Book reviews

The Catecholamines in Psychiatric and Neurologic Disorders. Edited by C Raymond Lake and Michael G Siegler. (Pp 343; £55.00.) Sevenoaks: The Butterworth Group, 1985.

Catecholamines are intimately involved in neurotransmission within both the peripheral and central nervous systems. Not surprisingly, alterations in catecholaminergic transmission have been implicated in a variety of psychiatric and neurological syndromes. Central disorders of catecholamine metabolism may be reflected by alterations in peripheral markers of these neuronal systems and a complex interaction seems to exist between the peripheral and central nervous systems in this respect. This volume deals with many aspects of catecholamine involvement in disease processes in a manner of relevance to both the basic scientist and the clinician.

The book contains an excellent basic introductory chapter on the assay of catecholamines in a variety of biological systems. More importantly, it also deals with the problem of interpretation of the data obtained. Subsequently, five major sections follow dealing with stress, neuropsychiatric disorders, paediatric disorders, affective disorders and finally, schizophrenia. The emphasis of the book is highly clinical but with sufficient basic science to make it of interest to a wide audience. For those involved in this area and as a reference work, I am sure that many will wish to take advantage of this volume.

P JENNER

Neurological Examination of the Newborn. (A Routine for All.) By Neil O'Doherty. (Pp 204; £29.95.) Lancaster: MTP Press Ltd, 1985.

There are many books on neurological examination of the newborn. Many of these, following the work of André Thomas and his disciples in France, have adopted a "developmental" approach, charting the correlation of increasingly complex and complete primitive or automatic responses with the gestational maturity of the infant born prematurely, and surviving with the help of ever more sophisticated neonatal

care, to reach, in most cases, his full potential for development as child and adult. Other workers, in the Netherlands (Prechtl and Beintema), the United States (Paine, Brazelton etc) and Britain (Dubowitz) have contributed to progress in neurological neonatal examination and to the goal of achieving comparability of results in the hands of different examiners. Much important paediatric epidemiological work has come from the United States National Institute of Health whose project studying 54,000 pregnancies in 12 teaching hospitals employed as examiners service (rather than research) oriented physicians, many of the relatively inexperienced. Among these were many young paediatricians-in-training from Britain, whose participation provided their first introduction to this fascinating field. The author of this book was one of these expatriates, who on his return to London, concerned about the standards of neurological examination in newborn nurseries, resolved to rectify the situation by devising with his colleagues a pragmatic, simple, brief, standardised scheme of examination with objective and easily taught items. In this small volume O'Doherty describes the method in a relatively brief text illustrated by a wealth of excellent photographs which are a pleasure to look at.

The book is in three parts. The first and shortest is on *The Body's Latent Abilities* and stresses the importance of the baby being in the best mood to perform, the various "states" of arousal and the need to move him up or down the scale by alerting or quietening in order to obtain the best results in the various items of examination.

The longest section is devoted to the examination. This is performed twice, with an initial brief survey and a more detailed and searching examination before discharge. Posture and motor activity at rest are described with their physiological and various deviant features and the same approach is adopted to eyes, upright, ventral and dorsal suspension, neck traction, palmar grasp, hip abduction, placing, extensor thrust, primary walking and Moro reflex. Face, head and neck, rooting and sucking, cry, tone and head circumference, normal and deviant, are discussed and illustrated. The author gives helpful practical guidance on how to facilitate the examinations; for example he describes how to achieve opening of the infant's closed hands, in order to elicit the palmar grasp, by flexing the wrists with light pressure on the metacarpals or by stroking the hand along the ulnar border. Normal variations are well described, such as the self-laceration of the face, the "action painting" of the sheets after heel-stab, the effects

of nose-rubbing and of "horse-riding" movements in the hyperactive body. The distinction between facial palsy and the often confused hypoplasia of the depressor anguli oris muscle, giving respectively a pear-shaped and an anvil-shaped mouth, is well described and illustrated.

The third section on outcome is more controversial. The author correctly points out that the "At Risk" concept, so popular in the 1960s and based largely on *historical* features both personal (prenatal, perinatal, postnatal) and familial, with a smaller contribution from "developmental warning signals" was too cumbersome and all-embracing to be of practical value, since an unmanageably large proportion of the newborn population were deemed candidates for special follow-up. The author believes that a much more manageable quota of 5% or 10% can be selected from the nursery population by concentrating on those babies showing neurological dysfunction, whether their biographies show "risk factors" or not. His contention is supported by American studies of cerebral palsy showing that 23% were classed as abnormal in the newborn nursery, though only 0.5% of the total nursery population were neurologically abnormal, compared with 34% regarded as suspect neonatally and 11% so designated in the total nursery population.

O'Doherty argues convincingly for the efficacy of the examination he describes which takes 5 minutes or less. The findings of the "primary care doctor" are checked by the "tutor", a physician with several years of paediatric experience. He calculates that with a 5% figure for ascertainment of neonatal neurological dysfunction, and follow-up examinations at 1, 4, 7 and 12 months, there would be 200 examinations in the first year from 1,000 births and perhaps 150 more up to school entry. Although in some centres all neonates receive a careful neurological examination, I suspect that most, nationwide, do not, and the universal adoption, with widespread education, of this method, would yield rich dividends in early detection and more efficient management of childhood neurological handicap.

No-one could fail to enjoy this book, carp though he might at certain statements. Like children, we all learn best when it is fun, so it has a headstart over many more solemn tomes. A copy in every nursery would raise standards and do much to improve the care of the handicapped but perhaps it should have been published, like a well known earlier book on the same subject, with a hole in its spine to secure it to the desk or cot-side.

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