CONTENTS OF VOLUME 215
No. 1, October 1980

Hydrolysis of Diacetylmorphine (Heroin) by Human Serum Cholinesterase. OKASAN ROCKE, NANCY MOTTERSWAR-JACKSON, HARRY W. ECKERSON and BERT N. LA DI

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

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

The Effects of Cocaine and Metanephrine on the Cardiac Responses to Norepinephrine Infusions. YUKITAOKI MASA, YASUO MUDA and MATTHEW N. LEVY

Effects of Lanthanum and Trifluoperazine on [125I]Calmodulin Binding to Rat Striatal Particulates. YUEN-SUM LAU and MARGARET E. NGEY

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. HUMMEL, 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 Phenytoin in the Isolated Perfused Rat Liver and in Vivo. MARY VORE and CHRISTOPHER MONROE

Pharmacokinetic-Dynamic Analysis of the Indomethacin-Pseudoephedrine Interaction in Man. P. CHENNAVASIN, R. SEIWELL and D. C. BRATER

Live Protein Synthesis and Catabolism in Mirex-Pretreated Rats with Enlarging Livers. 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, Ethosuximide and Carbamazepine on Neuromuscular Transmission. MARC T. ALDERDICE and BRAD A. TROMMER

The In Vitro Formation of Glutathione Conjugates with the Microsomally Activated Pulmonary Bronchiolar Alkylating Agent and Cytoxin. ALAN R. BUCKFITT and MICHAEL R. BOYD

Mechanism of Captopril-Induced Renal Vasodilatation in Anesthetized Dogs after Nonhypotensive Hemorrhage. P. C. WONG and B. C. ZIMMERMAN

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

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

Behavioral and Biochemical Effects of the Antidepressant Bupropion (Wellbutrin): Evidence for Selective Blockade of Dopamine Uptake in Vivo. BARRETT R. COOPER, THERESA 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. McILLEN, DWIGHT C. GERMAN and MARITI S. SAGERHA, WORTHY WARKSTIEN and PARKHURST A. SHORE

The Pulmonary Vascular Effects of Three Prostaglandin E1 Analogs in Conscious Newborn Lambs. JAMES E. LOCK, FLAVIO COCEANI, FRANCIS HAMILTON, ALISON GREENWAY-COATES and PETER M. OLLEY

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

Effect of Plasma Protein Binding on Quinidine Kinetics in the Rabbit. THEODORE W. GUNTERT and SVEN OIE


Cephapropir Nephrotoxicity. Transport, Cytotoxicity and Mitochondrial Toxicity of Cephaglycin. BRUCE M. TUNE and DORIS FRAVET


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

Sterespecific Radioimmunoassay of a-L-Acetylmethadol (LAAM). KIP L. McGUIILLAND and GEORGE D. OLSEN

Regulation of Calcium Fluxes in Rat Pancreatic Islets: The Role of K* Conductance. A. HERCHUELZ, N. THONNART, A.
Studies on the Effect of Chronic Oral Administration of Minoxidil and Hydralazine on Vascular Function in Spontaneously Hypertensive Rats. STANLEY GREENBERG

Prednisolone Clearance at Steady State in Dogs. FELIX J. FREY, BRIGITTE M. FREY, ANDREAS GREITHER AND LESLIE Z. BENET

Disposition of Enflurane in Obese Patients. MATTHEW S. MILLER, A. JAY GANDOLFI, ROBERT W. VAUGHAN AND JOHN B. BENTLEY

The Cyclic Nucleotide of the Rat Superior Cervical Ganglion. LINDA F. QUENZER, BRIAN A. PATTERTSON AND ROBERT L. VOLLE

Phentolamine, Renal Function and Renin Release. STEPHEN D. MIGDAL, GARY L. SLICK, DAOU D. ABU-HAMDAN AND FRANKLIN D. McDONALD

Modulatory Effect of Brain Acetylcholine on lnvoked Bradycardia and Tachycardia in Conscious Rats. A. P. CAPUTI, F. ROSSI, K. CARNEY AND H. E. BREZENOFF

Effects of Castration and Chronic Morphine Administration on Liver Alcohol Dehydrogenase and the Metabolism of Ethanol in the Male Sprague-Dawley Rat. THEODORE J. CICERO, JERROLD D. BERNARD AND KARIN NEWMAN

Antagonist Dissociation Constants and Relative Agonist Efficacies for Compounds Interacting with Beta-1 and Beta-2 Adrenergic Receptors in the Rat Jugal Vein. MARLENE L. COHEN, ROBERT R. RUFFOLO, JR. AND KATHRYN S. WILEY

Effects of Transmembrane Potential on Oscillatory Afterpotentials Induced by Acetylcholine in Canine Ventricular Tissues. GREGORY R. FERRIER

Maturation of Sympathetic Neurotransmission in the Rat Heart. VI. The Effect of Neonatal Central Catecholaminergic Lesions. RANDY DESKIN, ELLIOTT MILLS, WILLIAM L. WHITMORE, FREDERIC J. SEIDLER AND THEODORE A. SLOTKIN

Muscarinic Antagonism of the Effects of a Phosphodiesterase Inhibitor (Methylisobutiuxanthine) in Embryonic Chick Ventricle. REBECCA L. BIEGON, PAUL M. EPSTEIN AND ACHILLEES J. PAPPANO

Possible Generation of Potent Vasoconstricting Substance from Prostaglandin Endoperoxide Analogs, Human Platelets Mixture. SHOJI SHIBATA, W. K. H. HO AND U. IBIDA

Dissociation of Varied Actions of Norepinephrine on 45Ca Uptake and Release at Different Sites in Rabbit Aortic Smooth Muscle. HIDEAKI KARAKI AND GEORGE B. WEISS

Stereoselectivity of the Stimulus Effects of Morphine and Cyclazocine in the Squirrel Monkey. JANICE J. TEAL AND STEPHEN G. HOLTZMAN

Potentiation of Alpha Agonist Symptomaticimetic Amines on Vasocostriction by Adrenergic Nerve Stimulation. CHE SU

Comparative Study of the Electroencephalographic and Behavioral Effects of I-α-Acetylmethadol (LAAM), Two of Its Metabolites and Morphine and Methadone in the Rat. SCOTT E. LUKAS, J. EDWARD MORETON AND NAIM KHAN

Gentamicin Uptake by Renal Tubes Brush Border Membrane Vesicles. JAMES J. LIPSKY, LINDA CHENG, BERTRAM SACKTOR AND PAUL S. LIETMAN

Differing Electrophysiological Effects of Slow Response Inhibiting Agents Manganese and Verapamil on Ischemic, Infarcted and Normal Tissue in Situ. JOEL KUPELSCHMITT AND ROBERT COHEN

Melatonin Metabolism of Benzidine by a Prostaglandin-Mediated Process in Renal Inner Medullary Slices. NEVILLE S. RAPP, TERRY V. ZENERER, WENDY W. BROWN AND BERNARD B. DAVIS

Effect of the Angiotensin Converting Enzyme Inhibitor, Captopril, on NaCl Appetite of Rats. MELVIN J. FREELY

Increase of Neurotensin Content Elicited by Neuroleptics in Nucleus Accumbens. S. GOVONI, J. S. HONG, H.-Y. T. YANG AND E. COSTA

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. 418
Response and Sensitivity of Female Guinea-Pig Respiratory Tissues to Agonists during Ontogenesis. Charles Brine, Pamela G. Duncan, Malinda Midzenski and James S. Douglas. 426
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. 434
Mechanism of Renal Tubular Secretion of Norepinephrine in the Rabbit. Rodney W. Lappe, David P. Henry and Lynn R. Willis. 443
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. Karczmars. 455
The Presence of the Type A Form of Monoamine Oxidase within Nigrostriatal Dopamine-Containing Neurons. Keith T. Demarest, David J. Smith and Albert J. Azzaro. 461
Hydrocortisone and Human Lymphocytes: Increases in Cyclic Adenosine 3',5'-Monophosphate and Potentiation of Adenylate Cyclase-Activating Agents. Gianfranco Margone, Lawrence M. Lichtenstein and Marshall Plaut. 469
The Ionic Mechanism of Prolongation of Action Potential Duration of Cardiac Ventricular Muscle by Anthopleurin-A and Its Relationship to the Inotropic Effect. Keitaro Hashimoto, Rekuo Ochi, Kozuko Hashimoto, Jun Imai and Yuji Miura. 479
Presynaptic Effects of 2-Aminotetrinal on Struiatal Dopaminergic Neurons. Irene S. Hoffman, Robert J. Naylor and Luigi X. Cerededa. 486
Antidopaminergic Properties of Yohimbine. Bernard Scatton, Branimir Zivkovic and Jaroslav Dedek. 494
Effects of Acebutolol and Other Structurally Related Beta Adrenergic Blockers on Transmembrane Action Potential in Guinea-Pig Papillary Muscles. Hideaki Sada and Takashi Ban. 507
Does Histamine Influence Vasodilation Caused by Prolonged Arterial Occlusion or Heavy Exercise? Alan Daniel and Carl R. Honig. 533
No. 3, December 1980
The Effects of Chronic Methylenidate Treatment on Growth and Endocrine Function in the Developing Rat. George H. Greeley, Jr. and J. S. Kizer. 545
Histaminergic Mechanisms Involved in the Centrally Mediated Effects of Ouabain. Randall L. Tackett and J. E. Holl. 552
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. 557
Sodium Dependence of the Positive Inotropic Effect of Cardiac Glycosides. Jay R. Wiggins and Juan Jose Bentolila. 569
Phenytoin Inhibition of Cyclic Guanosine 3',5'-Monophosphate (cGMP) Accumulation in Neuroblastsoma Cells by Calcium Channel Blockade. Robert E. Study. 575
Regulation of Serotonin (5-HT) Receptors Labeled with [3H]Spiropropranol by Chronic Treatment with the Antidepressant Amitriptyline. Stephen J. Peroutka and Solomon H. Snyder. 582
Three Day Pleural Inflammation: A New Model to Detect Drug Effects on Macrophage Accumulation. N. Ackerman, A. Tomoloni, L. Miram, J. Kheifts, S. Martinez and A. Carter. 588
Maturation of Sympathetic Neurotransmission in the Rat Heart. V. Development of Baroreceptor Control of Sympathetic Tone. Jorge Bartolome, Elliott Mills, Christopher Lau and Theodore A. Slotkin. 596
Induction of Aryl Hydrocarbon Hydroxylase Activity in the Rat Prostate Glands by 2,3,7,8-Tetrachlorodibenzo-p-Dioxin. I. P. Lee and K. Suzuki. 601
Electrophysiological Evidence for Presynaptic Actions of Phencyclidine on Noradrenergic Transmission in Rat Cerebellum. Jwaharlal Marwaha, Michael R. Palmer, Donald J. Woodward, Barry J. Hoffer and Robert Freedman. 606
Alterations in Pentobarbital and Meperidine Pharmacokinetics Induced by Bile Duct Ligation in the Rat. Robert G. Knodell, David A. Brooks, Richard C. Allen and Walter T. Kyner. 619
Sites of Antinociceptive Action of Systemically Injected Morphine: Involvement of Supraspinal Loci as Revealed by Intracere-
<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Broventricular Injection of Naloxone. Joseph C. Yeung and Thomas A. Rudy</td>
<td>626</td>
</tr>
<tr>
<td>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</td>
<td>633</td>
</tr>
<tr>
<td>Stereospecific Assay for (-)- and (+)-Propranolol in Human and Dog Plasma. Bernie Silber and Sidney Riegelman</td>
<td>643</td>
</tr>
<tr>
<td>Consistent Unmasking of Dopamine-Induced Dilation of the Canine Femoral Vascular Bed. Jay J. Listinsky, Jai D. Kohli and Leon I. Goldberg</td>
<td>662</td>
</tr>
<tr>
<td>Comparative Studies of the Pharmacological Effects of the d- and l-Isomers of Codeine. Thuy T. Chau and Louis S. Harris</td>
<td>668</td>
</tr>
<tr>
<td>Effect of Carbonic Anhydrase Inhibitors and Acidosis on Choroid Plexus Epithelial Cell Sodium and Potassium. Quentin R. Smith and Conrad E. Johanson</td>
<td>673</td>
</tr>
<tr>
<td>The Renal Clearance of Digoxin is Dependent upon the Serum Digoxin Concentration. Thomas P. Gibson and Antonio P. Quintanilla</td>
<td>681</td>
</tr>
<tr>
<td>Purine Release from Vascular Adrenergic Nerves by High Potassium and a Calcium Ionophore, A-23187. Takeshi Katsuragi and Che Su</td>
<td>685</td>
</tr>
<tr>
<td>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. Okwuassaba and M. A. Cook</td>
<td>704</td>
</tr>
<tr>
<td>Neuronal Uptake of Choline Following Release of Acetylcholine in the Perfused Heart. Ruth Lindner, Konrad Löffelholz, Wolfgang Weide and Jutta Wittek</td>
<td>710</td>
</tr>
<tr>
<td>Specific Changes in the Cholinergic System in Guinea-Pig Vas Deferens after Denervation. Fumiaki Hata, Kunio Takeyasu, Yoshio Morikawa, Ron-Tsan Lai, Hajiie Ishida and Hiroshi Yoshida</td>
<td>716</td>
</tr>
<tr>
<td>Index, Volume 215, October–December, 1980</td>
<td>723</td>
</tr>
</tbody>
</table>