotension in the cat. (SP1, DM2) |
| 452 | ABEL, E. L., McMILLAN, D. E. and HARRIS, L. S. Tolerance to the hypothermic effects of Δ^9 -tetrahydrocannabinol as a function of age in the chicken. (SP2) |
| 457 | KRIVOV, W., KROEGER, D. and ZIMMERMANN, E. Actions of morphine on the segmental reflex of the decerebrate-spinal cat. (SP2, DM2) |
| 465 | CLARKE, G. and DAVIES, J. The effects of anti-Parkinson drugs on cortical neurones. (SP2, DM2) |
| 476 | BROWN, D. M., HUGHES, B. O., MARSDEN, C. D., MEADOWS, J. C. and SPICER, B. Some initial animal and human pharmacological studies with benapryzine (BRL 1288). (SP2, CP, PP) |
| 487 | ALLEN, JUDITH A., JENKINSON, D. J. and RODDIE, I. C. The effect of β -adrenoceptor blockade on human sweating. (SP3, CP) |
| | Autopharmacology |
| 498 | HÅKANSON, R., LIEBERG, G. and OSCARSON, J. Effects of prostaglandin E_1 on acid secretion, mucosal histamine content and histidine decarboxylase activity in rat stomach. (AP2) |
| 504 | EYRE, P., LEWIS, A. J. and WELLS, P. W. Acute systemic anaphylaxis in the calf. (AP2) |
| 517 | RIBEIRO, S. A. and SILVA, M. ROCHA E. Antinociceptive action of bradykinin and related kinins of larger molecular weights by the intraventricular route. (AP2) |
| | Pharmacokinetics |
| 529 | GOODCHILD, MARGARET and NEAL, M. J. The uptake of 3H - γ -aminobutyric acid by the retina. (PK3) |
| 543 | NEAL, M. J. and STARR, M. S. Effect of inhibitors of γ -aminobutyrate aminotransferase on the accumulation of 3H - γ -aminobutyric acid by the retina. (PK3) |
| 556 | GILLESPIE, J. S. and TOWART, R. Uptake kinetics and ion requirements for extraneuronal uptake of noradrenaline by arterial smooth muscle and collagen. (PK3, AP1, SP1) |
| 568 | POWIS, G. The accumulation and metabolism of (–)-noradrenaline by cells in culture. (PK3, AP1) |
| | Drug Mechanisms |
| 576 | LOOTS, J. M., MEIJ, H. S. and MEYER, B. J. Effects of <i>Naja nivea</i> venom on nerve, cardiac and skeletal muscle activity of the frog. (DM1) |
| 586 | BIRCH, N. J. and JENNER, F. A. The distribution of lithium and its effects on the distribution and excretion of other ions in the rat. (DM1, PK1, PP) |
| | Clinical Pharmacology |
| 595 | PHILLIPS, SUSAN J., RICHENS, A. and SHAND, D. G. Adrenergic control of tendon jerk reflexes in man. (CP, SP2) |
| | SHORT COMMUNICATIONS |
| 606 | WESTON, A. H. The effect of desensitization to adenosine triphosphate on the peristaltic reflex in guinea-pig ileum. (DM2, AP1, AP2) |
| 609 | BEAUGRAND, J. and ST.-LAURENT, J. Effects of α -methyl- <i>p</i> -tyrosine and L-DOPA on brain self-stimulation and motor activity in rats. (PP) |

Contents—continued

Proceedings of the British Pharmacological Society, London, 3-5 January, 1973

Communications

- 613P CRAWLEY, F. E. H., KENNEDY, P. and SWASH, M. Effect of dimethothiazine on tonic vibration reflex in man
- 615P LATHAM, A. N. and RICHENS, A. Pheneturide, a more potent liver enzyme inducer in man than phenobarbitone?
- 616P FRANKLIN, C. S. and KYEGOMBE, D. B. The distribution and induction of some drug-metabolizing enzymes in man
- 616P BRECKENRIDGE, A., DAVIES, D. S., DAVIES, L. and ORME, M. Dose-dependent enzyme induction
- 617P ADNITT, P. I., FRAYN, K. N. and TURNER, P. Effects of metformin on glucose uptake by isolated human skeletal muscle
- 618P DAVIES, D. L., LANT, A. F., MILLARD, N. R., SMITH, A. J., WARD, J. W. and WILSON, G. M. Some aspects of the clinical pharmacology of bumetanide, a new, potent oral diuretic
- 619P MARTIN, H. DE V. Atropine sulphate absorption from an intramuscular injection of a mixture of the oxime, P2S, and atropine in exercising humans
- 620P BASIL, B., COLLINS, R. F. and CUTHBERT, M. F. Pharmacokinetics of M&B 17,803A in animals and man
- 620P OHNHAUS, E. E. The pharmacokinetics of unchanged pindolol in patients with impaired renal function
- 621P AELLIG, W. H. Isoprenaline antagonism and duration of action in exercise induced tachycardia of three β -adrenoceptor blocking drugs: pindolol, LF 17-895 and propranolol
- 622P CLARK, R. A., JULIAN, D. G., NIMMO, J., PRESCOTT, L. F. and TALBOT, R. Clinical pharmacological studies of Kö 1173—a new antiarrhythmic agent
- 623P RICHARDSON, B. P. Evidence for a physiological role of prolactin in osmoregulation in the rat after its inhibition by 2-bromo- α -ergokryptine
- 624P JONDORF, W. R., MACINTYRE, D. E. and POWIS, G. Induction of liver microsomal drug metabolism in newly-hatched chicks
- 625P SALMON, G. K. and WEST, G. B. Variation in the response of rats to chemical and thermal injury
- 626P LEDINGHAM, I. MCA., MARSHALL, R. J. and PARRATT, J. R. Drug-induced changes in blood flow in normal and ischaemic regions of the canine myocardium
- 627P LI, D. M. F. Cardiovascular and respiratory effects of cannabis extracts and Δ^1 -tetrahydrocannabinol (Δ^1 -THC)
- 627P GARLAND, L. G. and MONGAR, J. L. Inhibition by cromoglycate of histamine release induced by dextran plus phosphatidyl serine
- 628P WILLIAMS, K. I. Prostaglandin synthesis by the pregnant rat uterus at term and its possible relevance in parturition
- 629P FERREIRA, S. H., MONCADA, S. and VANE, J. R. Further experiments to establish that the analgesic action of aspirin-like drugs depends on the inhibition of prostaglandin biosynthesis
- 630P BALLANTYNE, A., JONES, R. L. and UNGAR, A. The actions of prostaglandins A_1 and A_2 on airway resistance and compliance in the cat
- 631P CUTHBERT, A. W. and YOUNG, J. M. Determination of the number of muscarinic receptors in chick amnion muscle
- 632P COLQUHOUN, D., RANG, H. P. and RITCHIE, J. M. The binding of labelled tetrodotoxin and cobra toxin by the rat diaphragm
- 633P SMITH, P. A. and WALKER, R. J. Studies on 5-hydroxytryptamine receptors of neurones from *Hirudo medicinalis*
- 634P BLAKELEY, A. G. H., POWIS, G. and SUMMERS, R. J. Some characteristics of the uptake process in the isolated blood perfused cat spleen resistant to desmethylinipramine and 17- β -oestradiol
- 635P GABELLA, G. and JUORIO, A. V. Monoamines in the guinea-pig intestine
- 636P HUMPHREY, P. P. A. Depolarization and neuromuscular block in the rat
- 637P GINSBORG, B. L., HIRST, G. D. S., MAIZELS, J. V. and WALKER, J. Specificity of adenosine on transmitter output at the neuromuscular junction
- 637P PIXNER, D. B. Bicuculline and frog spinal neurones
- 639P ADAMS, P. R. and BROWN, D. A. Action of γ -aminobutyric acid (GABA) on rat sympathetic ganglion cells
- 640P GOTTESFELD, ZEHAVA, KELLY, J. S. and SCHON, F. Uptake of γ -aminobutyric acid (GABA) by sensory root ganglia
- 641P COLLINS, G. G. S. Drug-induced changes in the electrically evoked release of 3 H- γ -aminobutyric acid (3 H-GABA) from spinal cord
- 642P BRADLEY, P. B. and DRAY, A. Actions and interactions of microiontophoretically applied morphine with transmitter substances on brain stem neurones
- 642P HILL, R. G., SIMMONDS, M. A. and STRAUGHAN, D. W. Amino acid antagonists and the depression of cuneate neurones by γ -aminobutyric acid (GABA) and glycine
- 644P SUGRUE, M. F. Effects of morphine and pentazocine on the turnover of noradrenaline and dopamine in various regions of the rat brain

Contents—Continued

- 645P ANLEZARK, G. M., ARBUTHNOTT, G. W., CROW, T. J., ECCLESTON, D. and WALTER, D. S. Intracranial self-stimulation and noradrenaline metabolism in cortex
- 646P HORN, A. S. and SNODGRASS, S. R. The occurrence of tryptamine in rat brain and its pharmacological manipulation
- 647P ENDERSBY, C. A. and WILSON, CATHERINE. The effect of ovarian steroids on the uptake of ³H-noradrenaline, ³H-dopamine and ³H-5-hydroxytryptamine by hypothalamic tissue *in vitro*
- 648P BLANC, G., GLOWINSKI, J., STINUS, L. and THIERRY, A. M. Is cortical dopamine only the precursor of noradrenaline?
- 648P BENTON, D., RICK, J. T. and TABERNER, P. V. Pharmacological interactions between γ -hydroxybutyric acid and agents which modify cerebral γ -aminobutyric acid (GABA) metabolism
- 649P NEAL, M. J. and STARR, M. S. Effect of amino-oxyacetic acid on the accumulation of ³H- γ -aminobutyric acid (³H-GABA) by rat retina
- 650P NISTRI, A. and PEPEU, G. Increase in brain and spinal acetylcholine levels without antinociceptive actions following morphine administration in the frog
- 652P GARDNER, C. R. and WEBSTER, R. A. The effect of some anticonvulsant drugs on leptazol and bicuculline induced acetylcholine efflux from rat cerebral cortex
- 653P BRADSHAW, C. M., ROBERTS, M. H. T. and SZABADI, E. Relationship between the kinetics of neuronal responses and the release of drugs from micropipettes: effect of retaining current
- 653P LOH, H. S., WATERS, K. J. and WILSON, C. W. M. The effects of acetylsalicylic acid on the metabolic availability of ascorbic acid in man (T)
- 654P CAMPBELL, N. P. S., KELLY, J., PANTRIDGE, J. F., SHANKS, R. G. and STRONG, J. E. The evaluation of K₀ 1173 in patients with cardiac arrhythmias (T)
- 654P FEINBERG, H. Interaction of ADP with platelets (T)

Demonstrations

- 655P BAKER, G. F. and ROGERS, H. J. Effect of chlorpromazine on hexose penetration in the human erythrocyte
- 655P HILL, PENNY M. M. and YOUNG, MAUREEN. Use of the guinea-pig foetal placenta, perfused *in situ*, as a model to study the placental transfer of pharmacological substances
- 656P NEAL, M. J., PEACOCK, D. G. and WHITE, R. D. Kinetic analysis of amino acid uptake by the rat retina *in vitro*
- 657P BRADSHAW, C. M., ROBERTS, M. H. T. and SZABADI, E. A theoretical model of ion-movements in micropipettes occurring during the course of microelectrophoresis experiments
- 658P CASHIN, C. H. and SUTTON, SUSAN. The effect of anti-Parkinson drugs on catalepsy induced by α -methyl-*p*-tyrosine in rats pretreated with intraventricular 6-hydroxydopamine
- 659P IRESON, J. D. and OSBORNE, H. M. A modified motor activity test to discriminate major and minor tranquilizers
- 659P NAHORSKI, S. R., ROGERS, K. J. and SLATER, P. Analysis of labile brain constituents using a technique for the instantaneous fixation of brain tissue *in vivo*
- 660P GREENGRASS, PAMELA M. and TONGE, SALLY R. Some effects of the acute and chronic administration of sex hormones on brain monoamine concentrations
- 661P FOZARD, J. R. and MWALUKO, G. M. P. The uptake of 5-hydroxytryptamine by the rabbit heart *in vitro*
- 662P THOMAS, G. and WEST, G. B. Amino acids and inflammation
- 663P HILL, R. G. and MILLER, A. A. A technique allowing e.e.g. and activity recording together with intraventricular administration of drugs in the conscious rabbit
- 663P HILL, R. G., SIMMONDS, M. A. and STRAUGHAN, D. W. Microiontophoretic study of depressant amino acids and the specificity of their antagonists
- 664P CLARKE, G., HILL, R. G. and STRAUGHAN, D. W. Pharmacology of the neuronal excitation and inhibition induced by an acute seizure focus in feline cortex
- 665P GILBERT, J. N. T., MILLARD, B. J. and POWELL, J. W. Gas chromatography—mass spectrometry for the identification of barbiturate metabolites
- 666P MAIN, I. H. M. and WHITTLE, B. J. R. Effects of indomethacin on rat gastric acid secretion and mucosal blood flow
- 667P HAMMOND, M. D. and SCHNEIDER, C. Behavioural changes induced in mice following termination of ethanol administration
- 667P BRENELLS, ANN B. An *in vivo* method for studying release of putative neurotransmitter from the rabbit olfactory bulbs
- 668P JONES, I. M., JORDAN, C. C., MORTON, I. K. M., STAGG, C. J. and WEBSTER, R. A. Chronic dorsal root section on free amino acid levels in the rabbit spinal cord
- 669P GRIFFITHS, P. J., LITTLETON, J. M. and ORTIZ, A. A method for the induction of dependence to ethanol in mice
- 670P PRINCE, A. K. and TOATES, P. A stain for the detection of choline acetyltransferase
- 671P LINNOILA, M. and MATTILA, M. J. Interaction of alcohol and drugs on psychomotor skills as demonstrated by a driving simulator
- 672P ADJEPOUN-YAMOA, K. K. and PRESCOTT, L. F. Lignocaine metabolism in man
- 673P BOAKES, A. J. and PRICHARD, B. N. C. The effect of AH 5158, pindolol, propranolol, D-propranolol on acute exercise tolerance in angina pectoris
- 674P KIDDIE, MOIRA A., ROYDS, R. B. and SHAW, T. R. D. Preliminary studies on the pharmacology of an antidysrhythmic, K₀ 1173, in man

Contents—Continued

- 675P ALLUM, WENDY, AMINU, J., BLOOMFIELD, T. H., DAVIES, CAROL, SCALES, A. H. and VERE, D. W. Interaction between debrisoquine and phenylephrine in man
- 676P HOUGHTON, JOAN and PHILLIPS, EILEEN M. The pharmacology of human isolated pulmonary vascular tissue
- 677P ARBAB, A. G., TURNER, P. and VARIAVA, DINAZ M. The α -adrenoceptor blocking activity of desacetylthymoxamine on human isolated smooth muscle
- 678P TURNER, P. and VARIAVA, DINAZ M. Comparison of the potencies of edrophonium, neostigmine and eserine with a new anticholinesterase drug RX 67668 on human tissues
- 679P CARSON, I. W., CLARKE, R. S. J. and DUNDEE, J. W. Interaction of suxamethonium with intravenous induction agents
- 680P HICKS, DEBORAH C. The buccal absorption of some β -adrenoceptor blocking drugs
- 681P BAXTER, M. G., FOWLER, L. J., MILLER, A. A. and WALKER, J. M. G. Some behavioural and anticonvulsant actions in mice of ethanalamine O-sulphate, an inhibitor of 4-aminobutyrate aminotransferase
- 682P COURTICE, C. J. Signal conditioning modules for interfacing biological signals with a computer (T)
- 682P COURTICE, C. J. Modular equipment for processing and counting action potential data from microelectrodes (T)
- 682P EARL, JANET and LARGE, W. A. The hermit crab inhibitory neuromuscular junction as a model for investigating GABA-mediated inhibition (T)

Systematic Pharmacology

Cardiovascular system SP1
 Central nervous system SP2
 Other physiological systems SP3

Pharmacokinetics

Storage, distribution, fate PK1
 Synthesis, metabolism PK2
 Uptake, release PK3

Clinical Pharmacology, Experimental

Therapy CP
 Chemotherapy CT
 Miscellaneous M

Autopharmacology

Adrenergic, cholinergic transmission AP1
 Histamine, kinins, prostaglandins, etc. AP2
 Hormones AP3

Drug Mechanisms

Molecular, cellular, biochemical, biophysical DM1
 Receptors, antagonism, potentiation, tolerance DM2

Pharmacometrics PM

Psychopharmacology PP
 Toxicology TX