Book reviews

Multiple Sclerosis *British Medical Bulletin*. Volume 33 No. 1. Edited by J. S. Porterfield. (Pp. 88; £5.00.) The British Council, 65 Davies St., London W1Y 2AA. 1977.

What an exciting review this is. The pace of advance in multiple sclerosis research is becoming breathtaking, and the apparently irreconcilable views are coming together in a consensus. It seems likely that virology, immunology, biochemistry, and genetics will all be contributors to the denouement which cannot be far off. This issue of *British Medical Bulletin* is an outstanding survey of recent research, placed in the context of accepted epidemiological and pathological data by E. D. Acheson and C. W. M. Adams respectively. W. I. McDonald and A. M. Halliday review the diagnosis, including physiological tests, and provide criteria for a classification which could usefully be adopted by all clinical workers so that therapeutic trials may be comparable. Their valuable review of physiological tests, in which they were pioneers, stresses the importance of conduction block rather than slowing of conduction velocity. K. B. Fraser gives a good summary of the evidence for a virus disease, probably acting immunologically. The association with measles remains tantalising, and the status of the Carp MS-associated agent is very doubtful. Dr Margaret Haire, his colleague from Belfast, where so much of this work has been done, dismisses the significance of virus antibodies with special reference to measles. The difficulty, stressed by E. J. Thompson, is that the oligoclonal pattern of γ -globulin in CSF cannot usually be absorbed by measles antigen (unlike subacute sclerosing panencephalitis). There is still no diagnostic laboratory test, and a Lange gold curve has the virtues of speed and simplicity.

Immunological abnormalities of cellular and humoral types are reviewed by Stella Knight and E. A. Caspary. It is not possible at this time to decide between responses to paramyxovirus and some general alteration in cell-mediated immunity, possibly genetically selected. Things are not as simple as they would seem. Antibody may be protective rather than myelinoclastic,

and interference with nerve transmission might be independent of demyelination. The new test system on the rabbit eye (permitting direct *in vivo* testing of cells and sera) is a major new tool. It is being exploited by H. M. Wiśniewski who gives a clear account of the immunopathology of experimental demyelination. Is the oligodendroglial cell damaged as a 'by-stander' in a delayed-type hypersensitivity reaction, caused by any antigen which finds its way into the CNS? The answer to this one question is critical to the assessment of all the other papers, and also to any decision to use more aggressive immunosuppressive therapy.

A. N. Davison and M. L. Cuzner review the immunochemistry and biochemistry of myelin. Perhaps it is because there is so much material to digest, but I found this paper the most difficult to correlate with pathology. Two decades of work on the chemistry of myelin has not been helpful, and the work on demyelination leads straight back to immunological responses but with some emphasis on immune complexes in blood vessels. If fatty acid metabolism plays a role in the aetiology of multiple sclerosis, is it directly metabolic or by inhibiting lymphocyte responses? J. Mertin and J. Meade stress the latter, providing a modicum of theoretical support for the various forms of treatment reviewed by L. A. Liversedge, still plagued by unsatisfactory control of clinical trials.

The association between multiple sclerosis and HLA antigens, particularly A3, B7, and Dw2, is reviewed by J. R. Batchelor. An early contributor to this exciting new method of detecting gene-linkage, Dr Batchelor's article should be read by all who require a survey of this new field. His article is a model of clarity combining introductory material with advanced conclusions so that all who read may understand.

Multiple Sclerosis, introduced by J. H. D. Millar of Belfast with a nicely balanced survey of the contents, is a landmark. It is being reviewed more fully than is usual for a periodical because it is exactly the sort of survey required. It is short, authoritative, and timely.

J. A. SIMPSON

Basic Neurochemistry Edited by G. J. Siegel, R. W. Albers, R. Katzman, and B. W. Agranoff. (Pp. 825; illustrated; £9.50.) Little, Brown: Boston. 1976. Although it has a large number of authors, this book in general has a unified approach focusing where possible on the working brain. Allowances, of course, must be made for the different stages reached by various branches of the subject. This new edition contains additional chapters on photo-reception, cyclic nucleotides, prostaglandins, axoplasmic flow, and endocrine effects. After substantial sections on morphology, neural membranes, transmission, metabolism, and physiological integration, the remainder of the book (almost half of its length) consists of material on neurological and psychiatric disease, including new chapters on seizures and comatose states, and on mucopolysaccharidoses. These emphases on medical topics make the book a valuable neurochemical text and reference work for clinically orientated readers. Not least among its attractions are clarity and readability. Few textbooks can be read with much pleasure. This one can. Indeed, while making spot checks in different topics I often found myself browsing. Strongly recommended.

G. CURZON

The Autonomic Nervous System, 2nd revised edition. By O. Appenzeller. (Pp. 403; illustrated; \$47.95, Dfl.125.) North-Holland Publishing Company: Amsterdam. 1976.

It is a pleasure to welcome the second edition of this book which represents the results of extensive study of the literature on the autonomic nervous system in animals and man. It is a mine of information, and the information extends well beyond the autonomic nervous system. Who would expect to find in a book of this title sections on 'congenital absence of muscles', Sprengel's deformity of the shoulder, or arthrogryposis multiplex congenita? In none

of these does the author suggest a relationship with abnormalities of the autonomic nervous system. It is similarly uncertain whether the chapter on the pineal gland, and much of the chapter on respiration and its disorders, deserve their place here. The disadvantage of this extra material may be that the reader has additional difficulty in finding the item on the autonomic nervous system which he seeks, and which is probably there for him if he can find it. The standard of production is excellent.

J. M. K. SPALDING

Subarachnoid Hemorrhage and Cerebrovascular Spasm By Robert R. Smith and James T. Robertson. (Pp. 268; illustrated; \$26.50.) Charles C. Thomas: Springfield, Illinois. 1975.

The baffling problem of cerebral vasospasm after subarachnoid haemorrhage continues to excite the interest of surgeons as well as research workers. Although unpredictable in its onset and in its extent, it exerts a profound influence on the degree of brain damage and on the timing of operation.

This useful monograph brings together much important information—physiological, pharmacological, and pathological as well as clinical—and it is a useful summary of the various attempts that have been made to find a suitable experimental model for this important variety of cerebral vascular disease.

W. ROSS RUSSELL

Handbook of Spinal Cord Medicine By David C. Burke and D. Duncan Murray. (Pp. 90; illustrated; £14.5.) Macmillan: London. 1975.

A brief notice is justified for a small book for the pocket of house officers and others working in a paraplegia unit. It achieves its purpose very well. When it is revised, surely some mention of the plantar responses should be made in the description of upper motor neurone signs, and Fig. 1 should be modified to illustrate the account of sacral sparing. (Indeed the dermatome diagrams do not match). Persistence of reflexes in 'spinal shock' is attributed to 'the electrical charge remaining in the isolated cord' until it is 'finally dissipated'. Spinal injury and its manage-

ment is a field of strong and not always rational conviction, but the advice on management will be generally acceptable. It is good value.

J. A. SIMPSON

Advances in the Drug Therapy of Mental Illness (Pp. 168; Price not stated). World Health Organisation: Geneva. 1976.

This book is a compilation of a symposium held in 1973, and consists of 21 papers on various aspects of drug therapy, 18 in English and three in French. Although there has been a delay in publication, some effort has been made to update a number of the contributions. The topics cover a wide range, and include essays on the interaction of drugs with other therapies, the ethics of drug research, and the pathophysiology of schizophrenia. There is a particularly thoughtful paper by Van Praag on 'New developments in human psychopharmacology.'

This collection is unlikely to be of great use to medical students or non-psychiatrists, but for the psychiatrist and research worker in this field it is a useful and sometimes stimulating review. The English price is not stated but unless it is very reasonably priced, it is probably a book for the library rather than the personal collection.

CRAIGIE MACFIE

Books received

A Stereotaxic Atlas of the Mongolian Gerbil Brain By William J. Loskota, Peter Lomax, and M. Anthony Verity. (Pp. 157; illustrated; £10.50.) Ann Arbor Science: Michigan. 1975.

Mechanism of Action of Benzodiazepines Edited by E. Costa and P. Greengard. (Pp. 181; illustrated; \$16.75. Dfl.40.) North Holland: Amsterdam. 1975.

Advances in Neurology Vol. 13: Current Reviews Edited by Walter J. Friedlander. (Pp. 392; illustrated; \$31.75.) North Holland: Amsterdam. 1975.

Piagetian Theory and the Helping Professions Edited by Gerald I. Lubin, James F. Magary, and Marie K. Poulsen. (Pp. 348; illustrated; \$7.50.)

University of Southern California: Los Angeles. 1975.

Mental Health Services in Developing Countries Edited by T. A. Baashar, G. M. Carstairs, R. Giel, and F. R. Hassler. (Pp. 152; Sw.fr.18.) World Health Organisation: Geneva. 1975.

Hemispheric Disconnection and Cerebral Function Edited by Marcel Kinsbourne and W. Lynn Smith. (Pp. 300; illustrated; \$21.50.) Charles C. Thomas: Springfield. 1975.

The Varieties of Abnormality . . . A Phenomenological Analysis By Raymond J. McCall. (Pp. 568; \$22.50 cloth, \$16.95 paper.) Charles C. Thomas: Springfield. 1975.

Monographs in Oral Science: The Temporomandibular Joint Syndrome Edited by C. J. Griffin and R. Harris. (Pp. 205; illustrated; \$38.75.) S. Karger AG: Basel. 1975.

The Physiology of Nerve Cells By D. H. Paul. (Pp. 114; illustrated; £2.75.) Blackwell Scientific Publications: Oxford. 1975.

Mental Retardation and Developmental Disabilities—VII Edited by Joseph Wortis. (Pp. 378; illustrated; £10.00.) Churchill Livingstone: Edinburgh. 1975.

Brain Work: The Coupling of Function, Metabolism and Blood Flow in the Brain (Vol. VIII in Alfred Benzon Symposium series) Edited by David H. Ingvar and Niels A. Lassen. (Pp. 529; illustrated; Dkr.230.) Munksgaard International Publishers Ltd.: Copenhagen. 1975.

Diagnostic Ultrasound in Neurology: Methods and Techniques By Michael S. Tenner and Georgina M. Wodraska. (Pp. 183; illustrated; £15.65.) John Wiley and Sons: Chichester. 1975.

Multiple Sclerosis Research Proceedings of a joint conference held by the Medical Research Council and the Multiple Sclerosis Society of Great Britain and Northern Ireland. Edited by A. N. Davison, J. H. Humphreys, L. A. Liversedge, W. I. McDonald, and J. S. Porterfield. (Pp. 344; illustrated; £5.00.) Her Majesty's Stationery Office: London. 1976.

Men and Machines By H. Murrell. (Pp. 143; illustrated; 80p.) Methuen: London. 1976.

Radical Perspectives in Psychology By N. Heather. (Pp. 142; 80p.) Methuen: London. 1976.