Book Reviews


This is a well-written and well-illustrated comprehensive standard work in the field of cerebrovascular diseases. In 100 chapters and 1,226 pages, nearly all aspects of cerebrovascular diseases are covered. The profile of the book is clearly dedicated to hemorrhagic aspects of the stroke panorama, and excellent chapters are dedicated to the pathophysiology, diagnostics, and management of arteriovenous malformations (AVM) and cranial aneurysms. Technical aspects of surgical and interventional treatment of AVM and aneurysms are discussed in an excellent way and are well illustrated. The book contains several well-balanced chapters in which the different technical approaches to treatment of AVM and aneurysms are excellently discussed with pro et contra.

Throughout the 1,226 pages, elegant drawings, figures, and tables illustrate the text. The images in several chapters are of such high quality that even someone other than a neurosurgeon can get a good impression of the anatomy and the surgical problems.

The first chapters of the book are dedicated to a discussion of the cerebral vasculature in health and disease, with an excellent summary of anatomy, brain function, blood flow, and metabolism.

Section two covers diagnosis in stroke and illustrates well all the recent techniques applied in the field. In about 300 pages, ischemic stroke, syndromes, and treatment are discussed. The last 600 pages deal with hemorrhagic stroke. Rather small parts of the book discuss the medical treatment of ischemic stroke. Epilepsy is not dealt with as such in this book, but in many chapters there are references to seizures as a consequence of the different forms of cerebrovascular disease.

The editors have succeeded in selecting an excellent group of co-authors and have also succeeded in making this a most readable book. However, in some of the chapters the same treatment strategies are discussed, but not always with the same result. This is just a tiny criticism and, in fact, does not influence the main impression of the book. In some of the chapters the reference list seems somewhat outdated, stopping at 1990.

In my review copy of the book a few of pages unfortunately were upside down, which did not spoil the pleasure of reading.

Finally, on closing the book you get a pleasant feeling of having read what there is to know about cerebrovascular disease, especially hemorrhagic stroke and even the ethical aspects of cerebrovascular care and the role of clinical trials. The book is warmly recommended to all physicians, especially those working in the field of cerebrovascular disorder. For epileptologists this is a useful book to understand the disorder that is a main cause of epilepsy.

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This is the second publication of the Commission on Economic Aspects of ILAE. The present book offers a broad and comprehensive overview of the current methods and activities undertaken to introduce economic aspects in the evaluation of the management of epilepsy.

In Chapters 1 and 2, an introduction is given to basic factors to be considered in economic evaluations, as well as possible study methodologies to be applied in economic studies. The fact that financial resources are limited in all societies and that political decisions are often based on economic arguments stands in contrast to the situation that little is known about the real costs of epilepsy and the economic benefits of any treatment. A sound basis is needed for the cost calculation based on epidemiologic findings and characterization of costs. Direct as well as indirect costs have to be considered. Furthermore, tools to measure outcome in domains such as quality of life are badly needed to assess effectiveness of interventions.

Chapter 3 gives an introduction to the Epilepsy Foundation of America study currently under way in the United States. Up to now, only two studies have been published on the cost of epilepsy in the U.S. The described study, therefore, should contribute to the knowledge of the social burden of epilepsy. Prevalence- as well as incidence-based direct and indirect costs will be calculated to gain estimates on the national costs of epilepsy.

Chapters 4 to 6 deal with the experiences gained in Australia, where, since 1993, economic evaluations have been mandatory for approval of a new treatment for reimbursement. Australia is the first country in the world to ask for such studies. A first optional version was introduced in 1990. Up to now, registration has been based on quality, safety, and efficacy of a treatment, but usually no comparisons as to economic advantages are undertaken for regulatory purposes. After 5 years’ experience, it has been shown that economic evaluations are effective as a discriminating tool and also serve as a basis for price negotiation.
A move towards evidence-based decision making can be seen as well. In contrast to Canada, where similar studies are now required, the Australian studies are focused specifically on direct costs. They had to incorporate assumptions as to resource utilization and, to date, there have been no studies published to confirm or refute these assumptions.

Finally, in chapters 7 to 9, three economic studies are presented. The study from Canada on the introduction of vigabatrin (VGB) shows an example of the kind of economic studies that are now mandatory by regulatory affairs. It provides information on the expected economic consequences of introducing VGB from the point of view of a health-care system. But such studies do not take into consideration the effects on quality of life or on indirect costs.

The study conducted in Sweden (chapter 8) deals with the change in indirect costs by epilepsy surgery. A reduction of the indirect costs as well as socioeconomic effects of epilepsy and epilepsy surgery can be shown. This is in contrast to the high direct costs of this treatment. This aspect is highlighted by the study on epilepsy surgery in Colombia (chapter 9). It illustrates that epilepsy surgery can be successfully performed to a high standard in developing countries at considerably lower costs than in developed countries. The fact that the results come from a subsidized private non-profit organization and that no correlation to national economic figures is made unfortunately limits the usefulness of this study.

Overall, the compilation gives a profound survey of the current knowledge and activities in the attempt to also economically evaluate the management of a certain disease syndrome. Other related aspects, such as the problem of humanitarian benefit versus economic gain, as well as ethical considerations when performing economic studies, are not discussed in this book, but should definitely be addressed in future activities in this field.

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In the mind of many neurologists, Norman Geschwind’s contribution to neurology and neuropsychology will remain associated with his landmark work on disconnection syndromes. Reading “Behavioral Neurology and the Legacy of Norman Geschwind” reaffirms this belief, but also opens a wide spectrum of Geschwind’s other contributions in different subfields of neurology, such as aphasia, dyslexia, autism, epilepsy, and dementia. This multi-authored book is divided into 5 parts.

The initial part provides a forum for personal perspectives on Geschwind. Former colleagues and students testify as privileged witnesses of his keen intelligence, teaching skills, mentorship, and deep human aspirations.

In the part on language disorders, several authors describe Geschwind’s influence on the study of aphasia, the evolving concepts of anomia, dyslexia, and stuttering. The neurolinguistic models proposed by Geschwind and coworkers were based on a thorough study and analysis of the work of late 19th and early 20th century scientists, such as Wernicke, Liepmann, Déjerine, and Broca, and also lesser known researchers. In aphasia, the major influence of Geschwind was to initiate the change from the prevailing holistic to brain-oriented language investigations.

In the third part, Geschwind’s contributions to disconnection, attention disorders, autism, dementia, and apraxia are described and commented on by several authorities in the respective fields. His two-part treatise “Disconnexion Syndromes in Animals and Man” represents Geschwind’s most powerful and persisting influence in neurology. He united old German and French literature with recent anatomical, physiological, and clinical data.

In the part on epilepsy, Schomer and Devinski illustrate the ability of Geschwind to synthesize large volumes of data and see relationships that were not apparent to his peers. David Bear explains the concept of the “Geschwind syndrome,” a syndromic change in behavior, hypergraphia, religiosity, hyposexuality, aggressiveness, and stickiness described by Geschwind and Waxman. Herzog elucidates the relationship between neuroendocrine function and temporal lobe epilepsy that Geschwind established.

In the final part on handedness, cerebral dominance, and autoimmune disease, the reader gets a cross-section of research in the field that was greatly inspired by Geschwind’s work during his last years. In collaboration with Behan, he showed that there was a significant increase in the incidence of stuttering, dyslexia, colitis, thyroid disease, and myasthenia gravis in the population of strong left-handers. He also found significant associations between laterality and learning disabilities, blond hair and occupation.

As Galaburda explains in his epilogue, Norman Geschwind’s work “evolved from the reestablishment of classic thinking to the forging of new frontiers, reinforcing the idea that in order to make progress, it is necessary to know the useful past.” Besides an astute clinician who cared about the well-being of his patients, Geschwind was a great scientist with an intuitive and “architectural” vision.

Despite the presence of some redundancy between different chapters, which is to be expected in this type of book, “Behavioral Neurology and the Legacy of Norman Geschwind” is informative, pleasant, and inspiring both to a general neurological audience and to epileptologists.

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