

useful descriptions of the different surgical approaches to the cervical and dorsal spines.

Several papers review the current status of treatment of severe congenital abnormalities of the spine, and discuss alternatives to immediate closure of meningomyeloceles. There are contributions on the blood supply of the spinal cord, the mechanism of syringomyelia and syringobulbia, and on the use of evoked potentials for prognosis in spinal cord injury.

The volume ends with an important contribution on mechanisms and management of spinal cord injury. References are given after each section. Although most of the work is already published, the sections provide stimulating reading about some of the more difficult aspects of spinal surgery. The volume should be of value to orthopaedic and paediatric surgeons, as well as to neurosurgeons.

R. D. ILLINGWORTH

**BIOCHEMICAL ASPECTS OF NERVOUS DISEASES** Edited by J. N. Cumings. (Pp. 265; price not stated.) Plenum Press: London. 1972.

The scope of this book is best indicated by listing its contents: metabolic aspects of some diseases of peripheral nerves (J. Wilson and R. H. S. Thompson), biochemistry of muscle diseases (R. J. T. Pennington), biochemistry of demyelination and demyelinating diseases (B. Gerstl), biochemistry of copper in man and its role in the pathogenesis of Wilson's disease (J. M. Walshe), brain amine metabolism in some neurological and psychiatric disorders (G. Curzon), biochemical neurological disease in children (L. I. Woolf).

Most chapters present their material in a form suitable for the clinician, but it must be conceded that certain aspects of biochemistry cannot be simplified without loss of precision. Nevertheless, many practising neurologists will be glad to have this useful summary available for consultation. It is well edited and the production is good.

J. A. SIMPSON

**DICTIONARY OF BEHAVIORAL SCIENCE** By B. B. Wolman. (Pp. 478; illustrated; £5.95.) Mac-Millan: London. 1974.

Dictionaries in the behavioral sciences are rare indeed, and any new dictionary warrants careful examination. This dictionary has been prepared with the help of 99 scholars who aimed to cover fields ranging widely from psychology to endocrinology. Any dictionary has limitations, and this one is no exception. In areas with which the reviewer is familiar, some of the definitions appeared so short and terse as to lose completely the flavour of the defined concept, whereas others merely juggled words—for example, 'ejaculatio deficiens' is defined

as 'inadequate ejaculation'. A further criticism is that, in psychology at least, the approach is very much North American, reflecting a stress on psychodynamic approaches, and on psychometrics. However, these criticisms are a little unfair, for it is very rare indeed to be able to find such diverse topics as signal detection theory, and psycho-analytic theory dealt with in the same book.

At the price (nearly £6) for 478 pages, this is certainly good value for money, although the price may put it beyond the reach of many of the undergraduates for whom it would be most valuable. Certainly this dictionary should find a place in any university library, and in many specialist departmental libraries.

D. NEIL BROOKS

**KETAMIN** By M. Gemperle, H. Kreuzer, and D. Langrehr. (Pp. 464; illustrated; \$25.20.) Springer: Berlin, Heidelberg, New York. 1973.

The pharmacology of anaesthetic drugs is sometimes presented as a progression of decreasing CNS excitability leading to marked depression and death. On the other hand, increasing irritability represents a continual process in the opposite direction leading to hyperexcitability and death. Anaesthetic agents are usually regarded as depressants but some are, in fact, CNS stimulants capable of inducing hallucinations. Ketamine and gamma-hydroxybutyric acid are examples of the latter.

The book on ketamine contains the Proceedings of the 2nd Ketamine Symposium held in Mainz, West Germany, in April 1972 and is concerned mainly with three broad aspects of pharmacology—namely, cardiovascular effects, actions on the central nervous system, and clinical applications. It is generally agreed that ketamine causes a significant rise in blood pressure, which is interpreted in various papers as being due to a direct stimulation of the myocardium, alpha stimulation, or increasing effectiveness of endogenous and exogenous catecholamines. Ketamine also causes a rise in intracranial pressure and several papers advise that this agent should not be used in patients with space-occupying lesions. To avoid untoward effects, it seems that there is a need to resort to polypharmacy. It is suggested, for example, that the frequency and severity of psychomotor activity and hallucinatory dreams can be reduced by various drugs including dehydrobenzperidol. This drug is also recommended to produce adrenergic  $\alpha$ -blockade to counteract hypertensive effects of ketamine, but it is not emphasized that this action is only transient.

Although there is some enthusiasm for ketamine in clinical practice, there is concern about emergence