Book reviews

Lisuride and Other Dopamine Agonists.

Edited by Donald B Calne, Reinhard Horowski, Richard J McDonald & Wolfgang Wuttke. (Pp 576; \$48.98.) New York, Raven Press, 1982.

On first picking up this book the response is likely to be similar to that of the child who was given a present of a book on penguins. When asked how she liked her present she replied "It was very nice but it told me more about penguins than I wanted to know". Who, one must ask, wants a book of 550 pages devoted to lisuride and other dopamine agonists?

This book was compiled from the proceedings of a symposium held in West Berlin in December 1981. It suffers therefore from the disadvantages common to such compilations being at times repetitive with essentially similar work being presented by different groups of scientists; and in being somewhat patchy in its scope. There is also the inevitable criticism that much of the work presented in this way has already been superseded. Nevertheless there are some excellent things to be found in this volume.

The main sections of the book are devoted to the endocrine pharmacology of dopamine agonists and the neurological pharmacology of these compounds. In the preliminary sections some aspects of receptor pharmacology are reported. The dopamine receptor is proving to be a highly variable and complex structure which responds slightly differently to each of the new dopaminergic ergot compounds. The chapter on oestrogens and dopamine receptor sensitivity provides a fascinating example of hormonal effects on brain neuronal mechanisms. The unusual pharmacokinetics of ergot compounds is explained and in particular their extensive metabolism during their initial passage through the liver.

The section devoted to the neuro-endocrine effects of dopaminergic agonists provides a comprehensive review of the subject. The place of these compounds in the treatment of prolactinomas, acromegaly, suppression of lactation, infertility and premenstrual tension is considered in detail by many of the leading workers in this field. It is no exaggeration to say that the management of patients with these conditions has been revolutionised by the introduction of compounds such as bromocriptine and lisuride and these chapters will provide an

important source of references in the clinical management of patients with these conditions.

The use of dopamine agonists other than levodopa in the treatment of Parkinsonism remains highly contentious. The wide variations in dose and response may relate partly to the complex pharmacokinetics already mentioned. Similarly their value appears to be their longer duration of action than levodopa so that in patients with marked fluctuations in response the addition of a dopamine agonist may be beneficial. It is clear, however, from reading these chapters that the aim must be to find more specific and better tolerated dopamine agonists which avoid the disadvantages of levodopa treatment and might therefore replace levodopa for primary treatment for Parkinson's disease.

This book can only be recommended as a reference work. It will be used by pharmacologists needing a review of these compounds and their mode of action; and by clinicians looking for guidance in the treatment of their patients with Parkinson's disease and a wide variety of neuro-endocrine disorders.

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Neuropharmacology, Clinical Applications.

Edited by Walter B. Essman & Luigi Valzelli. Pp 399; £39.50.) Lancaster: MTP Press, 1982.

The title of this book is misleading. It is about psychopharmacology, not neuropharmacology, and the clinical applications are few. It is written mainly by psychiatrists, not pharmacologists. This is definitely not a textbook of pharmacology, and the topics are highly selected. The subjects discussed include: neuronal-glial metabolic interactions in stress; somatosensory affectional deprivation (SAD) theory of drug and alcoholic behaviours; Gilles de la Tourette's syndrome; the psycho-pharmacology of clonidine; clinical and psychopharmacological evaluation of L-5HTP in depression; central cholinergic mechanisms, neuroleptic action and schizophrenia. The preface says "this . . . is a source for the clinician to clarify areas of clinical interest through an understanding of the related neuropharmacodynamics". The problem with this kind of approach is that apart from

neuroleptics, relatively few groups of drugs have any great or selective effect on mental illness, memory, mood, behaviour, personality or intellect, and of those that do, scientific evaluation is often very difficult. Do any of us really believe on present evidence that clonidine is better than haloperidol in the treatment of Gilles de la Tourette's syndrome, that anticholinergic drugs should not be used in elderly Parkinsonian patients because of the risk of producing amnesia, that choline or lecithin are of real value in the treatment of Alzheimer's disease, that piracetam improves cognitive behaviour? The book gives no kind of answer to these practical questions. It assumes a familiarity with basic pharmacology that is seldom achieved by students taking MB finals and rarely preserved thereafter. Some of the chapters appear to be little more than index medicus searches, heavily referenced but lacking any kind of critical approach or clear conclusion. There is approximately one complete page of references for every three pages of text.

Did any patients' rights group protest in the 1950s when intraventricular cholinesterase was given to schizophrenics? We read that the "cholinolytic enzyme cholinesterase or a cholinergic blocker, pentamethonium iodide . . . was instilled . . . into the lateral ventricles of chronic schizophrenics with prolonged catatonic stupor. Of the fifteen patients treated with one or more injections of these substances, six returned to normal at one time or another". Much of the book is like this, horrific, fascinating, impossible to assess. Then, to increase our confusion—"rather large amounts of drugs were used, eg 22.5 mg of cholinesterase. Also crystalline penicillin G was instilled in addition (in view of the recent work of . . . *et al* (1978) suggesting that an increase of prostaglandin E₁ by penicillin may be therapeutic in schizophrenia, this may have inadvertently contributed to the therapeutic effect)". What therapeutic effect? The index is as good as the rest of this book. St Vitus's dance, akinesia, venserazide, parasympathicomimetics all appear, although redemption comes with evolution of chastity-the. Reference to p30 shows this is central to SAD theory—"but meaningful and lasting solutions to alcoholism, drug abuse and violence . . . must necessarily involve the replacement of the authoritarian structure of patrolineal cultures with the nurturant-affectional structure of matrolineal cultures". A far cry from pharmacodynamics.

JD PARKES