Book Review

Baillière's Clinical Anaesthesiology: International Practice and Research. Vol. 8 No. 2. Muscle Relaxants

D.R. Goldhill, P.J. Flynn, (Guest Eds.). Baillière Tindall, 1994. 227 pages. £27.50. ISBN: 0-7020-1847-3

and clinical application in a way which makes it easy to read and a pleasure to review.

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The stimulus for compiling this updated review of muscle relaxants for anaesthetists has been the availability of innovative drugs and investigative technology. The editors have selected topics of current interest for discussion in ten chapters. These include recent advances in neuromuscular physiology, pharmacokinetic behaviour of muscle relaxants and the monitoring of neuromuscular blockade. They debate the place of succinylcholine and the role of new drugs, pipecuronium, doxacurium, mivacurium and rocuronium in clinical practice. Controversies are not avoided: unresolved issues surrounding myopathies associated with the use of muscle relaxants in intensive care units and the recognition that cardiac arrest can follow succinylcholine administration to patients with occult muscular dystrophies are featured.

The authorship is predominantly from the United Kingdom with one-third of the contributors from North America, Australia and the Netherlands. Therefore, it is surprising that the resulting chapters reflect an international consensus so well. Individual chapters in the early part of the book provide the scientific basis on which the clinical topics covered later depend. Understanding the differing sensitivities of muscle groups to relaxant drugs explains how vecuronium acts sooner at the larynx than at the thumb. Good intubating conditions may be missed if the anaesthetist waits for abolition of adductor pollicis response, whereas monitoring the orbicularis oculi muscles provides a closer correlation with laryngeal muscle activity. The rationale for choosing edrophonium or neostigmine is also clarified. As they have different modes of action, neostigmine is more suited to antagonizing deep residual neuromuscular blockade and edrophonium provides rapid reversal from lesser degrees of block. It will be interesting to know whether the new short-acting non-depolarizing agent, mivacurium, will always require reversal. If it does, then edrophonium, which acts only on acetylcholinesterase, may be preferable to neostigmine which diminishes the plasmacholinesterase needed to inactivate mivacurium.

Overall, this book provides a very informative and relevant synopsis of the current status of muscle relaxant use for anaesthetists. It harmonizes basic science, research