BOOK REVIEWS


This 200-page textbook originates from the Montreal Neurological Hospital and Institute (associated with McGill University). This point is important because the book is mainly an account of the methods and techniques favoured by this group of workers. The advantage of this approach is, of course, that the authors are always writing about techniques of which they have extensive personal knowledge, but the inevitable disadvantage is that the reader is not presented with a balanced view of the alternatives open. Nonetheless, the book is recommended to trainees provided that they also read other texts on this subject. For the experienced neurosurgical anaesthetist, the book is a "must" because it gives detailed accounts of the methods used in this famous neurosurgical centre.

The first quarter of the book is an up-to-date account, with 151 references, of physiological and pharmacological principles. This allocation of space is characteristic of the authors' emphasis on the importance of basic knowledge to clinical neuro-anaesthesia and in it Dr. Galindo gives a clear account of cerebral haemodynamics, cerebrospinal fluid pressure changes, central control of circulation and respiration and hypothermia. He concludes the section with a topical account of the regulation of cerebrospinal fluid pH in the face of metabolic and respiratory changes in blood PH.

The clinical part of the book opens with an account of anaesthesia for the special investigations which are particular to neurosurgery. These workers use halothane with spontaneous respiration for cerebral angiography, a technique about which there is currently some discussion. For retrograde aortic cannulation they recommend a technique of neuroleptanalgesia in spontaneously breathing conscious patients. They comment, however, as others have done before, that "not infrequently a patient who appeared quite comfortable during the procedure will complain about it vigorously the following day".

There is then a chapter on the anaesthetic assessment of the neurosurgical patient which contains very little of particular relevance to neurosurgery. Space limitations make this section sketchy and the information it contains is given in greater detail in most of the standard anaesthetic texts.

In the following chapter on the general principles of anaesthesia for intracranial surgery, one reads the surprising statement that "barbiturates have no overall effect on the brain unless accompanied by respiratory depression". The anaesthetic technique used for craniotomy is thiopentone induction followed by spontaneous ventilation with nitrous oxide-oxygen and halothane, followed by spontaneous ventilation with nitrous oxide-oxygen and methoxyflurane and finally followed by curare and hyperventilation. They do not approve of extreme hyperventilation but set the minute volume to be 25 to 50 per cent above the Radford nomogram. Since they measured PaCO₂ in most of the patients it is a pity that the mean values are not given for this ventilation technique.

Fifty interesting pages containing practical accounts of anaesthetic techniques employed for particular intracranial and spinal operations then follow. This section contains many excellent illustrations but also one almost unintelligible "ghost" e.g. An interesting point is that these workers employ controlled ventilation for posterior fossa operations and rely on the e.c.g. to monitor the integrity of the medullary centres. The book concludes with chapters on the management of head injuries, on postoperative care and on the treatment of chronic pain. One hopes that the statement in the chapter on head injuries that "physiological dead space is increased because alveoli that are not being ventilated are being perfused with blood" will be corrected in the next edition.

This book is a valuable addition to the available literature on neuro-anaesthesia. It should, however, have an even wider appeal because it illustrates on almost every page the importance of routine monitoring in clinical anaesthesia. Indeed, the argument for routine clinical monitoring has rarely been better advanced than on pages 120-123 of this book.

D. Gordon McDowall

Tumori Primitive non Odontogeni delle Ossa Mascelari. By Prof. C. E. Pini, Dr. S. Fiocca, Prof. M. Scandali, Prof. C. Braccini and Dr. E. Casella. Published by Poligrafica Industriale Lombarda, Milan. Pp. 365; 94 × 64 in.

This substantial volume of 365 pages contains papers presented to the Thirty-sixth National Congress of the Italian Association of Medical Dentists. It deals with primary non-odontogenic tumours of the bones of the jaws and the greater part of the volume is devoted to detailed descriptions of the pathology, clinical features and treatment of these lesions. An appendix of fifteen pages, plus bibliography, by Dr. Rita Ghezzi, deals with the anaesthetic problems. She stresses the importance of a full and careful pre-operative assessment of the patients' general condition paying particular attention to the haemopoietic, cardiovascular, nutritional and metabolic aspects and making enquiries with regard to previous treatment, particularly with steroids and with radiotherapy. For premedication she favours combining atropine or hyoscine with an antihistamine drug which, besides its sedative action, helps to lessen oedema in the affected tissues. Thiopentone induction is avoided when there is inflammation of the floor of the mouth because of the danger of acute oedema of the glottis. Where there is severe inflammation in the floor of the mouth, prophylactic tracheostomy or at least previous intubation under local anaesthesia is favoured. Otherwise halothane induction followed by intubation with a cuffed, armoured tube is recommended. For resection of the mandible the tube is passed through the nose and for resection of the maxilla through the mouth. Halothane anaesthesia is continued throughout and some postural control of the blood pressure is practised. Trimetaphan and local infiltration of the tissues with adrenaline and lignocaine are used as well, sometimes together with halothane.
Postoperative management is also discussed in respect of parenteral nutrition and hydration, the use of drugs and the care of the tracheostomy.

R. Brearley

I Traumi dello Schiello Facciale. By M. Staffieri, M. Senaldi, E. Bozzi, C. E. Pini, R. Ghezzi, A. Lazaroni, E. Giammilla and N. Fabri. Published by Poligrafica Industriale Lombarda, Milan. Pp. 681; £4.61. in. This volume of 681 pages contains papers presented at the Eighteenth Congress of the Italian Association of Hospital Otologists. Rita Ghezzi contributes a chapter on emergency treatment and general anaesthesia in maxillofacial trauma. After describing the emergency treatment of respiratory and cardiocirculatory failure, she passes on to the metabolic effects of trauma and the importance of other associated injuries, particularly craniocerebral trauma. She then deals in detail with the anaesthetic technique. Respiratory depressant drugs should be avoided for premedication. Induction is achieved with intravenous barbiturates, followed by intubation except in the presence of inflammation in the floor of the mouth. In such patients anaesthesia is induced with halothane, or, in severe cases, previous intubation under local anaesthesia is carried out, or even a tracheostomy. After the reposition of nasal fractures she recommends the placing of a tube in each nostril to allow nasal breathing. This measure can be particularly useful if the injury has also caused oedema of the lips. The preferred anaesthetic is halothane, nitrous oxide and oxygen and this is stated to allow postural reduction of the vascularity of the head region and an easy postanaesthetic recovery.

R. Brearley

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