BOOK REVIEWS

Familial Alzheimer's Disease. Molecular Genetics and Clinical Perspectives. Eds G D Miner, R Richter, J P Blass, J L Valentine, L A Winters-Miner. (Pp 444; \$150.00.) New York: Marcel Dekker. 1989.

This book shares a rapidly expanding area of research with several other excellent books. It differs from them in that it attempts to cover not only relatively recent molecular and genetic findings (part II) but also clinical aspects (part I) together with much broader areas of biological research (part III) into Alzheimer's disease, both familial (FAD) or otherwise (AD). It is ambitious in its aim to appeal to both research workers and practising physicians, which explains the curious inclusion of a chapter on the legal aspects of Alzheimer's, which occurs in the final section together with an overview of future research perspectives.

Three chapters of part I cover similar ground, assessing the evidence for genetic transmission. A chapter on the neuropsychological assessment of dementia should be read with a chapter in part III, which presents data on research into early psychometric markers of FAD.

Part II opens with an important chapter on the possibility of genetic heterogeneity in FAD and its implications for future studies. This chapter also includes a useful review of genetic heterogeneity in other conditions and discusses other genetic syndromes associated with amyloidosis. Linkage to markers on the proximal long arm of

chromosome 21 is discussed by two groups. One group excludes linkage to 10 pedigrees largely of late onset, in contrast to the second affirming linkage in early onset pedigrees. The latter group provides a useful discussion of the difficulties of applying linkage studies to late onset pedigrees and also discusses the exclusion of the gene for the amyloid precursor protein as the site of the primary genetic abnormality in FAD. Other chapters in this section examine other molecular approaches to isolating the genetic lesion. These include quantitative methods of DNA analysis in Down's syndrome and AD (related by their common neuropathology) and the examination of the molecular pathology of intra- and extraneuronal filaments in AD. Part II ends with an evaluation of the role of amyloid in terms of messenger RNA in situ hybridisation studies and the formation and deposition of the amyloid protein in AD. A very useful editorial rounds up this section by discussing the problems in detecting supposed heterogeneity; allelic, non-allelic, and aetiological.

Part III deals with a wide range of new approaches to research aimed at both diagnosis and treatment of AD. The potential diagnostic value of studies as diverse as platelet membrane fluidity, neuropsychology, monospecific antibodies, and neuroimaging are discussed. The rapidly expanding field of therapeutics is very adequately surveyed and summarised for clinician and researcher alike. A far sighted project aimed to accommodate epidemiological, clinical, neuropathological, and genetic approaches is described and highlights the essential message of this book regarding future research strategies; the need for integration of these and other specialities.

The year by year bibliography will be much appreciated by researchers and concludes a volume which covers

many areas of current research over and above those suggested by the title. The major failing is that more than two years have elapsed since the conference on which these papers are based; two years in which a lot has happened especially in the molecular genetics of AD. In spite of this many researchers and clinicians will find something of value in this book and might like to recommend it to their librarian.

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Catalog of Teratogenic Agents. 6th ed. Thomas H Shepard. (Pp 793; £42.50.) Baltimore: Johns Hopkins University Press. 1989.

I was unaware of this useful catalogue which comprises an alphabetical list of 1968 chemicals, drugs, and other environmental agents. After each entry there is a brief summary of evidence for and against teratogenesis. Although many of the chemicals are unlikely to be encountered in a clinical setting, their inclusion is undoubtedly useful to those who are involved with the new Control of Substances Hazardous to Health regulations. Alcohol, cancer chemotherapy, hyperthermia, ultrasound, and video display terminals are among other interesting entries. Useful notes on further reading and lists of possible, proven, or unlikely human teratogens are provided.

I strongly recommend this volume as a convenient source of information to which everyone, whether their work is in the clinic or the laboratory, should have access.

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