The Neurophysiology of the Cerebral Cortex By Lynn Bindman and Olof Lippold (pp 411; £47.50) Maidenhead: Edward Arnold, 1981.

This is a most handsome and impressive book, which would be of the greatest help to undergraduate and postgraduate students if they could afford it. It is up to date, well produced and profusely illustrated with helpful diagrams and figures, many of them original. The style is excellent, fresh and critical almost throughout, with no mere repetition of received opinion, and is consequently a joy to read.

The book is divided into sections on structure, electrophysiology, neurochemistry and neurophysiology, the last of these being the longest. There is a 32 page index and there are 1500 references, well up to date and placed together at the end. I found the chapters on the input of information to the cortex, processing in the visual cortex and motor functions of the cortex particularly valuable. The authors are rightly at pains throughout to emphasise the importance of species, preparation, and depth and agent of anaesthesia, in all their critical discussions; and at many points, where the experimental evidence is inconclusive or a piece of evidence is missing, appropriate experiments are suggested. A critical approach like this is necessarily a personal approach, and one is bound to find points at which one disagrees with the conclusions reached. These are, perhaps not surprisingly, often found where the authors’ views are well known and controversial. Thus, it is suggested (p73) that the technique of response averaging (whether unit or mass response) “...tend(s) to give response patterns which do not exist at all in reality. ...”

Again, the observation that mass brain-potentials can be subject to contamination by muscle action-potentials becomes inflated into the view (p126) that the alpha rhythm is generated by eye muscle tremor and (p138) that the slow waves of sleep are generated by rapid eye movements (which actually occur in a different stage of sleep). These views were presumably originally proposed in order to make people look to their methods and controls; but now they have gained a life of their own, and the critical presentation of evidence from both sides of a controversy, so evident elsewhere in the book, is lacking at these points.

But these are “good” faults; they stem from the enthusiastic partisanship of real experimentalists with a point of view, and are easily seen and forgiven. It would have been all too easy to write a less critical, less controversial and less interesting review of current knowledge of the workings of the cerebral cortex, and the authors were right to do it their way.

DN RUSHTON


This is one of the best books on the subject that I have read. It opens with an informative section on the development of local anaesthesia which includes a useful four pages of “potted history.” Chapters on pharmacology, physiology, applied anatomy and physiology and equipment follow. Regional techniques should never be embarked upon lightly, and precautions and dangers in administration get a good airing. Local analgesic drugs have doses too, and you will not be allowed to forget this! Thereafter techniques are described in detail, each body area being dealt with in turn (it is therefore easy to find one’s way about this big volume). Specialised surgical applications of techniques follow and there is a useful (and salutary) section on complications. The last section of the book is concerned specifically with the treatment of pain and is dealt with very comprehensively within a comparatively small compass. The multi-disciplinary approach to pain is emphasised and the “philosophy” of the Pain Clinic outlined. This should be compulsory reading for those thinking of starting this work.

Finally, epidural and intrathecal opiates have a mention. Respiratory depression has been reported after their use. This warning is repeated here: and cryoanalgesia, TCNS, intravenous sympathetic blockade and hypnosis have not been omitted. I was very interested in the technique of coeliac (celiac!) plexus block as outlined. Is not the loss of resistance test (with air or “local”) as satisfactory as feeling the vibration of the peri-arterial structures transmitted to the needle? Ease of injection is mentioned later in the description. I have the impression that 7.5% phenol in water is as good a neurolytic agent in thoracic sympathetic block as the alcohol recommended, and perhaps a little less likely to produce post-injection neuralgia. And I should like to have seen mention of the relationship between the pain clinic and the hospice and religious affiliations; but this is really “nit picking.” I enjoyed the book immensely and recommend it heartily. It is full of good things—a book to be consulted by any doctor who may be concerned with neural blockade and pain work. The editors are to be congratulated. It is well documented with an excellent bibliography. But oh! the price—£62. Librarians should buy it now and doctors put their book tokens together for their own copy.

CDT ADDYCE


This book gives the contributions to a symposium held in Istanbul, Turkey in September 1979. The communications are grouped into five major areas: demyelinating diseases, convulsive disorders, extrapyramidal diseases, peripheral neuropathies and immunopathology, with a miscellaneous group of articles which include vitamin deficiency, steroids, aminoacids and amines. The emphasis generally is on the underlying biochemistry of the various neurological disorders, with some comments on problems of treatment. The main value of the Book would therefore be appreciated by clinicians and research scientists requiring information on possible basic mechanisms associated with these disorders rather than by scientists wishing to be informed on the clinical aspects. This is not surprising as the symposium was organised under the auspices of the...