these authors found that improvement in expressive skill was not related to a child's involvement in intervention services and the results were not encouraging with regard to the effectiveness of early childhood intervention programs. These findings agree with other reports that early intervention efforts did not reduce the frequency of later problems during the school years. The lack of validation of many early intervention efforts noted in the literature places the concerned pediatrician or other professional in a quandary. Apparently, he can use the parent's report of the child's vocabulary size to advise the parent with a high degree of accuracy as to whether the child's expressive language skills will improve in the next few months. However, if the parent wants advice about seeking treatment the basis of action is not clear. The parents should probably be advised of the importance of careful assessment and differential diagnosis in any child with a severe expressive delay and intervention should certainly be considered if the problem persists beyond the third birthday, even given the uncertain effects of intervention techniques. The more accurate diagnosis of subtypes of language delay or dysphasia might lead to more specific intervention techniques as described in the previous article and the beneficial effects of treatment may become more apparent. The early language milestones scale (ELM) has been found a reliable tool to base referral of a child showing evidence of language delay when the test is applied between 25-36 months of age. In the 12 month and younger age groups the test is of no value, and for infants between 13 and 24 months of age there is moderately good agreement between the ELM and the more direct testing with a sequenced inventory of communication development (SICD). (Walker D et al. Early language milestone scale and language screening of young children. Pediatrics Feb 1989; 83:284-288).

SPEECH ABNORMALITIES AND TEMPORAL LOBE SEIZURES

The role of speech manifestations in the lateralization of temporal lobe seizures was reviewed at the Section of Epilepsy and Clinical Neurophysiology, Department of Neurology, Cleveland Clinic Foundation, Cleveland, OH by the review of videotapes of 100 complex seizures in 35 patients who underwent temporal lobectomy for intractable epilepsy. All patients had prolonged EEG video monitoring with scalp and subdural electrodes and their speech dominance was determined with an intracarotid amobarbital test. Speech manifestations were classified as vocalization, normal speech, or abnormal speech. Vocalizations of sound without speech quality occurred during the seizure in 48.5% of patients. Normal speech occurred ictally in 34% of patients. Abnormal speech (speech arrest, dysphasia, and dysarthria) occurred in 51% of patients either during the seizure or postictally. Only postictal dysphasia and ictal identifiable speech had significant lateralizing value: 92% of patients with postictal dysphasia had their seizures originating from the dominant temporal lobe, and 83% of those with ictal identifiable speech had seizures localized to the nondominant side. (Gabr M et al. Speech manifestations in lateralization of temporal lobe seizures. Ann Neurol Jan 1989; 25:82-87).

COMMENT. This study shows that speech manifestations are common in complex partial seizures of temporal lobe origin and can help to lateralize the origin of the seizure. John Hughlings Jackson noted that seizures in the dominant hemisphere could result in speech abnormalities and Penfield found that electrical stimulation of the speech areas in the dominant hemisphere produced dysphasia whereas stimulation of the motor speech area of either hemisphere produced vocalization.

BODER'S SUBTYPES OF DYSLEXIA

The subtyping of dyslexic children proposed by Boder (1971, 1973) have been validated by quantitative neurophysiological techniques at the Gunderson Medical Foundation, LaCrosse, WI. Children were classified as being dysphonetic (auditory-phonetic disabilities), dyseidetic (visual spatial disabilities) or mixed (deficient in both processes). In one study of 21 dyslexic children between 7 and 10 years of age and six controlled children, there were significant differences between the dyslexic subgroups and between the dyslexic and controlled children on three of the six cognitive tasks (frustration level reading, spelling recognition, and drawing a clock). Significant differences occurred in left temporal parietal theta, and this difference occurred in the area of the angular gyrus, presumed to be important in phonetic decoding. This suggested that the reportedly normal phonetic skills of dyseidetic children may not be normal but rather a sign of overuse of a processing strategy associated with inefficiency of right hemisphere visual gestalt abilities. Additional support for an overuse theory in dyseidetic dyslexia came from the behavior of the children during reading tasks. The dyseidetic children audibly decoded many words whereas dysphonetic and mixed dyslexics skipped unknown words or substituted words with the same beginning sound. On a second study involving 33 eight and nine year old dyslexic children and 31 controls, the results of two of seven cognitive tasks confirmed subtype differences. Significant differences in left temporal parietal theta activity in the electroencephalograms of the dyseidetic children suggested that their reading disabilities may be the result of overuse of linguistic abilities rather than deficient visual spatial skills. (Flynn JM, Deering WM. Subtypes of dyslexia: Investigation of Boder's system using quantitative neurophysiology. Dev Med Child Neur 1989; 31:215-223).

COMMENT. A diagnostic screening test for subtypes of reading disability, the Boder Test of Reading Spelling Patterns, is published by the Psychological Corporation, San Antonio, TX. The Boder Test is easily administered and identifies four subtypes of reading disability on the basis of reading and spelling performance. The test is based on the premise that dyslexic readers have characteristic patterns of strengths and weaknesses in two distinct cognitive components of the reading process: The visual gestalt function and the auditory analytic function. The visual gestalt function underlies the ability to develop a sight vocabulary. The auditory analytic function underlies the ability to develop phonic word-analysis skills. These two cognitive functions are basic to the two standard methods of initial reading instruction: The whole