British neurophysiology has hitherto suffered from the restrictions of strict regulations on survival experiments on animals, but there is now an increasing interest in neurophysiological and experimental psychobiological studies on higher primates. Without an established laboratory tradition to learn from, many will welcome this useful little volume, from a series on experimental medicine and surgery in primates. The present volume is from an American aeromedical research laboratory. After a helpful comparative review of the chimpanzee central nervous system there are very practical chapters on research methods such as stereotaxic and implantation techniques and apparatus for psychobiological research. There is also a convenient summary of key references on the growth and development of the chimpanzee and its vision, audition, and other senses, motor behaviour, learning and concept formation, emotion, motivation, social organization and behaviour. This is not an exhaustive treatise, but it is very suitable for experimenters beginning to work with the chimpanzee.

J. A. SIMPSON


This book has a strange title but it is actually about the reaction of nervous tissue to various insults. It is a monumental work written by only two authors.

Part I, by Professor Hager, is called 'General morphological pathology of nervous tissue'. It is not a textbook of neuropathology, but rather one of histology and deals with the normal appearances and pathological changes in nerve cells, glial cells, nerve fibres, and blood vessels. It also deals with the histology of necrosis, gliosis, myelin breakdown, deposits of abnormal substances (senile plaques, calcium corpora amylacea). Part I is profusely illustrated, mainly with excellent electron-micrographs and reproductions of quaint coloured drawings from textbooks and papers of the 1920s. The latter are charming but can be downright misleading—who has ever seen a nerve cell with its two satellites in mitosis as drawn by Spiehlmeyer (1922)? One man cannot these days have first-hand experience of all aspects of neuropathology and this tells in some of the sections. But it is good to have so much information especially about electron microscopic appearances collected together. There are thousands of references.

Part II, by Professor Noetzel, entitled 'The structure of the central and peripheral nervous system as basis for its function and its diseases', is less satisfactory. There is overlap with the first section and it is not clear on what grounds topics have been selected for discussion. The treatment of most subjects is extremely superficial. There are snippets of neuroanatomy, five pages are devoted to the ageing nervous system, and the influence of the nervous system on skin, skeleton, and muscle is dealt with in less than a page—these organs atrophy when they are denervated. One does not feel like paying a great deal for a book which tells one nothing about carbon monoxide poisoning except that the globus pallidus is often affected. There are quite useful sections on the effect on the nervous system of diseases of other organs and the lipidoses and other 'inborn errors of metabolism' are discussed.

One wonders whether the days of the expensive and definitive handbook are not over and whether it would not be more useful to publish a 'Recent Advances' series containing reviews, by experts, on selected topics.

S. J. STRICH

DIAGNOSIS OF BRAIN DISEASE BY ULTRASOUND. Edited by Kenji Tanaka. (Pp. vi + 164; 169 figures, 14 tables. No price given.) Shindan-To-Chiryo Sha Co: Tokyo, Japan. 1969.

This volume, edited by the professor of surgery, Juntendo University School of Medicine, Tokyo, Japan, consists of seven chapters, written by Professor Tanaka, four medically-qualified members of his department, and a radio-engineer. It would seem that this group of investigators were among the first to use ultrasonic methods in localizing space-occupying intracranial lesions and they give a comprehensive review of the principles involved, of the equipment required, and of the information which can be obtained by A-scope and B-scope echocoeophalography. The text includes many illustrative case reports indicating how these methods have been helpful in localizing intracranial tumours and haematomas and in the investigation of hydrocephalus. A note on the use of an ultrasonic needle-type transducer for exploration of the depths of the brain is also included. The book is pleasantly produced and some of the illustrations are of good quality, but unfortunately the authors have not been able to arrange for the text to be carefully checked by an editor with a thorough grasp of the English language. While one must appreciate the difficulties facing those who set out to write a scientific monograph in an unfamiliar tongue, the quality of the prose in this publication is so uneven and at times so obscure that this fact alone detracts considerably from its value. Apart from the resulting lack of clarity, there are parts of the book where misprints occur in such profusion as to be a constant source of irritation to the reader. To read, for instance, on page 1 that '... the U. S. Atomic Energy Commission concluded that the tumor by ultrasonic in human skull is not suitable...' and on page 2 that 'There were many controversies (sic) about the reliability ...' can hardly be regarded as a felicitous beginning. Nevertheless, the book contains a good deal of useful information for those who are prepared to take the time to separate the wheat from the chaff.

JOHN N. WALTON


The subtitle of this book, the ninth of a series of Monographs in Pathology from the International Academy of Pathology, reflects the difficulty in classifying this book. It is not a systematic textbook of human neuropathology,
but neither is it a handbook on experimental laboratory methods. The first section covers a range of topics from the function of the neuron and glia, microchemistry of human cerebral cortex, and clinical and tissue culture studies on demyelinating disorders to hereditary and viral ataxias in animals, and radiation injury to a group of three papers on Alzheimer's disease.

The second section is a symposium on geographic pathology. (Mariana Islands syndromes, kuru, hepatocerebral diseases in Japanese and West Indian neuropathy) and the third section is on special methods such as CSF examination, cerebral biopsy, histochemistry of nervous tissue and muscle, fluorescence and electron microscopy of the nervous system.

Some of the chapters make difficult reading but the book is worth its place in a library for those who can remember where they read such an assorted list.

J. A. SIMPSON


This publication presents the proceedings of the Symposium which was organized by the Permanent Section of Microbiological Standardization and held in London in November, 1968. It affords an excellent survey of recent laboratory and clinical research, not only on rubella vaccines but also on all aspects of rubella infection. The main concern of the participants was maternal infection resulting in infection of the foetus in utero. This problem has raised many fascinating lines of research requiring active co-operation between clinicians, virologists, immunologists, and epidemiologists, and its world-wide interest was manifest by the high standard both of the papers presented in this Symposium and the discussion sessions.

The first session on epidemiology comprised papers from France, United States, Sweden, Switzerland, Italy, Israel, Japan, Taiwan, Germany, Teheran, and the United Kingdom. They showed that there was a striking similarity in the epidemiology of rubella in these countries. However, in Japan, rubella infection was apparently associated with a lower incidence of congenital defects than in the United States. A preliminary report from Cincinnati indicated that immune serum globulin with a high rubella antibody titre was effective in preventing infection when given within 24 hours of exposure to rubella; the protection afforded by increasing the time-interval between infection and administration of immune globulin was subsequently being studied.

The second session comprised papers giving up-to-date information on laboratory techniques. For serological diagnosis there were reports on a method for collection of blood on filter paper discs and comparison and interpretation of antibody studies by the various techniques of specific immunofluorescence, haemagglutination-inhibition, neutralization, complement-fixation, haemadsorption-inhibition, immunodiffusion, and platelet-aggregation. The influence of non-specific serum factors on neutralization tests was also described. Virus isolation studies included reports on the growth of rubella virus in various cell cultures and also on rubella virus interference. Comparison of the antigenic structures of American and Japanese strains and the results of experimental vertical transmission of these strains in rabbits was also reported.

The third session dealt primarily with the attenuation of rubella virus for vaccine production, and the final and fourth session presented 28 communications on clinical trials with various attenuated rubella vaccines. The protective efficacy of several of these vaccines was amply demonstrated and no evidence of virus spread to susceptible contacts was detected in any of these studies.

This book affords a valuable compendium on most aspects of recent work on rubella and should be consulted by anyone concerned with the details of prophylaxis or diagnosis of rubella infection.

CONSTANCE A. C. ROSS


This book contains the Proceedings of the 21st Symposium in Immunobiological Standardization, organized by J. R. R. Toothill on the topic of biological assay methods as applied to the production of vaccines. It consists of some 31 papers by an international group of experts, all, with the predictable exception of the French contributors, in English.

The contributors have stuck close to their last, and the papers deal with practical problems of experimental and, particularly, statistical control of potency in the production of vaccines for human use. For this reason, the book will have little appeal to the non-specialist. To the specialist, the papers are short, expert, and represent a valuable account of present techniques; the section on the statistical basis of quality control is particularly satisfactory, and a prominent feature is the attention given to experimental design so as to reduce the number of animals required for adequate analysis.

The book is produced by a litho-offset method. The final print size is small throughout, and the frequent use of even smaller print in the text makes for tiring reading. Some papers are particularly unfortunate—for example, the figures in the paper by Starke and Winkler, and the extensive reference tables in the paper by Toothill, Robinson, and Adams. Considering the content, format, and price, this book could be recommended only to someone working in this field.

J. S. GILLESPIE


This book is an account of one man's teaching, and for this reason alone would be noteworthy. The reader sits in a class of students through a year of neurological teaching, and each brief chapter narrates the weekly case presentations, with history, signs, diagnosis, and treatment. Many patients are presented, with disorders ranging from the commonplace to the rare. The style
THE CENTRAL NERVOUS SYSTEM. Some Experimental Models of Neurological Diseases
J. A. Simpson

*J Neurol Neurosurg Psychiatry* 1969 32: 492-493
doi: 10.1136/jnnp.32.5.492-b

Updated information and services can be found at:
http://jnnp.bmj.com/content/32/5/492.3.citation

**Email alerting service**
Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

**Notes**

To request permissions go to:
http://group.bmj.com/group/rights-licensing/permissions

To order reprints go to:
http://journals.bmj.com/cgi/reprintform

To subscribe to BMJ go to:
http://group.bmj.com/subscribe/