ATLAS OF PEDIATRIC ELECTROENCEPHALOGRAPHY, 1981. By Warren T. Blume. Published by Raven Press, New York, NY. 336 pages. $85.00 US.

Electroencephalography is an important part of the rapidly growing field of pediatric neurology. The Atlas of Pediatric Electroencephalography is a critical and timely work by Dr. Blume, whose credentials as an electroencephalographer are impeccable and whose own original contributions in the field of pediatric encephalography and epilepsy are well respected.

Childhood is characterized by the tremendous changes related to a dynamically developing central nervous system. Dr. Blume, from his perspective as an electroencephalographer and pediatric neurologist emphasizes the importance of appreciating the wide range of variability of the normal electroencephalogram in childhood by dedicating almost half of the atlas to normal electroencephalograms in children. In each sequence of illustrations there is an obvious attempt to present in an orderly fashion, electroencephalograms of infants, younger children and adolescents. Throughout the book there are recurrent attempts at defining the difference between the child's E.E.G. at certain ages and that of an adult, but the author does not dedicate a specific chapter to emphasize the difference. Such a synthesis, I believe, would have enhanced the value of this atlas, especially for electroencephalographers who are not pediatric neurologists.

The chapter on abnormal E.E.G. is invaluable for many reasons. The emphasis placed by the author on the limitations of the electroencephalogram in clinical diagnoses reflects the experience that he commands and the pitfalls that all those interpreting electroencephalograms should avoid. The in-depth treatment of such specifically pediatric entities as infantile spasm and acquired asphasia of childhood with bitemporal spikes is very useful. The significance of rolandic spikes and their correlation with clinical seizures is also well reviewed. The rigorous definition of the multiple independent spike foci (MISF) reflects the author's own original contributions in this area. His conclusions in MISF as to the predictability of seizure frequency when the E.E.G. is quantified (more likely when the spike frequency is 1 per 10 seconds) indicates the usefulness of a systematic approach to EEG in investigation of childhood epilepsy. But even though there is an excellent treatment of the subject of infantile spasm and hypsarrhythmia, this reviewer was frustrated when the discussion ended with the statement, "However, see Stamps et al (74)". This was quite unlike the conclusive summaries characterizing the rest of the text.

An important paragraph is dedicated to acquired aphasia of childhood with temporal spikes a condition often not even mentioned in other texts or atlases of electroencephalography. However the title of the paragraph is misleading. The presently proposed nosology of "Verbal Auditory Agnosia" might have been a better term for that segment rather than 'Acquired Aphasia of Childhood'. In the text the author does describe the acquired aphasia of childhood with temporal spike syndrome, but the reader may be misled into believing that all acquired aphasias of childhood are associated with that EEG pattern. Furthermore, while administration of diazepam does not affect aphasia in the verbal auditory agnosia syndrome, it does produce a dramatic response in epileptic aphasia.

The role of E.E.G. in some common pediatric neurologic problems is discussed in a separate chapter from the one on the abnormal E.E.G. and epileptiform potentials specifically relevant to epilepsy. This is a relatively new approach which I found helpful. I was a little doubtful, however, as to the definition of febrile convulsions given in the text which was uncharacteristically simplistic and more compatible with a diagnosis of seizures with fever.

The E.E.G. changes in breath-holding spells are very well described and the author suggests that the E.E.G. has little role in the diagnosis of these spells when a proper clinical description is obtained. Unfortunately this subject is tucked away under the heading of syncope and I was unable to locate any reference to breath-holding spells in the index.

The quality of the illustrations throughout this atlas is excellent. The majority are quite convincing evidence of the pattern that the author describes in the captions on each page. The beauty of some of these illustrations is supplemented by the concise clinical correlations below the figures. Occasionally there is dissociation between the meaning implied in the text of the chapter preceding the illustrations and the implication the reader derives from the caption below the figures. For example, figure 178 describing an 8 and 16 pattern that augments to spike wave: the caption below this illustration states that the patient had absence but normal intelligence. In the text of the chapter preceding the sequence of illustrations, the author makes the statement that the "8 and 16 pattern with absences would produce, unfortunately, frequent uncontrolled absences." This might imply a less benign prognosis than later.

It is the opinion of this reviewer that an important chapter to add in the next edition would be one that would discuss terminology and definitions, rather merely than allude to these in captions or omit the definition completely such as occurred with paroxysmal lateralized epileptiform discharges. It would also have been helpful to have a few illustrations to highlight the text on degenerative diseases.

The electroencephalographer who is dealing with pediatric neurologic problems spends a major part of his time evaluating E.E.G.s of the neonate. A chapter on neonatal E.E.G. or at least expansion of chapter 1 on the normal E.E.G. to include E.E.G.s at different gestational ages of the premature and the full-term newborn would certainly enhance the value of this atlas.

Despite these few shortcomings the Atlas of Pediatric Electroencephalography is a credit to Dr. Blume and a reference which should be available in every E.E.G. Laboratory.

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