

BOOK REVIEW

Advances in Neurology. Volume 70. Supplementary Sensorimotor Area. Edited by Hans O. Lüders, Lippincott-Raven Publishers, Philadelphia 1996, 512 pp.

In 1994, forty-three scientists from a variety of disciplines in basic science and clinical neurology took part in a symposium on research into the supplementary sensorimotor area of the brain (SSMA). All were invited to contribute to this volume which therefore contains a heterogeneous mix of neuroanatomy, physiology, functional imaging and clinical medicine. The book can be divided roughly in half, the first half concentrating on basic science and the second on clinical aspects. The whole is prefaced by excellent chapters on the historical background by Hans Lüders and Hans-Joachim Freund (albeit containing redundant information).

As far as the clinical neurologist is concerned, the main importance of this area of the brain lies in its epileptogenic potential, and indeed the last 200 pages of the book concentrate almost entirely on SSMA epilepsy in adults. There is much of interest here. SSMA epilepsy has a number of unusual features. Partial seizures originating here have the reputation for bizarre features, and the combination of relatively preserved consciousness, vocalization and odd motor symptoms may cause confusion with non-epileptic attack disorder. As in all regions of the cerebral cortex, the seizure symptoms are not always a guide to the anatomical localization of the epileptic focus. Typically, however, speech is arrested at the onset of SSMA seizures, followed by vocalization, repetition of words or phrases or even laughter. Ictal motor phenomena include the classical contraversive head and eye deviation and posturing of the contralateral hand in front of the eyes (fencing posture), complex

bimanual behaviours (rubbing the hands, bicycling movements of the legs) disorganized thrashing movements or genital manipulation. Contralateral sensory phenomena may occur. The presence of electroencephalographic abnormalities outside the region of the SSMA, and the common finding of bilaterally synchronous discharges reflecting the propensity of mesial hemispheric foci to propagate rapidly, may complicate seizure localization. A large variety of different epileptogenic lesions have been described in patients, but cortical dysgenesis is becoming increasingly recognized in this group. In those without cortical dysgenesis surgery may be very successful in improving seizure control and there are several relevant chapters on neuroimaging, electroencephalographic localization, neuropsychology of SSMA lesions and surgery.

Of necessity a book of this type contains a great deal of repetition which makes it appear rather disorganized. It is certainly not light reading, but some of the clinical chapters represent good introductions to the more specialized aspects of epileptology (for example Andres Kanner's short chapter on differentiation between non-epileptic attacks and SSMA seizures). In contrast, and I am sure partly as a result of my clinical background, I found the first half of the book more difficult to get to grips with; several chapters (e.g. 17, 18 and 19, and 20 and 21) appeared to review very similar ground which I found frustrating. Although for the superspecialist research neurophysiologist there is much of interest here, for the most part it left me cold, despite my background in neurophysiology research.

Definitely not bedtime reading. To sum up, not exactly a 'must buy' but rather a useful source of reference material for the academic library.

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