spill over into clinical practice. Clearly, with an aging population disorders of mental function associated with normal aging, rather than with dementia itself, may lend themselves to the possibility of improvement by drug treatment. Whether this is a happy state of affairs, or something with profound ethical implications for society as a whole is something which has not yet received the attention it deserves. This relatively small book reviews possible approaches to the pharmacology of aging in animals, and in humans. The human work is related mainly to the unwanted effects of drugs in the elderly with particular regard to drug interactions and to unexpectedly powerful effects in aged people. These chapters in the book are particularly useful. The precise value of experiments of maze-learning behaviour in aged rats to abnormalities of human behaviour in the latter decades of life are rather uncertain, but it is refreshing to see work on suitable subjects for scientific investigation. Several chapters are concerned with biochemical concepts of neurotransmitter action, and of changes in the activity of cyclic-AMP-determined enzyme effects in aged animals and these are less satisfactory, representing rather preliminary work with little relation to clinical practice, or indeed, to changes in drug action in aged animals. It is, perhaps, reassuring to read that "a universal decline in transmitter-receptor interactions appears not to occur in the brain during aging." Nonetheless, it must be admitted that there are changes in intellectual function in some aged people, who are in all other respects normal, without signs of dementia. These aspects of brain function in aging individuals merit further study.

M Swash

Hormones and the Brain Edited by David de Wied and Pieter A van Keep (pp 325; £16.95) Lancaster: MTP Press Ltd, 1980.

The editors of this volume deserve congratulations and thanks. David de Wied is noted for his highly original studies of the behavioural effects of peptide fragments derived from ACTH, MSH, vasopressin and the endorphins. Pieter van Keep is experienced in endocrinology and in the field of medical communication. Together they have produced a workshop-derived volume that can be read from cover to cover with enjoyment. The date of the workshop is not stated but most articles cover the literature up to the end of 1979 and several include papers for the first half of 1980. Of the contributors, 23 work in the USA and 31 in Europe. None is from the UK.

The first section of the book contains eight chapters on brain receptors for steroids and peptides and the anatomy of peptidergic systems. These papers maintain a broad functional outlook and are accessible to any medical reader. Of the nine chapters on the experimental study of behavioural effects of hormones, six concern peptides and three concern sex hormones. There is a skilful blending of experimental and clinical data concerning addiction and schizophrenia. The remaining 10 chapters are on diverse clinical aspects of the interaction between hormones and psychopathology, including three on affective disorder.

Most interest attaches to the behavioural effects of endogenous peptides, or fragments derived from them, in particular their effects on the acquisition and retention of learned behaviours including addiction. The presentation of the animal work is lucid and stimulating. Lapses into pseudo-explanations are rare. However, the statement "neuropeptides may exert their effects on behavioural adaptation by modulation of ongoing activity in the brain and thus function as neuro-modulators" (p 170) is not far in spirit from the classical "morphine owes its sleep-inducing effect to its hypnotic properties." There are no occasional inconsistencies or conflicts between chapters. Thus the statement (on p 106) that diabetes insipidus rats have a serious memory deficit is questioned on page 95. This may be interpreted as a sign of commendable editorial restraint. Indeed the most serious criticism I have of this volume is that six of the chapters should have been longer. Neurologists and psychiatrists will find this book an excellent summary of the most exciting recent work on the role of hormones and peptides in normal and pathological behaviour.

BS Meldrum


Edited by a renowned practitioner in the field of pain relief, this book comprises nine chapters, each chapter covering various aspects of the subject in different ways and to differing standards. For this reviewer, three contributions stand out as being particularly valuable. That on nerve blocks (A Brown) is excellent, and a model of detailed and critical assessment, in particular when dealing with the results and especially the hazards of many neurolytic procedures. All concerned should be familiar with these hazards, which have resulted in a search for alternative and safer procedures. The displacement of chemical neurolysis by thermocoagulation procedures in many centres is well illustrated in the following chapter devoted to the role of neurosurgery for pain relief (E Hitchcock). The profusion of techniques discussed in this interesting and useful contribution indicates the dilemma of exactly what is the best procedure to advise for the patient. The account of management of pain in cancer patients (RD Hunter) has six of its pages devoted to a helpful discussion on diagnostic techniques, which adds to a most worthwhile and realistic consideration of what the radiotherapist and oncologist have to offer. These three chapters are very informative and outweigh the more conventional treatment given, admittedly by distinguished authorities in their fields, to pharmacological management (NE Williams), psychiatric management (I Pilowsky), non-invasive methods (M Mehta) and terminal care (C Saunders). Whether yet another chapter on management of a pain relief centre (S Lipton) is justified must remain a matter of opinion. The least satisfactory chapter is that on the neurological aspects of pain therapy (BD Wyke). Particularly disappointing are that its thirty pages are entirely devoid of detailed references in the text, that in this volume on the therapy of pain there is no reference to the fact that much of the material is based on animal work, and that the endogenous opioid-like substances are barely considered.

In essence, this is a book of patchy