authors have only been partially successful in this goal. The text is very logically laid out under the major headings of "Basic Techniques" that are necessary for EEG, EMG and Evoked Potentials. There then follows three chapters on the normal aspects of EEG and four on the abnormal aspects of EEG. Abnormal Evoked Potentials (four chapters) covering VEP's, SEP's, BAEP's and Evoked Response Audiometry are covered. Four abnormal chapters on EMG covering motor unit disorders, application of quantitative methods, peripheral nerve disorders and reflexes in neuromuscular disorders are presented. Lastly, there are seven chapters on basic neuromechanisms dealing with these electrophysiological modalities, plus an excellent discussion on the basic mechanisms of the epilepsies.

Most, if not all, the authors will be well known to the readership of this Journal. Many of these authors, in fact, have made not only major contributions in the literature already but have authored important textbooks on their subject material or well received critical reviews. Herein lies one of the major criticisms in that the authors in this text have seemingly given in many instances an abridged version of earlier reviews or publications they have authored. As such, there is a general tendency throughout the book for the information to be presented in a rather brief or stilted form so that one can only get an overview and none of the subjects have really been covered in much depth. A novice or a neophyte in the field would probably be over his depth, and yet, an experienced clinical or researcher would not find the material meaty enough for intellectual challenge. The redeeming feature, however, of this approach is that all chapters are very heavily referenced as current as 1986. This would not be a textbook to recommend for a Neurology or Neurosurgery resident but would be a book to recommend for a library to purchase or even better still, a multidisciplinary clinical neurophysiology lab to have on its shelf for reference.

> Michael W. Jones Vancouver, British Columbia

SLEEP AND ITS DISORDERS IN CHILDREN. 1987. Edited by Christian Guilleminault. Published by Raven Press. 316 pages.

This single volume multiauthored text provides, what is to this point, the only comprehensive exposé on sleep and its disorders in infants and children. What will be appreciated by many is a glossary of terms used in the diagnostic classification of sleep and arousal disorders at the beginning of the text. The work is subsequently divided into two main subdivisions. The first part of the book provides normative background data and population surveys relating to the development and consolidation of the sleep-wake cycle in infancy and the development of normal physiological responses during sleep in infants and adolescents. The second half of the work is more clinically oriented and describes in greater detail many pathological disorders of sleep, including the insomnias (disorders of initiating and maintaining sleep), disorders of excessive somnolence, and the parasomnias.

Although the initial eight chapters are not focused directly

on the pathology of sleep-wake disorders, they represent "pioneering work" directed at the establishment of normative data for infants and children. It is speculated that a clearer definition and comprehension of the normal development of sleep will foster a better understanding of the pathological condition. Data is presented in a chronological manner, presenting trends which are found in premature infants under 36 weeks gestation and comparing these patterns to those found in mature infants. Further directions for research in the area of infant motility are also discussed as a means of investigating CNS integrity in the newborn. Subsequent chapters develop the concepts of consolidation of sleep-wake stages and consolidation of sleep states in the infant; describe variability of sleep architecture in children 6-12 years and a trend toward waking alertness and sound nocturnal sleep patterns during adolescence, as well as suspected psychosocial mechanisms responsible for the development of adolescent sleep patterns. There is also a detailed chapter related to respiratory physiology (during sleep) and adaptation from the newborn through the adolescent.

The last two-thirds of the text deals with the pathology of sleep. After two excellent chapters which survey the incidence of various sleep disorders, there is a very comprehensive chapter on the colicky infant by Marc Weissbluth in which it is speculated that many of the later developing sleep disorders may originate in parental mismanagement of the infants' sleep schedules. Subsequent chapters relate to the major disorders of sleep in children, including insomnia, schedule disturbances, narcolepsy, sleep apnea during infancy and its possible relation to SID's, other respiratory related sleep disorders, nightmares, somnambulism and enuresis. There is also a chapter discussing sleep-waking disorders in mental retardation and an interesting chapter concerned with the interaction of epilepsy and sleep disorders. The chapters related to sleep apnea in infancy and obstructive sleep apnea syndrome in children by Christian Guilleminault were particularly strong. They clarified our present understanding of risk factors for SID's and its relationship to apnea of infancy. The clinical facets of sleep apnea and its etiologies are well described and a brief but complete list of potential treatments is discussed. Respiration in children with asthma and obstructive pulmonary disease is dealt with in a separate chapter. There is also a comprehensive approach for evaluation and treatment of enuretic children developed by German Nino-Murcia and Sharon A. Keenan in the chapter on "Enuresis and Sleep".

When considering the frequency of sleep disorders in this age group and the variety of physicians who treat these young patients including pediatricians, respirologists, family physicians, psychiatrists and neurologists, this text should appeal to a broad spectrum of medical personnel. The only possible disappointment to some physicians less experienced in the treatment of sleep disorders might be the paucity of clinical examples or lack of clinical description of some of the basic sleep disorders. Not withstanding this potential criticism, the discussions concerning etiology, sleep architecture in sleep disorders, and treatment will prove worthwhile for physicians in a wide spectrum of subspecialties treating this young patient population. The text is strongly recommended without reservation.

W.F. Murphy Calgary, Alberta