fold. It is recommended to all those working in the area although the price may well be a deterrent for some pockets (presumably it has been inflated by the number of illustrations). Dr Swash and Dr Schwartz are to be congratulated for omitting to make any mention of that well-known, non-existent entity ME!

P HUDSON

Recent Advances in Epilepsy. Edited by TA Pedley, BS Meldrum. (Pp 266; £45-00.) Edinburgh: Churchill Livingstone, 1988.

This is the fourth edition in a series which began in 1983. The format is the same as that of successful previous editions, presenting high quality review articles that span animal experimental and clinical fields of epilepsy with well known authors working on both sides of the Atlantic.

Experimental areas explored in this edition include mechanisms of seizure initiation and spread, the kindling model of epilepsy and amino-acid abnormalities in epilepsy. The majority of the book is clinically orientated with chapters on the role of the EEG, teratogenicity of drugs and the management of pregnancy in women with epilepsy. The field of new antiepileptic drugs is covered and the position of corpus callosotomy in the treatment of intractable epilepsy is reviewed. Two concluding chapters deal with the problems of the medicolegal consequences of epilepsy and epileptic automatisms. A novel and interesting chapter is included on parasitosis of the central nervous system and epilepsy.

Inevitably, it is possible to criticise some of the chapters as being available in a very similar form in other publications. In those volumes particular interest often arises in comparing European practice in the management of epilepsy with that of the USA. Perhaps this is most clearly reflected in the opening sentence of the chapter on the management of seizures during pregnancy. This would suggest that the major concerns in the author’s mind are the “medical legal consequences of caring for women with epilepsy”, a concern that might not be uppermost in the minds of most European clinicians approaching this problem. Professor Porter’s chapter very fully covers the problems of evaluation of new antiepileptic drugs. The chapter does not, however, address the current controversy surrounding the use of cross-over or parallel group designs and nor does it discuss the current problems being presented to investigators in this area by major disagreements that exist between regulatory authorities on each side of the Atlantic on the necessity or otherwise of actively controlled monotherapy studies at an early stage in the assessment of new antiepileptic drugs.

As always, the main value of this volume is that it brings together authoritative review articles within a single volume. There is no doubt that anyone with an interest in epilepsy or responsible for the care of patients with epilepsy will find something of interest within this book and, like its predecessors, it will remain an important review and reference source for some time to come.

DW CHADWICK


This book consists of a series of high quality articles based on a Ciba Foundation Symposium which was concerned with key questions on the pathogenesis of the transmissible spongiform encephalopathies. It is largely concerned with scrapie but also includes Creutzfeldt-Jakob disease, kuru, Gerstmann-Strassler disease, mink encephalopathy and chronic wasting disease. Almost all of the articles are concerned with the possible nature of the scrapie agent and the pathogenesis of these diseases. The remarkable nature of the so-called unconventional virus diseases includes the long incubation periods, the agent’s resistance to a variety of procedures which inactivate conventional viruses, the absence of immune responses and the unknown nature of the infectious agent itself. A major advance in this field was made in 1981 with the discovery of scrapie-associated fibrils which are now known to occur in most if not all cases of unconventional virus disease. The suggestion then emerged on the basis of further studies that these diseases were due to a novel infectious agent termed prion which was postulated to be a self-replicating protein. It is now clear that a glycoprotein called PrP is the major constituent of scrapie-associated fibrils. This protein is present in normal as well as scrapie-infected brains although the form associated with infected tissues has different physical characteristics which may be due to biochemical modification.

This field is a controversial one and this is reflected by the various articles and to an even greater extent by the very rigorous and lively discussions which follow them. Almost all of the subject matter concerns scrapie and it should be remembered that experimental scrapie in mouse and hamsters has provided most of our understanding of the neuropathogenesis of these infections. All of the contributions contain some experimental details although some have a more general remit and there are a number of excellent introductory paragraphs even in the highly technical contributions. There are chapters on the clinical neurology of Creutzfeldt-Jakob disease, and the neuropathology of unconventional virus infections and these are followed by an excellent chapter by Kimberlin and Walker on the pathogenesis of experimental scrapie. This is followed by a number of chapters which discuss the various theories of scrapie pathogenesis. It comes over very clearly that no one knows what constitutes the scrapie agent. The main possibilities are that the scrapie agent is a virus with unconventional properties, a “virino” in which the infectious form of the agent is a hybrid between a scrapie-specific nucleic acid and a protective host protein, or that the agent is a modified host protein. The various chapters discuss the pros and cons of these theories with varying degrees of enthusiasm. There are a number of highly technical chapters which the clinical neurologist without a backgroung in this field will find hard going. Of particular interest for neurologists, however, will be the chapter on the pathogenesis of amyloid formation in Alzheimer’s disease, Down’s syndrome and scrapie.

I personally found this volume extremely stimulating and I particularly enjoyed the detailed and lively discussions following each chapter which themselves included much information, both published and unpublished, and there is a separate reference list following the discussions. Anyone familiar with the sometimes heated exchanges at scientific meetings between the various groups working in this field will not be surprised at the rigour of the discussions in this volume and this adds greatly to the book’s success. There are very clear and succinct introductory and concluding pages by F Brown and one is left with little doubt that the key questions in this field, most notably the final demonstration as to whether the scrapie agent is indeed a nucleic acid or a self-replicating protein, or both should not be too far off in the future.

In summary, this volume gives the state of the art in the scrapie field and, although very technical in places, will be of considerable