



HAZARDS OF LOCAL ANAESTHETIC INJECTIONS

Revised First Edition. By Daniel P Barnard. Pp. vi + 150. Illustrated. R85. DP Barnard. 1998. ISBN 0-620-18666-6.

A healthy male patient, aged 31, is given a local anaesthetic for the suturing of a severe gash in the leg. Three minutes later, he loses consciousness. What do you do? What is the cause of the loss of consciousness? How do you manage the patient? How do you tell if this is a serious or trivial event? What is the basis of adverse reactions to local anaesthetic injections? The answers are to be found in this book.

The author has had both clinical and academic experience and approaches the problem in a systematic and structured manner. His basic degree is in dentistry and therefore the emphasis in this book is on the dental applications of local anaesthetic, but there is a large amount of information which will be of interest and importance to the medical practitioner.

The style is clear, no-nonsense and unambiguous. Case reports are presented to illustrate the various types of side-effects including biochemical, physiological and psychophysiological. Professor Barnard describes the clinical features of the more common reactions and their management. The significance of the knowledge of these matters is brought home in the report of 14 cases of severe reactions in which 7 patients died, and 3 were left permanently brain damaged. These were cases in which varying combinations of narcotic analgesics, anti-emetic sedatives, and nitrous oxide were administered together with a local anaesthetic injection resulting in the disastrous consequences. Awareness of the additive effects of these drug combinations is crucial in emergency situations.

Professor Barnard also warns against complacency when considering the amount of vasoconstrictor in the ampoules of local anaesthetic. He says, 'The view that the concentrations of vasoconstrictors in local anaesthetic are too low to cause any serious side-effects is a misconception.' Cardiac arrest, hypertensive crises and fatal cerebrovascular incidents have been reported.

Drug interactions are also too important not to be considered. Tricyclic antidepressants, β -blockers, thyroid hormone, and general anaesthetics have been implicated in adverse reactions when combined with local anaesthetics.

The preservatives are no less worthy of attention and may be responsible for allergic reactions. It should be noted, however, that less than 1% of reactions to local anaesthesia are purely allergic. The diagnosis of an allergic reaction is very difficult and differentiation between allergic and toxic responses is an extremely complex exercise. Incorrect diagnosis may lead to

erroneous labelling of a patient as 'allergic'.

Two major areas which deserve mention and are well covered in the book are medical conditions in which administration of local anaesthetic is controversial, and the psychophysiological aspects of local anaesthesia, particularly in the dental setting. The management of the latter may have to include administration of sedatives, and the author presents guidelines for the choice and dosage of these medications. Reactions may vary from a vasovagal response which is managed by placing the patient in the supine position, to cardiac arrest which is the recurrent nightmare of every practitioner who administers local anaesthetics on a regular basis.

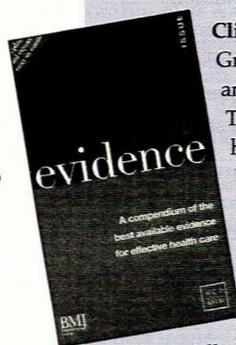
Other conditions such as pregnancy, lactation and the menstrual cycle, hypertension and ischaemic heart disease are discussed; the problems and management are clearly elucidated. Local effects such as haematoma, facial nerve paralysis, damage to a nerve from direct needle or chemical trauma, and needle fracture all come in for some coverage, with educational and clinically applicable approaches.

The last chapter on the three stages of local anaesthesia (pre-operative, intra-operative and postoperative) should to my mind, have appeared in the front of the book. Pre-operative assessment of the patient's fitness to receive local anaesthetic is perhaps the most important part of management. Prevention of adverse reactions is better than management and reversal.

This book is essential reading for any doctor who performs minor surgical procedures.

Fred N Sanders

BOOK MANAGER'S CHOICE



Clinical Evidence, published by the BMJ Publishing Group, R1 100 per subscription (two issues per annum).

This compendium of evidence on the benefits and harms of common clinical interventions is written by practising clinicians using rigorous searching and evaluation methods. It will enable health care professionals to make informed decisions about choosing one treatment or test over another; informing patients and their families and involving them in decision-making, as well as auditing clinical procedures and identifying gaps in the evidence.

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EVIDENCE BASED CARDIOLOGY*

Edited by Salim Yusuf, John A Cairns, A John Camm, Ernest L Fallen, Bernard J Gersh. Pp. xxvi + 1123. £140. BMJ. 1998. ISBN 0-7279-1171-6.

This is a remarkable book. In 71 chapters and just over 1 000 pages, it summarises the evidence on which current treatment of cardiovascular disease is based. All important aspects of adult cardiovascular disease are covered, with the notable exception of thoracic aortic aneurysms (but includes cerebrovascular and peripheral vascular disease). The chapters are short and to the point and most conclude with a useful summary or box containing key points. For a multi-authored textbook, there is unusual consistency of style and minimal overlap. Many 1997 references are quoted.

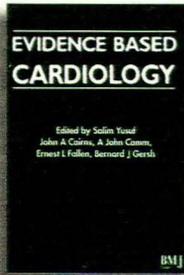
The practice of cardiology has changed radically during the last 15 to 20 years, with large randomised controlled trials establishing unequivocally the benefits of such treatments as thrombolysis in acute myocardial infarction, as well as harmful practices such as administration of class I anti-arrhythmic drugs to survivors of infarction. This book provides the clinician with a succinct analysis of the evidence (or lack of it) underpinning current treatment of cardiovascular disease. The breakdown of evidence is emphasised throughout the book. Introductory chapters on approaches to evaluating evidence, learning from clinical practice, decision analysis and understanding concepts relating to quality of life and health economics are particularly valuable. The illustrative cases at the end of the book, highlighting application of the principles, are useful.

Inevitably, there are quibbles with interpretation of evidence (e.g. considering the ESVEM Trial as Grade A evidence for sotalol in the treatment of ventricular arrhythmias when the trial was not designed to test that). I did not, however, detect any typographic errors or errors of fact.

This book is concise, current and comprehensive. It does not replace standard cardiology textbooks but is an essential accessory to them. Every practising cardiologist should have a copy to which he/she can refer frequently. Since cardiovascular disease constitutes a large proportion of general medicine, I recommend it to general physicians as well. The authors in general and the editors in particular, are to be congratulated on this important work. It will, of course, need to be updated as new evidence emerges.

At the published price of £140, it is expensive but worth it.

R N Scott Millar



BOOKS RECEIVED

The receipt of these books is acknowledged, and this listing must be regarded as sufficient return for the courtesy of the sender. Books that appear to be of particular interest will be reviewed as space permits. The Journal does not publish unsolicited reviews.

A Knowledge Base of Heterosexual HIV/AIDS as a Global Problem in the 21st Century. A Guide for Medical Practitioners and Health Care Workers.* By Sydney J Lachman. Pp. xiii + 721. R240. Pharmaceutical Society of South Africa (Southern Gauteng Branch). 1999. ISBN 0-620-23713-9.

Drug Sport Folio for Sport in South Africa. An Inforbase of Prohibited and Permitted Substances Relating to Sport.* CD-ROM and paper version. First edition. Compiled and edited by Marlize Smuts, Foreword by Prof Tim Noakes. R275. INFOSOURCE. 1999. CD-ROM: ISBN 1-919770-09-7, paper version: ISBN 1-919770-10-0

Action Methods in Group Psychotherapy.* By Daniel J Tomasulo. Pp. xiii + 234. R218.31. Taylor & Francis. 1998. ISBN 1-56032-659-X.

Enhancing Primary Care of Elderly People.* By F Ellen Netting & Frank G Williams. Pp. xvi + 251. R261.92. Taylor & Francis. 1999. ISBN 0-8153-2532-0.

Clinical Chaos. A Therapist's Guide to Nonlinear Dynamics and Therapeutic Change.* Edited by Linda L Chamberlain and Michael R Bütz. Pp. xiv + 225. R232.85. Taylor & Francis. 1998. ISBN 0-87630-926-0.

From Survival to Fulfillment. A Framework for the Life-Trauma Dialectic. Series in Trauma and Loss*. By Paul Valent. Pp. xii + 256. R569.72. Taylor & Francis. 1998. ISBN 0-87630-921-X.

Designing Mental Health Services and Systems for Children and Adolescents. A Shrewd Investment.* The Leadership Series. Edited by J Gerald Young and Pierre Ferrari. Pp. xxiii + 476. R594.23. Taylor & Francis Group. 1998. ISBN 1-56032-794-4.

Black's Medical Dictionary.* 39th Edition. Edited by Gordon Macpherson. R267.90. A & C Black. 1999. ISBN 0-7136-4566-0.

AIDS and HIV in perspective. A Guide to Understanding the Virus and its Consequences.* Second edition. By Barry D Schoub. Pp. xiii + 274. Illustrated. £17.50/US\$27.95. Cambridge University Press. 1999. ISBN 0-521-62766-4.

Handbook of Child and Adolescent Outpatient, Day Treatment and Community Psychiatry.* Edited by Harinder S Ghuman and Richard M Sarles. Pp. xvii + 393. R791.73. Taylor & Francis. 1998. ISBN 0-87630-874-4.

Childhood Epilepsies and Brain Development.* Edited by A Nehlig, J Motte, SL Mosh and P Plouin. Pp. vii + 311. Illustrated. £59/US\$103. John Libbey & Company (Pty) Ltd. 1999. ISBN 0-86196-578-7.