



Book Reviews

A Colour Atlas of Burn Injuries. By John A. Clarke. (London, Glasgow, Chapman and Hall Medical, 1992). ISBN 0-412-34840-3. Pp viii + 120, ill. Price £49.95.

John Clarke has designed a comprehensive introduction to the subject of burns management intended for nurses, doctors in training, psychologists, dieticians and other associated medical, paramedical and social disciplines. The atlas format lends itself to striking the right level for all these groups and of course the subject lends itself to pictorial representation.

Although the first chapter, on the Classification of Burns, lacks crispness and clarity and the text is rather opaque, the book thereafter improves. The sections on the early and late management of different types of burns are well organised and clearly informative. They present a particularly useful practical manual in the day-to-day management of burns.

The photographs in the book are plentiful and striking and well supported by the text. The book fulfills its purpose of introducing an enormous topic in a coherent and attractive presentation. The references are limited, but appropriate to the putative level of the readership. At £49.95 it represents good value for money.

R. W. SMITH

Cell and Tissue Culture Models in Dermatological Research. Edited by A. Bernd, J. Bereiter-Hahn, F. Hevert and H. Holzmann. (Berlin, Heidelberg, New York: Springer-Verlag, 1993). Pp xv + 363, ill. Price DM 168. ISBN 3-540 55972-8.

Everyone seems to be at it nowadays, including plastic surgeons: cultivating cells, analysing their make-up and seeing the effect on them of various poetic-sounding substances. Some of the techniques involved and their results are presented in this selection of cell and tissue culture models in dermatological research on skin culture, melanocyte function, wound healing, fibroblast function, collagen, skin ageing and pharmacology.

First among the topics relevant to plastic surgery is autoimmunity, now highlighted by the silicone implant debate. The opening paper describes how at least one nuclear protein shuttles between the nucleus, the cytoplasm and the cell surface, suggesting that antinuclear antibodies are not just markers but are directly involved in autoimmune disease.

For those trying to culture keratinocytes and to persuade them to adhere to wounds, there are several papers. For example, on the changes in the keratin profiles of cultured cells produced by retinoids (Vitamin A related compounds) and on how mechanical stress enhances human keratinocyte differentiation in culture.

High in the Top Ten Molecules of the Moment is Transforming Growth Factor β (TGF β). This multifunctional cytokine appears in several papers. Collagen type VII is the major component of the anchoring fibrils which are crucial for stability at the dermal-epidermal junction. It is produced *in vitro* by keratinocytes and fibroblasts, much more so if they are cultured together; adding TGF β then stimulates further expression of type VII collagen. TGF β also stimulates collagen synthesis by fibroblasts in monolayers and three-dimensional collagen gels. Granulation tissue fibroblasts (and so probably those in capsules around implants) more actively proliferate and synthesise collagen than skin fibroblasts and are also more sensitive to TGF β . Collagen then in turn can influence epidermal cell migration.

Among all this contemporary research it is reassuring to learn that most of the ideas developed in the 1920's to 1940's about melanin synthesis are still valid, beginning with the tyrosinase-dependent oxidation of tyrosine to dopaquinone. Only now there

are two types of melanin to consider: old-style eumelanin and the more recently investigated pheomelanin.

While cardiac and peripheral vascular surgeons study the complex functions of macrovascular endothelial cells, plastic surgeons trying to understand skin flap microcirculation and its pharmacology may want to turn to the paper in this book on the culture of human dermal microvascular endothelial cells.

All this and more is to be found in this book based on a symposium held in Frankfurt/Main in Germany. With good editing, the presentations have been changed into well constructed papers and assembled into a wide ranging book which is produced to Springer-Verlag's usual high standards. It is expensive and is more for library and laboratory shelves than an individual's bookcase.

M. J. TIMMONS

Atlas of Microvascular Surgery: Anatomy and Operative Approaches. Edited by Berish Strauch, Han-Liang Yu, Zhong-Wei Chen and Ralph Liebling. (NY, Thieme, 1993). ISBN 0-86577-436-6. Pp x + 560, ill. Price \$195.

This substantial volume aims to show how to raise free flaps. It is divided into four sections—upper extremity, lower extremity, trunk, head and neck. It describes in detail the anatomy of 43 donor sites, 98 basic and varied techniques of flap design and 39 procedures for exposure of recipient vessels. The book does not discuss the clinical applications of any particular flap but compensates by listing most of the major references at the end of each chapter. Instructions are concise and direct and illustrated stepwise by approximately 570 simple surgical diagrams. Individually these pictures are larger than really necessary. The description of each flap begins with a resumé of the anatomy and its variation derived from the literature and the authors' own investigations. Then follows a "comments and insights" section offering practical information such as maximum recommended flap size and average pedicle length in adults and children; and finally the harvesting technique in detail.

The volume satisfies the need for a comprehensive and practical manual for the microsurgical trainee, and quick aide mémoire for experienced microsurgeons attempting the less familiar flaps and has much to recommend it at \$195.

R. SMITH

An Atlas of Surgical Exposures of the Lower Extremity. By Alain C. Masquelet, Christopher J. McCullough, Raoul Tubiana, Ian Fyfe, Leslie Klenerman and Emile Letournel. (London, Martin Dunitz, 1993). Pp x + 414, ill (470 drawings). ISBN 1-85317-003-8. Price £149.50.

This book is written by a group of Anglo-French authors and details all the major surgical exposures prevalent to orthopaedics on the pelvis and lower limb.

The exposures are detailed extremely well, mainly by line drawings in colour and anatomically correct. The text is brief and this is appropriate for an atlas, as most of the dissection can be well followed in the step-by-step illustrations. The format is constant throughout and includes indications, patient positioning, incision and completed exposure. There are no operative photographs and indeed the line drawings are almost certainly superior to photographs, which are often presented in similar works, but with less clarity.

There are two sections of the Atlas devoted to the surgical exposure of arteries, veins and peripheral nerves. The variety of

exposures, particularly of the arterial tree, is excellent, and this work would therefore be of interest to surgeons engaged in microvascular reconstruction. For instance, the posterior calf muscle-splitting incision popularised among microsurgeons by Marco Godina is beautifully illustrated. However, gross anatomy does not change and the content of this section is no different from what is available in standard anatomical texts. In fact, the lack of reference to important anatomical variations and anomalies of the major arteries is perhaps a significant omission—an omission which would not be lost on the reconstructive microsurgeon.

The final section in this volume describes the "exposure" (*i.e.* dissection) of a selection of skin and muscle flaps—vastus lateralis, soleus, gastrocnemius, saphenous fasciocutaneous, dorsalis pedis (pedicled), medial plantar and lateral supramalleolar flaps. One assumes that these represent the personal selection of one or more of the authors, who emphasise in the Preface that this production offers a "holistic vision" of modern reconstruction which should enable the surgeon to "tackle compound lesions".

The book is intended primarily for orthopaedic surgeons and it is an excellent source of reference for surgery of the lower limb, particularly as it details anatomy in relation to orthopaedic exposures very well. However, it does not deal with operative technique other than exposure. The superb quality of the production makes it expensive but it is nevertheless recommended for libraries and perhaps operating theatres. The cost may make it prohibitive to the individual surgeon. The references are limited—23 in all, 15 of which are in the English language.

J. O. SMALL

Decubitus Ulcers of the Pelvic Region. By Nicholas J. Lüscher. (Seattle, Toronto, Bern, Göttingen, Hogrefe & Huber, Publishers, 1992). Pp 152, ill. (149 figs). ISBN 0-88937-049-4. Price DM 188.

In his preface to this compact and well presented new work, P. G. Arnold laments the Cinderella status of the subject of pressure sores and their treatment. The author, Dr Nicholas Lüscher, belies this fact by the vigour, thoroughness, and singlemindedness of his approach to the subject. The book is a true monograph representing his long experience and, in particular, a detailed analysis of a prospective series of some 140 pressure sores treated by him during an intensive study of 2794 surgical inpatients in his unit over a period of 4 years.

The book is a translation and, in my view, suffers a certain loss of continuity, logic and organisation as a result but it is a treasure house of wisdom and good sense nevertheless. It will appeal to anybody with an interest in the subject but would probably be most useful for the reader who already has experience in the subject.

The work is very well illustrated with line drawings, black and white and colour photographs. There are sections on epidemiology, conservative management, general considerations of operative management and discussions on many, although not all, the flap techniques applicable to repair in the pelvic region.

I particularly enjoyed many of the simple tips given at random throughout the text; for example, the examination of patients while seated on a glass sheet and the advice to ligate appropriate segments of a Roho cushion in adapting the device to individual patients! There is a superb collection of references to the subject of pressure sores which is perhaps some compensation for the rather tragic absence of an index to the book. It is to be hoped that this omission will be corrected in a second edition.

At about £75 the book is reasonable value. As all Western populations grow older, the subject of pressure sores and their treatment will become more relevant every year. As the extent of the problem increases, other specialities will address the challenging problems involved unless plastic surgeons grasp the nettle so well addressed in this book and I would thoroughly recommend interested clinicians to read Dr Lüscher's work.

P. J. MAHAFFEY

Functional Surgery of the Larynx and Pharynx. Edited by Waryam Singh and David S. Soutar. (Butterworth-Heinemann Ltd, Oxford, London, Boston, 1993). Pp xii + 208, ill. Price £44.50. ISBN 0-7506-0612-6.

I am reliably informed that this multi-author book edited by Waryam Singh and David Soutar has taken 4 years to bring to fruition. This delay, which appears to be almost inevitable, must be a significant detraction for editors of these tomes.

In spite of the delay in going to print, this is a first class volume for those with an interest in the field of functional surgery of the larynx and pharynx. The full breadth of the topic is covered from voice production to voice rehabilitation.

There is little doubt that surgery for malignant tumours of the larynx has the most devastating consequence of all cancers of the head and neck. Patients understandably are resistant to the prospect of removal of the larynx; they feel that any alternative therapy must be preferable.

The scope of reconstructive surgery following pharyngo-laryngectomy in respect of the airway and the ability to swallow is covered by David Soutar. We are told by our ENT colleagues that the mode of the repair does have a profound influence on the final quality of the rehabilitated voice. It is thus important that we plastic surgeons, who are involved in head and neck oncological surgery, do consult and comply with the demands of our colleagues.

Fortunately, modern techniques have allowed us to move away from the artificial speech appliances and oesophageal speech and into the arena of 'fistula speech', thus enabling air to be passed through the normal pathway with a consequent improvement in the final result. Waryam Singh is one innovator of such a speech valve. There are alternative valves available; all these are frankly discussed.

This is a well constructed and presented book containing all the information required for those in this specific field. We all appreciate the importance of aspects of rehabilitation in head and neck cancer patients, the voice being perhaps more important than many others. Waryam and David are to be congratulated on their achievement.

N. M. BREACH

Percutaneous Local Anaesthesia. David Woolfson and Dermot McCafferty. (Ellis Horwood, NY, London, Toronto, 1993). Pp 270, ill. Price £65.

This monograph, from the vast Ellis Horwood Series in Pharmaceutical Technology, originates from the School of Pharmacy at Queen's University, Belfast. Its authors present an exhaustive treatise on the scientific background and the clinical usage of local anaesthetic agents administered topically onto intact skin. The authors declare, in the preface, that they have attempted to draw together the current state of knowledge on all aspects of percutaneous local anaesthesia into a source book for a wide range of readers including surgeons, anaesthetists, pharmacists and pharmaceutical scientists. The book is divided into six major sections covering historical development, pain, the pharmacology of local anaesthetic drugs, percutaneous absorption of local anaesthetics, the formulation of local anaesthetics for percutaneous delivery and clinical applications. The authors write with unquestioned authority on the pharmaceutical aspects of their subject but one wonders whether they have taken on too much (particularly with regard to the more clinical sections of the text) without enlisting the help of specialist contributors. The text is clear but on occasion becomes tedious and over-detailed (for example Chapter 2.6 on the measurement and evaluation of pain) and is also apt to wander off the point (I question the relevance of sedative premedication in Chapter 6). Otherwise the content is sound and is reasonably illustrated with good line diagrams. The book is thoroughly and appropriately sprinkled with up-to-date references and the index is good. The presentation is attractive in hardback format although there are errors in typesetting (e.g. p. 217).

Percutaneous Local Anaesthesia undoubtedly fulfils its authors' aspirations as a source book. It is, however, over-priced, and has, in my view, little appeal for the practising plastic surgeon. It cannot be recommended as a purchase either for individual plastic surgeons or for their departmental libraries. It will, however, find a place on the shelves of schools of pharmacy.

R. EASTLEY