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PROCEEDINGS OF THE BRITISH PHARMACOLOGICAL SOCIETY

EDINBURGH

12th to 15th July, 1961

COMMUNICATIONS

W. C. Bowman and **M. J. Rand** (*Department of Pharmacology, School of Pharmacy, London, W.C.*1).
Failure of neuromuscular transmission produced by a false transmitter.

J. Raventos (*Pharmaceuticals Division, Imperial Chemical Industries, Macclesfield, Cheshire*).
The action of the optically active isomers of adrenaline and noradrenaline on the innervated vas deferens.

W. C. Bowman and **C. Raper** (*Department of Pharmacology, School of Pharmacy, London, W.C.*1).
The effect of adrenaline on slow-contracting skeletal muscles.

W. C. Bowman, B. A. Callingham and **A. A. J. Goldberg** (*Department of Pharmacology, School of Pharmacy, London, W.C.*1).
The neuromuscular blocking action of carbolonium bromide.

J. D. Harry (*introduced by* **G. Brownlee**) (*Department of Pharmacology, University of London King's College, London, W.C.*2).
The site of action of drugs on the circular muscle strip from the guinea-pig ileum.

G. Paterson (*introduced by* **G. Brownlee**) (*Department of Pharmacology, University of London King's College, London, W.C.*2).
The action of sympathomimetic amines on denervated skeletal muscle.

M. Martin-Smith, S. Nanjappa, S. Reid and **J. J. Lewis** (*Department of Experimental Pharmacology, Institute of Physiology, The Univ rsity, Glasgow, W.*2).
Pharmacological activity in some thionaphthenylenes.

G. Van Petten and **J. J. Lewis** (*Department of Experimental Pharmacology, Institute of Physiology, The University, Glasgow, W.*2).
The effect of amphetamine and some related compounds upon the adenosine nucleotides of rat brain.

A. M. Barrett and **M. A. Stockham** (*introduced by* **G. A. H. Buttle**) (*Department of Pharmacology, School of Pharmacy, London, W.C.*1).
The effect of stress on circulating corticosterone levels in the rat.

R. B. Barlow and **J. T. Hamilton** (*Pharmacological Laboratory, University of Edinburgh*).
The activity of some analogues of nicotine on synaptic transmission.

D. J. Boullin, D. Mackay, P. B. Marshall and **J. F. Riley** (*Department of Pharmacology and Therapeutics, Queen's College, Dundee*).
The effect of vitamin B_6 deficiency on tumour growth and urinary histamine excretion in rats bearing a transplantable hepatoma.

Jean Eperon, Lalitha Kameswaran, Eva Kovacs and **G. B. West** (*Department of Pharmacology, School of Pharmacy, London, W.C.*1).
Histidine decarboxylase and tumour growth.

G. A. H. Buttle and **Jean Eperon** (*Department of Pharmacology, School of Pharmacy, London, W.C.*1).
Antigenic responses of normal and malignant tissue.

I. H. M. Main (*introduced by* **H. M. Adam**) (*Pharmacological Laboratory, University of Edinburgh*).
Histamine and gastric secretion in the rat.

A. K. Armitage and **J. R. Vane** (*Department of Surgery, King's College Hospital, and Department of Pharmacology, Royal College of Surgeons of England, London, W.C.*1).
The assay of catechol amines on the isolated rat stomach strip.

M. D. Day and **M. J. Rand** (*May & Baker, Dagenham, Essex, and Department of Pharmacology, School of Pharmacy, London, W.C.*1).
Sympathetic cholinergic nerves revealed by guanethidine.

G. Boyd, J. S. Gillespie and **B. R. Mackenna** (*Department of Physiology, The University, Glasgow, W.*2).
The action of guanethidine and bretylium on the response of the small and large intestine of the rabbit to stimulation of the extrinsic autonomic nerves.

Rosemary Cass and **T. L. B. Spriggs** (*introduced by* **G. B. West**) (*Department of Pharmacology, School of Pharmacy, London, W.C.*1).
Some effects of guanethidine and bretylium in the rat.

A. L. A. Boura and **A. F. Green** (*The Wellcome Research Laboratories, Langley Court, Beckenham, Kent*).
Effects of bretylium and guanethidine on responses to different rates of sympathetic nerve stimulation.

M. D. Day (*introduced by* **R. Wien**) (*May & Baker, Dagenham, Essex*).
Dopamine reversal of the blocking action of guanethidine and bretylium.

J. R. Vane (*Department of Pharmacology, Royal College of Surgeons of England, London, W.C.*1).
A general hypothesis to account for the potentiation of the effects of catechol amines by substances such as hexamethonium and bretylium.

T. C. Muir and **J. J. Lewis** (*Department of Experimental Pharmacology, Institute of Physiology, The University, Glasgow, W.*2).
The application of Ariens' theory of the evaluation of neuromuscular blocking agents.

R. P. Stephenson (*Pharmacological Laboratory, University of Edinburgh*).
Theories of the action of drugs at receptors.

S. E. Smith (*introduced by* **R. S. Stacey**) (*Department of Pharmacology and Therapeutics, St. Thomas's Hospital Medical School, London, S.E.*1).
Effect of reserpine on amine concentration in pigeon brain.

Marta Weinstock and **H. C. Stewart** (*Department of Pharmacology, St. Mary's Hospital Meaical School, London, W.*2).
Receptor similarity in different actions of analgesic drugs.

P. Withrington and **Eleanor Zaimis** (*Department of Pharmacology, Royal Free Hospital School of Medicine, London, W.C.*1).
The " reserpine " cat.

Margaret Day and **J. R. Vane** (*Department of Pharmacology, Royal College of Surgeons of England, London, W.C.*1).
The use either of oxygen or sodium deficiency to distinguish between direct and indirect effects of drugs on the guinea-pig ileum.

Jennifer Maclagan (*introduced by* **Eleanor Zaimis**) (*Department of Pharmacology, Royal Free Hospital School of Medicine, London, W.C.*1).
A comparison of *in vivo* and *in vitro* responses of the cat's tenuissimus muscle to neuromuscular blocking drugs.

M. W. Parkes and **A. W. Lessin** (*Roche Products, Welwyn Garden City, Herts*).
The central stimulant actions of α-methyltryptamine.

A. W. Lessin and **R. F. Long** (*introduced by* **M. W. Parkes**) (*Roche Products, Welwyn Garden City, Herts*).
Effects of various agents upon uptake of 5-hydroxytryptamine by blood platelets *in vivo*.

W. H. H. Andrews and **I. del Rio Lozano** (*Department of Pharmacology, St. Mary's Hospital Medical School, London, W.*2).
Hepatic endothelial activity in the release of substances bound to plasma albumin.

B. F. Leonard (*introduced by* **R. Schneider**) (*Department of Medical Biochemistry and Pharmacology, The Medical School, Birmingham*, 15).
The pharmacology of the alkaloids of pithecolobine samanth (Benth).

J. L. Broadbent (*Smith Kline and French Research Institute, Welwyn Garden City, Herts*).
The cardiotonic action of some tannins.

G. R. Gough and **P. A. Robertson** (*introduced by* **R. H. Thorp**) (*Department of Pharmacology, The University of Sydney, Australia*).
An oxytocic substance in the hypothalamus.

D. F. Sharman (*introduced by* **Marthe Vogt**) (*Institute of Animal Physiology, Babraham, Cambridge*).
The identification of 3-methoxy-4-hydroxyphenylacetic acid (homovanillic acid) in brain tissue and a method for its estimation.

Session on Clinical Pharmacology

D. Taverner (*introduced by* **G. A. Mogey**) (*Department of Pharmacology, The School of Medicine, Leeds*, 2).
Assessment of hypnotic activity.

J. Syme (*introduced by* **W. L. M. Perry**) (*City Hospital, Edinburgh*, 10).
Studies with kanamycin sulphate.

R. H. Girdwood and **A. W. Dellipiani** (*Department of Medicine, University of Edinburgh*).
The uptake of amino-acids and vitamins by organisms isolated from the small intestine of man.

S. H. Taylor, G. R. Sutherland, D. C. H. Hutchison, P. C. Robertson and **K. W. Donald** (*introduced by* **W. L. M. Perry**) (*Department of Medicine, University of Edinburgh*).
The pharmacological actions of sympatholytic drugs in man.

G. P. Crean (*introduced by* **W. L. M. Perry**) (*Gastro-intestinal Unit, Western General Hospital, Edinburgh,* 5, *and Clinical Endocrinological Research Unit, Forrest Road, Edinburgh*).
The effect of corticosteroids and ACTH on human gastric secretion.

A. N. Smith, G. W. Ashcroft, T. B. B. Crawford, W. E. Brocklehurst and **K. Fotherby** (*Gastro-intestinal Unit, Western General Hospital, Edinburgh,* 5*; Clinical Endocrinological Research Unit, Forrest Road, Edinburgh; Pharmacological Laboratory, University of Edinburgh*).
Biochemical studies in patients with carcinoid tumours.

G. W. Ashcroft, Elizabeth McDougall and **P. A. Barker** (*introduced by* **W. L. M. Perry**) (*Royal Edinburgh Hospital for Mental Disorders, Edinburgh,* 10).
Tetrabenazine: clinical trial of a reserpine-like drug in chronic schizophrenia.

E. A. Harris, J. Cowie, R. Sleet and **J. S. Robson** (*introduced by* **W. L. M. Perry**) (*Department of Therapeutics, Royal Infirmary, Edinburgh*).
The assessment of respiratory stimulants with particular reference to vanillic acid diethylamide.

Anne T. Lambie and **J. S. Robson** (*introduced by* **W. L. M. Perry**) (*Department of Therapeutics, Royal Infirmary, Edinburgh*).
The mechanism of the action of chlorothiazide in diabetes insipidus.

J. A. Simpson (*introduced by* **W. L. M. Perry**) (*Neurological Unit, Northern General Hospital, Edinburgh,* 5).
The use of oximes in the treatment of cholinergic crisis in myasthenia gravis.

M. Davies and **G. M. Wilson** (*Department of Pharmacology and Therapeutics, The University, Sheffield,* 10).
Aldosterone antagonists in diuretic therapy.

C. R. B. Joyce (*Department of Pharmacology, The London Hospital Medical College, London, E.*1).
Patient co-operation and the precision of clinical trials.

J. R. Hodges and **M. T. Jones** (*Department of Pharma. ology, Royal Free Hospital School of Medicine, London, W.C.*1).
The determination of corticotrophin.

K. B. Holloway (*introduced by* **W. L. M. Perry**) (*Department of Anaesthetics, Royal Infirmary, Edinburgh*).
Guanethidine in controlled hypotension.

G. Onuaguluchi (*introduced by* **S. Alstead**) (*Department of Materia Medica, The University, Glasgow, W.*2).
Assessment of drug therapy in Parkinsonism.

A. H. B. Masson (*introduced by* **R. E. Lister**) (*Department of Anaesthetics, Royal Infirmary, Edinburgh*).
Some problems in the clinical evaluation of analgesia.

DEMONSTRATIONS

In the Duncan Flockhart Research Laboratories

Margaret Ettles and **R. E. Lister** (*J. F. Macfarlan & Co., Edinburgh*, 8).
Withdrawal symptoms in addicted rats.

R. E. Lister (*J. F. Macfarlan & Co., Edinburgh*, 8).
Drug modified instinctive behaviour in the gerbil.

J. E. Lightowler (*introduced by* **C. G. Haining**) (*T. & H. Smith, Edinburgh*, 11).
A method of recording respiration in laboratory animals using a body plethysmograph.

C. G. Haining and **Members of the Staff** (*T. & H. Smith, Edinburgh*, 11).
Other apparatus of general interest in pharmacology.

In the Pharmacology Department, University New Buildings

J. McC. Murdoch (*introduced by* **W. L. M. Perry**) (*Department of Infectious Diseases, University of Edinburgh*).
Cycloserine in urinary tract infections.

K. S. Lai and **H. M. Adam** (*Departments of Medicine and Pharmacology, University of Edinburgh*).
The assay of gastrin on the perfused rat's stomach.

K. Fotherby, J. B. Brown and **J. A. Strong** (*introduced by* **W. L. M. Perry**) (*Clinical Endocrinological Research Unit, Forrest Road, Edinburgh*).
The response of the human adrenal cortex to different stimuli.

G. P. Crean (*introduced by* **W. L. M. Perry**) (*Gastro-intestinal Unit, Western General Hospital, Edinburgh*, 5, *and Clinical Endocrinological Research Unit, Forrest Road, Edinburgh*).
Hormonal influences on the stomach.

R. H. Girdwood, J. Richmond and **J. McManus** (*Department of Medicine, University of Edinburgh*).
Microbiological assay methods for vitamins and amino-acids and their application to clinical medicine.

W. E. Brocklehurst and **N. E. Condon** (*Department of Pharmacology, University of Edinburgh*).
The enhancement of anaphylaxis *in vivo* by maleic and succinic acid, as demonstrated by exposure of animals to aerosols of antigen.

S. C. Lahiri and **W. E. Brocklehurst** (*Department of Pharmacology, University of Edinburgh*).
Bradykinin and anaphylactic shock.

H. M. Adam and **W. R. G. Stephen** (*Department of Pharmacology, University of Edinburgh*).
Histamine in the C.N.S. and hypophysis of the dog.

S. H. Taylor, G. R. Sutherland, D. C. H. Hutchison, P. C. Robertson and **K. W. Donald** (*introduced by* **W. L. M. Perry**) (*Department of Medicine, University of Edinburgh*).
Measurements of sympatholytic action in normal and hypotensive subjects.

B. L. Ginsborg and **B. Mackay** (*introduced by* **W. L. M. Perry**) (*Departments of Anatomy and Pharmacology, University of Edinburgh*).
Structural differences in avian muscles.

M. H. Draper, H. Friebel and **K. Karzel** (*introduced by* **W. L. M. Perry**) (*Department of Physiology, University of Edinburgh*).
The action of drugs on frog sartorius muscle membrane.

J. G. Blackman and **C. Ray** (*introduced by* **W. L. M. Perry**) (*Department of Pharmacology, University of Edinburgh*).
Action of mecamylamine and pempidine at the neuromuscular junction.

J. G. Blackman, C. Ray and **B. L. Ginsborg** (*introduced by* **W. L. M. Perry**) (*Department of Pharmacology, University of Edinburgh*).
Recording from the spinal sympathetic ganglia of the frog.

R. Schneider and **B. E. Leonard** (*Department of Medical Biochemistry and Pharmacology, The Medical School, Birmingham*, 15).
A simple method for the *in vivo* recording of peristalsis.