involving steroids'. Those whose biochemistry is limited to that given in medical courses may find parts of the book hard going. The very large number of steroids, closely related in chemical structure but widely diverging in biological activity, is at the same time the main fascination and difficulty of the subject. As the authors point out, the difference between masculinity and femininity is only four hydrogen and one carbon atoms. The first chapter grasps this prickly problem of names and structures. It is difficult, and requires application and careful study. Then one proceeds to an easier, clear and useful account of the neuroendocrinology and sites of steroid biosynthesis. There are numerous helpful line drawings and photomicrographs of tissue sections. More chemistry follows. The pathways of biosynthesis and metabolism are dealt with in great detail. Structural formulae, trivial and systematic names are all given, although these names are repeated in Appendix I. Indeed, there is so much detail that in some tables the print is too small for comfortable reading. Despite this, one looks for more information about alternative pathways and factors deciding the route followed, matters of great importance in pathology. Work in recent years which has shown that cortisol is produced in man by pathway(s) not involving progesterone is not mentioned. This omission may be due to the long time taken to produce the book. There are only a few references to work published in 1969. The various enzyme defects, found in steroid hormone biosynthesis, which are of such great clinical interest, are very clearly dealt with in an excellent chapter on clinical aspects of the pituitary-adrenocortical axis. Indeed, this and the next chapter on the pituitary-gonadal axis are the best in the book. Finally, 58 pages are devoted to recent work. Here one finds inter alia information on the feedback of gonadotrophins, the comparison of menstrual and oestrous cycles, steroid muscle relaxants and the protein binding of steroids, including competitive protein binding analysis. It is disappointing that much more space has not been devoted to this very important subject of protein-steroid interaction.

In summary, this book contains a wealth of interesting and useful information. The medical reader will find the biochemistry difficult, but if he can persevere he will be well rewarded. It is certainly a book which should be owned and constantly referred to by those beginning to work on steroids in the biochemical, pharmacological or clinical field. Many others will wish to refer to it when they occasionally have to deal with steroids. There is a good index of 14 pages, and it is easy to find one's way about the book. The authors are to be congratulated on having undertaken and successfully completed the very difficult task of reducing the vast knowledge of steroids to manageable dimensions.

J. K. GRANT


This is the 17th volume in the series Clinical Neurosurgery and reports the proceedings of the Congress of Neurological Surgeons held in September 1969.

The book contains 14 papers on various aspects of neurosurgery as well as some matters personal to the congress. The papers are on topics so varied that it is difficult to evaluate the book as a whole, and in any case the interval of time has outdated the conclusions of some of them.

Seven of the papers deal with various aspects of peripheral nerve injury and repair. These give sound practical advice on the treatment of such injuries, the paper on nerve grafting is especially good, but little in the way of new principles or ideas emerges from them.

A paper on the treatment of spasmatic torticollis by cervical rhizotomy has almost an old-world flavour and the author's statement that 'evaluation of the effects of surgery is difficult' and the fact that only four patients from a series of 50 considered themselves to be cured indicate the value of this treatment. There is no mention of the results of stereotactic surgery nor of the hypothesis that most, if not all, cases of torticollis are manifestations of a more widespread dystonia.

Four papers deal with pituitary or parasellar lesions and include an excellent account by W. F. Hoyt of the anatomy of the optic chiasm.

Dr. Yasargil deals with intracranial and spinal microsurgery in his usual authoritative manner and there is an excellent paper on concomitant craniocerebral and spinal trauma by Richard C. Schneider.

With such a pot-pourri of papers on widely differing aspects of neurosurgery it is difficult to assess the usefulness of printing a permanent and expensive (£7.50) record of the congress. No doubt it will remind those who attended it of the many wise words spoken. For those who did not, the passage of time will have lessened the value of some of these papers and they will probably prefer to acquire their information from more recent papers in the specialist journals.

BRODIE HUGHES


This well-produced monograph is based on a study of 2,085 'clean' operations performed by several neurosurgeons in the Massachusetts General Hospital during the period 1952-65, with a post-operative infection rate of 4.1%; and a further 579 operations from 1966-68 when it fell to 0.3%. The reason given for the reduction in infections was the introduction of ultraviolet radiation in the operating theatre at an intensity of 35 micro-watts/sq cm, at the operating site: in addition, more intensive maskings and gowned, and less activity of theatre personnel was instituted. Ultraviolet theatre radiation was described by Wells and Wells in 1936, and in the same year by Hart, but has never gained popularity. There must be bacteriological and technical reasons for this.

The book is a sequel to the author's previous work on 'post-operative craniotomy infections' (1966), and similar significant factors concerning post-operative infection are noted, including operations of long duration, re-operations, excess activity of theatre personnel and the drainage of wounds. On the other hand the age of the