CONTENTS OF VOLUME 215

No. 1, October 1980

Hydrolysis of Diacetylmorphine (Heroin) by Human Serum Cholinesterase. OKASANA LOCKRIDGE, NANCY MOTTERSHAW-JACKSON, HARRY W. ECKEBRÖNN AND BERT N. LA DU

Effects of Drugs on Behavior in Rats Maintained on Morphine, Methadone or Pentobarbital. D. E. McMILLAN, W. T. McGIVNEY AND W. C. HARDWICK

The Effect of Arginine Vasopressin and Its Analog on the Synthesis of Prostaglandin E₂ by Rat Renal Madulary Interstitial Cells in Culture. THOMAS R. BECK, AYVÍN HASÍD AND MICHAEL J. DUNN

The Effects of Cocaine and Metanephrine on the Cardiac Responses to Norepinephrine Infusions. YUKITAKA MASUDA, YASUO MATSUWA AND MATTHEW N. LEVY

Effects of Lanthanum and Trifluoperazine on [³⁵S]Calmodulin Binding to Rat Striatal Particulates. YUEN-SUM LAU AND MARGARET E. GREGGY

Tolerance and Disposition of Tetrahydrocannabinol in Man. C. ANTHONY HUNT AND REESE T. JONES

The Effects of Methadone on Respiration and Ventilation in Pygmy Goats. RICHARD C. NEAL AND GEORGE D. OLSEN

Presynaptic and Postsynaptic Neuromuscular Effects of a Specific Inhibitor of Acetylcholinesterase. RICHARD T. BOIS, RICK G. HUMMER, WOLF D. DETTMANN AND MICHAEL B. LASKOWSKI


The Role of Norepinephrine in the Regulation of Fluid Absorption in the Rat Proximal Tubule. Y. L. CHAN

The Effect of Estradiol-17β Treatment on the Metabolism and Biliary Excretion of Phenotoin in the Isolated Perfused Rat Liver and in Vivo. MARY VOGUE AND CHRISTOPHER MONTGOMERY


Live Protein Synthesis and Catabolism in Mirex-Pretreated Rats with Enlarging Liver. KEITH M. ROBINSON AND JAMES D. YARBROUGH

Oxazepam Kinetics: Effects of Age and Sex. DAVID J. GREENBLATT, MARCIA DIVOLL, JEROLD S. HARMATZ AND RICHARD I. SHADER

Differential Effects of the Anticonvulsants, Phenobarbital, Ethoxyzide and Carbamazepine on Neuromuscular Transmission. MARC T. ALDERNICE AND BRAD A. TROMMER

The in Vitro Formation of Glutathione Conjugates with the Microsomal Activated Pulmonary Bronchiolar Alkylating Agent and Cytoxin. A. R. BUCKPIT AND MICHAEL R. BOYD

Mechanism of Capotrip-Induced Renal Vasodilatation in Anesthetized Dogs after Nonhypotensive Hemorrhage. P. C. WONG AND B. C. ZIMMERNER

Transit Patterns of Marker Compounds Given by Segmented Retrograde Intrabiliary Injection (SRII) in the Isolated in Situ Perfused Rat Liver. TOSHIKO IMAMURA AND JAMES M. FUJIMOTO

Site of Action of Dehydrocholate in Inhibiting the Biliary Excretion of Morphine in the Isolated in Situ Perfused Rat Liver. TOSHIKO IMAMURA AND JAMES M. FUJIMOTO

A New Mode of Action of SKF 522-A on Morphine Disposition Studied by Segmented Retrograde Intrabiliary Injection (SRII) in the Isolated in Situ Perfused Rat Liver. TOSHIKO IMAMURA AND JAMES M. FUJIMOTO

Behavioral and Biochemical Effects of the Antidepressant Bupropion (Wellbutrin): Evidence for Selective Blockade of Dopamine Uptake in Vivo. BARRY R. COOPER, TEREZA J. HESTER AND ROBERT A. MAXWELL

Amphetamine-Haloperidol Interactions on Striatal and Mesolimbic Tyrosine Hydroxylase Activity and Dopamine Metabolism. RONALD KUCZENSKI

Potentiation of Responses to Adrenergic Nerve Stimulation in Isolated Rat Atria during Chronic Tricyclic Antidepressant Administration. FULTON T. CREWS AND CHARLES B. SMITH

Pimozide: Delayed Onset of Action at Rat Striatal Pre- and Postsynaptic Dopamine Receptors. BRIAN A. MC MILLEN, DWIGHT C. GERMAN, MANJIT K. SANGHERA, WORTHY WARMACK AND PARKHURST A. SHORE

The Pulmonary Vascular Effects of Three Prostaglandin E₂ Analogs in Conscious Newborn Lambs. JAMES E. LOCK, FLAVIO COCEANI, FRANCIS HAMILTON, ALISON GREEENWAY-CATES AND PETER M. OLLERY

Ibuprofen Improves Survival from Endotoxic Shock in the Rat. W. C. WISE, J. A. COOK, T. ELLER AND P. V. HALUSKA

Effect of Plasma Protein Binding on Quinidine Kinetics in the Rabbit. THEODORE W. GUENTERT AND SVEIN ØIE


Cephalosporin Nephrotoxicity. Transport, Cytotoxicity and Mitochondrial Toxicity of Cephaloglycin. BRUCE M. TUNE AND DORIS FRAVART


Changes in Cardiac Glycoside Activity Produced by Aminosugar Addition. L. SCOTT COOK, ROBERT W. CALDWELL AND CLINTON B. NASH

Stereospecific Radioimmunoassay of a,β- Acetylethanol (LAAM). KIP L. MCGILLARD AND GEORGE D. OLSEN

Regulation of Calcium Fluxes in Rat Pancreatic Islets: The Role of K⁺ Conductance. A. HERCHUELZ, N. THONNART, A.
<table>
<thead>
<tr>
<th>No. 2, November 1980</th>
</tr>
</thead>
<tbody>
<tr>
<td>Studies on the Effect of Chronic Oral Administration of Minoxidil and Hydralazine on Vascular Function in Spontaneously Hypertensive Rats. <strong>STANLEY GREENBERG</strong></td>
</tr>
<tr>
<td>Prednisolone Clearance at Steady State in Dogs. <strong>FELIX J. FREY, BRIGITTE M. FREY, ANDREAS GREITHER AND LESLIE Z. BENET</strong></td>
</tr>
<tr>
<td>Disposition of Enflurane in Obese Patients. <strong>MATTHEW S. MILLER, A. JAY GANDOLFI, ROBERT W. VAUGHAN AND JOHN B. BENTLEY</strong></td>
</tr>
<tr>
<td>The Cyclic Nucleotide Content of the Rat Superior Cervical Ganglion. <strong>LINDA F. QUENZER, BRIAN A. PATTERSON AND ROBERT L. VLOLE</strong></td>
</tr>
<tr>
<td>Phenytoin, Renal Function and Renin Release. <strong>STEPHEN D. MIGDAL, GARY L. SLICK, DAOUD ABU-HAMDAN AND FRANKLIN D. McDONALD</strong></td>
</tr>
<tr>
<td>Modulatory Effect of Brain Acetylcholine on Refract-Induced Bradycardia and Tachycardia in Conscious Rats. <strong>A. P. CAPUTI, F. ROSSI, K. CARRERS AND H. E. BREEZENFELD</strong></td>
</tr>
<tr>
<td>Effects of Castration and Chronic Morphine Administration on Liver Alcohol Dehydrogenase and the Metabolism of Ethanol in the Male Sprague-Dawley Rat. <strong>THEODORE J. CICERO, JERROLD D. BERNARD AND KARIN NEWMAN</strong></td>
</tr>
<tr>
<td>Antagonist Dissociation Constants and Relative Agonist Efficacies for Compounds Interacting with Beta-1 and Beta-2 Adrenergic Receptors in the Rat Jugular Vein. <strong>MARLENE L. COHEN, ROBERT R. RUFFOLO, JR. AND KATHRYN S. WILEY</strong></td>
</tr>
<tr>
<td>Effects of Transmembrane Potential on Oscillatory Afterpotentials Induced by Acetylstrophanthidin in Canine Ventricular Tissues. <strong>GREGORY R. FERRIER</strong></td>
</tr>
<tr>
<td>Maturation of Sympathetic Neurotransmission in the Rat Heart. VI. The Effect of Neonatal Central Catecholaminergic Lesions. <strong>RANDY DESKIN, ELLIOTT MILLS, WILLIAM L. WHITMORE, FREDERIC J. SEIDLER AND THEODORE A. SLOTKIN</strong></td>
</tr>
<tr>
<td>Muscarinic Antagonism of the Effects of a Phosphodiesterase Inhibitor (Methylisobutylxanthine) in Embryonic Chick Ventricile. <strong>REBECCA L. BIEGON, PAUL M. EPENST AND ACHILEES J. PAPPANO</strong></td>
</tr>
<tr>
<td>Possible Generation of Potent Vasocontracting Substance from Prostaglandin Endoperoxide Analogs, Human Platelets Mixture. <strong>SHOHIBI SHIBATA, W. K. H. HO AND U. BHIDA</strong></td>
</tr>
<tr>
<td>Dissociation of Varied Actions of Norepinephrine on 42Cu Uptake and Release at Different Sites in Rabbit Aortic Smooth Muscle. <strong>HIDEAKI KARAKI AND GEORGE E. WEISS</strong></td>
</tr>
<tr>
<td>Stereoselectivity of the Stimulus Effects of Morphine and Cyclazocine in the Squirrel Monkey. <strong>JANICE J. TEAL AND STEPHEN G. HOLTZMAN</strong></td>
</tr>
<tr>
<td>Potentiative Effects of Alpha Agonist Symptomimetic Amines on Vasoconstriction by Adrenergic Nerve Stimulation. <strong>CHE SU</strong></td>
</tr>
<tr>
<td>Comparative Study of the Electroencephalographic and Behavioral Effects of I-α-Acetylmethadol (LAAM), Two of Its Metabolites and Morphi and Methadone in the Rat. <strong>SCOTT E. LUKAS, J. EDMUND MORETON AND NAID KHANZIAN</strong></td>
</tr>
<tr>
<td>Gentamicin Uptake by Renal Tubule Brush Border Membrane Vesicles. <strong>JAMES J. LIPIKSY, LINDA CHENG, BERTRAM SACKTOR AND PAUL S. LIETZMAN</strong></td>
</tr>
<tr>
<td>Differing Electrophysiologic Effects of Slow Response Inhibiting Agents Manganese and Verapamil on Ischemic, Infarcted and Normal Tissue in Situ. <strong>JOEL KUPERSMITH AND ROBERT COHEN</strong></td>
</tr>
<tr>
<td>Metabolism of Benzidine by a Prostaglandin-Mediated Process in Renal Inner Medullary Slices. <strong>NEVILLE S. RAPP, TERRY V. ZENER, WENNY W. BROWN AND BERNARD B. DAVIS</strong></td>
</tr>
<tr>
<td>Effect of the Angiotensin Converting Enzyme Inhibitor, Captopril, on NaCl Appetite of Rats. <strong>MELVIN J. FREELY</strong></td>
</tr>
<tr>
<td>Increase of Neurotensin Content Elicited by Neuroleptics in Nucleus Accumbens. <strong>S. GOVONI, J. S. HONG, H.-Y. T. YANG AND E. COSTA</strong></td>
</tr>
</tbody>
</table>

Inhibition of Depressor Cardiovascular Reflexes by a Derivative of γ-Aminobutyric Acid (GABA) and by General Anesthetics...
with Suspected GABA-Mimetic Effects. PETER M. LALLEY
Response and Sensitivity of Female Guinea-Pig Respiratory Tissues to Agonists during Ontogenesis. CHARLES BRINE, PAMELA
G. DUNCAN, MALINDA MIDEZENSK AND JAMES S. DOUGLAS
Cyclic Nucleotides and Contraction/Relaxation in Airway Muscle: H1 and H2 Agonists and Antagonists. PAMELA G. DUNCAN,
CHARLES BRINE, RICHARD L. ADOLPHSON AND JAMES S. DOUGLAS
Mechanism of Renal Tubular Secretion of Noradrenaline in the Rabbit. RODNEY W. LUFFE, DAVID P. HENRY AND LYNN R.
WILLIS
Regulatory Role of Glutathione and Soluble Sulphydryl Groups in the Toxicity of Adriamycin. RICHARD D. OLSON, JAMES S.
MACDONALD, CHRIS J. VAN BOXTEL, ROBERT C. BOERTH, RAYMOND D. HARRISON, ALFRED E. SLONIM, RICHARD W.
FREEMAN AND JOHN A. OATES
A Comparative Study of the Pharmacological Properties of the Positive Potential Recorded from the Superior Cervical Ganglia
of Several Species. N. J. DUN AND A. G. KARCZMAR
The Presence of the Type A Form of Monoamine Oxidase within Nigrostriatal Dopamine-Containing Neurons. KEITH T.
DEMAREST, DAVID J. SMITH AND JEROME J. AZZARO
Hydrocortisone and Human Lymphocytes: Increases in Cyclic Adenosine 3'-5'-Monophosphate and Potentiation of Adenylate
Cyclase-Activating Agents. GIANNI MARENGO, LAWRENCE M. LICHTENSTEIN AND MARSHALL PLAUT
The Ionic Mechanism of Prolongation of Action Potential Duration of Cardiac Ventricular Muscle by Anthopleurin-A and Its
Relationship to the Inotropic Effect. KITARO HASHIMOTO, REIKU OCHI, KOROKU HASHIMOTO, JUN INUI AND YUIJI MIURA
Presynaptic Effects of 2-Aminotetralins on Striatal Dopaminergic Neurons. IRENE S. HOFFMAN, ROBERT W. NAYLOR AND LIUGI
X. CUBEDDU
Antidopaminergic Properties of Yohimbine. BERNARD SCATTON, BRANIMIR ZIVKOVIC AND JARELA DEZEK
AWAD
Effects of Acetylcholine and Other Structurally Related Beta Adrenergic Blockers on Transmembrane Action Potential in Guinea-
Pig Papillary Muscles. HIDEAKI SADA AND TAKASHI BAN
Tolerance to the Effects of Morphine on Intestinal Motility of Unanesthetized Dogs. NORMAN W. WEISSRODT, PIOTR J. THOR,
E. M. COPELAND AND THOMAS F. BURK
Effects of Alpha Adrenergic Blockade, Combined Nicotinic and Muscarinic Ganglion Blockade and Spinal Anesthesia upon
Noradrenaline Depression of Ganglion Transmission in the Dog. JAMES G. HILTON
Improvement of Human Myocardial Mitochondria after Dobutamine: A Quantitative Ultrastructural Study. DONALD V. UNVER-
FERTH, CARL V. LIEBER, RAYMOND D. MAGORIEN, RICHARD CROSBY, JOHN R. SIRBELY, ALBERT J. KOLIBASH, MICHAEL
R. DICK, JOSEPH A. MEACHAM AND NOBUHISA BARA
Does Histamine Influence Vasodilation Caused by Prolonged Arteriolar Occlusion or Heavy Exercise? ALAN DANIEL AND CARL R.
HONG
Propranolol Effects on Membrane Repolarization Time in Isolated Canine Purkinje Fibers: Threshold Tissue Content and the
Influence of Exposure Time. JACK K. PHUETT, THOMAS WALLACE AND U. KRISTINA WALLACE

No. 3, December 1980

The Effects of Chronic Methylenidate Treatment on Growth and Endocrine Function in the Developing Rat. GEORGE H.
GHEELEY, JR. AND J. S. KIZER
Histaminergic Mechanisms Involved in the Centrally Mediated Effects of Ouabain. RANDALL L. TACKETT AND J. E. HOLL
Different Mechanisms of Action of Acetazolamide and Parathyroid Hormone on Proximal Tubular Absorption of Fluid and 5,5-
Dimethyl-2,4-Oxazolidinedione. Y. L. CHAN
Transport of Choline Out of the Cranial Cerebrospinal Fluid Spaces of the Rabbit. ROBERT C. LANMAN AND LEWIS S.
SCHANKER
Sodium Dependence of the Positive Inotropic Effect of Cardiac Glycosides. JAY R. WIGGINS AND JUAN JOSE BENTOLILA
Phenotoin Inhibition of Cyclic Guanosine 3',5'-Monophosphate (cGMP) Accumulation in Neuroblastoma Cells by Calcium
Channel Blockade. ROBERT E. STUDY
Regulation of Serotonin (5-HT) Receptors Labeled with [3H]Spiroperidol by Chronic Treatment with the Antidepressant
Amipryline. STEPHEN J. PEROUTKA AND SOLOMON H. SNYDER
Three Day Pleural Inflammation: A New Model to Detect Drug Effects on Macrophage Accumulation. N. ACKERMAN, A.
TOMOLONIS, L. MIRAM, J. KIEFETS, S. MARTINEZ AND A. CARTER
Maturation of Sympathetic Neurotransmission in the Rat Heart. V. Development of Baroreceptor Control of Sympathetic Tone.
JORG BARTOLOME, ELLIOTT MILLS, CHRISTOPHER LAU AND THEODORE A. SLOTKIN
Induction of Aryl Hydrocarbon Hydroxylase Activity in the Rat Prostate Gland by 2,3,7,8-Tetrachlorodibenzo-p-Dioxin. I. P.
LEE AND K. SUZUKI
Electrophysiological Evidence for Presynaptic Actions of Phencyclidine on Noradrenergic Transmission in Rat Cerebellum.
JWAHARAL MARWANA, MICHAEL R. PALMER, DONALD J. WOODWARD, BARRY J. HOFFER AND ROBERT FREEDMAN
Estrogen-Induced Alterations in the Autonomic Responses of the Rabbit Uterine Bladder. ROBERT M. LEVIN, FRANCES S.
SHOFER AND ALAN J. WEIN
Alterations in Pentobarbital and Meperidine Pharmacokinetica Induced by Bile Duct Ligation in the Rat. ROBERT G. KNODELL,
DAVID A. BROOKS, RICHARD C. ALLEN AND WALTER T. KYNER
Sites of Antinociceptive Action of Systemically Injected Morphine: Involvement of Supraspinal Loci as Revealed by Intracere-
Contents

Ventral Injection of Naloxone. Joseph C. Yeung and Thomas A. Rudy 626
Multiplicative Interaction between Narcotic Agonisms Expressed at Spinal and Supraspinal Sites of Antinociceptive Action as Revealed by Concurrent Intrathecal and Intracerebroventricular Injections of Morphine. Joseph C. Yeung and Thomas A. Rudy 633
Sterespecific Assay for (−)- and (+)-Propranolol in Human and Dog Plasma. Bernie Silver and Sidney Riegelman 643
Consistent Unmasking of Dopamine-Induced Dilation of the Canine Femoral Vascular Bed. Jay J. Listinsky, Jai D. Kohli and Leon I. Goldberg 662
Comparative Studies of the Pharmacological Effects of the d- and l-Isomers of Codeine. Thuy T. Chau and Louis S. Harris 668
Effect of Carbonic Anhydrase Inhibitors and Acidosis on Choroid Plexus Epithelial Cell Sodium and Potassium. Quentin R. Smith and Conrad E. Johanson 673
The Renal Clearance of Digoxin is Dependent upon the Serum Digoxin Concentration. Thomas P. Gibson and Antonio P. Quintanilla 681
Purine Release from Vascular Adrenergic Nerves by High Potassium and a Calcium Ionophore, A-23187. Takeshi Katsuragi and Che Su 685
The Effect of Theophylline and Other Methylxanthines on Presynaptic Inhibition of the Longitudinal Smooth Muscle of the Guinea-Pig Ileum Induced by Purine Nucleotides. F. K. Okeuwa-Saba and M. A. Cook 704
Neuronal Uptake of Choline Following Release of Acetylcholine in the Perfused Heart. Ruth Lindmark, Konrad Löfvelholm, Wolfgang Wrede and Jutta Witzke 710
Specific Changes in the Cholinergic System in Guinea-Pig Vas Deferens after Denervation. Fumiaki Hata, Kunio Takeyasu, Yoshio Morikawa, Ron-Tsun Lai, Hajime Ishida and Hiroshi Yoshida 716
Index, Volume 215, October–December, 1980 723