Book reviews

An atlas of surgical techniques of the hand and wrist

Raoul Tubiana, Alain Gilbert, Alain Masquelet with illustrations by Léon Dorn.
518 pages, 600 illustrations. Martin Dunitz 1999
ISBN 1-85317-300-2

Three famous and experienced French hand surgeons have produced this magnificent atlas on surgical techniques. In 1990, a similar atlas on surgical exposures in hand surgery was published, partly with the same authors and, above all, the same illustrator. As understood from the title, this is not a textbook but an atlas, which means that the illustrations are perhaps more important than the words. In this respect, no reader will be disappointed, the drawings of Léon Dorn on anatomy, pathology and surgical approaches are numerous and very good. Black and white drawings with interesting details marked in red are mixed with full colored anatomical paintings which are very informative, sometimes even beautiful. These pictures show, step-by-step, the surgical technique in most of the available surgical procedures in hand surgery.

The book comprises 10 chapters dealing with Trauma and Mutilation, Bone and Joints, Soft tissue, Tendons, Nerves, Paralysis, Rheumatoid arthritis, Dupuytren"s and Congenital malformations, respectively. Many standard operations in hand surgery are covered in these chapters such as closed and open reduction of fractures, surgical treatment of hand infections and local flap coverage of skin defects. The main part of the book, however, describes surgical techniques which in Scandinavia are performed at departments specialized in hand reconstruction. For example, more than 2/3 of the chapter on Trauma and Mutilation deals with such rare operations as pollicization, toe transfers and translocation of metacarpals. The chapter on Paralysis describes numerous varieties of tendon transfers, which are of great value to the specialized hand surgeon, but perhaps of less interest to the average orthopedic surgeon.

All chapters have a reference list, which unfortunately is not updated to the latest references leading to the suspicion that the publishing time for this edition has been very long. Some of the recommended surgical techniques also seem somewhat old-fashioned (or is the treatment tradition in France different from that in Scandinavia). For example, nothing is said about four-finger dynamic splints after flexor tendon sutures, nor are bone anchors described for ligament reinsertion; only osteosutures are recommended in ligamentoplasty and the postoperative protocols after flexor tendon suture include only passive motion a.m. Duran and one-finger rubber band a.m. Kleinert.

However, these concerns are trifles; this atlas is a gold mine to the surgeon working with reconstructive hand surgery and is strongly recommended to all surgical units treating hand injuries, especially those in which highly specialized procedures are performed.

Christer Sollerman
Department of Hand Surgery, Sahlgrenska University Hospital, SE-413 56 Göteborg, Sweden

An atlas of foot and ankle surgery

N. Wülker, M. Stephens, A. Cracchiolo III, editors, 450 pages, Martin Dunitz 1998
ISBN 1-85317-378-9

I very much enjoy studying a geographic atlas and I am impressed by the huge amount of information which can be extracted quickly from a single map. I was expecting that kind of experience when I started to read *An atlas of foot and ankle surgery.* Although nicely illustrated, I realized quickly that this book is not really an atlas. The illustrations are not fully informative, so the text has to be read and there is too much text to become quickly informed. The book includes 50 chapters covering nearly every surgical topic in the foot and ankle. I only missed a chapter on pilon fractures comprising screw and plate fixation as well as modern minimal invasive surgery combining external fixation and percutaneous fixation of the articular surface.

The illustrations consist of either two color line drawings or colored drawings showing surface topography or surgical topography. Most of the drawings are simple and very good. However, some of the colored drawings showing surgical topography are inaccurate or directly misleading. For example, the illustration showing the extended lateral approach for fixation of calcaneous fracturs shows the peroneal tendons to be retracted distally and posteriorly. This is wrong. The lateral wall will not be exposed sufficiently, but what is much worse is that trying to do so means dissection in the subcutaneous tissue with a great risk of causing skin necrosis. The dissection must be sharp and directly to the bone, and the tendons must stay in the full thickness flap pulled anteriorly and proximally.

The list of contributors includes 55 authors with wide experience in foot and ankle surgery. Some chapters give a balanced survey; others give the authors' personal experiences and opinions. I think the reader of this book should be an experienced foot and ankle surgeon, who can judge between what is presentation of the authors' own favorite method and what is an internationally recognized method.

Frank Linde
Foot and Ankle Section, Department of Orthopaedic Surgery, Aarhus University Hospital, DK-8000 Aarhus, Denmark

Surgery for bone and soft-tissue tumors

Michael A Simon and Dempsey Springfield (eds), Lippincott-Raven, Philadelphia-New York 1998
ISBN 0-397-51396- 8

The need for a replacement of William Enneking's classical work *Musculoskeletal tumor surgery* from 1983 has become more and more obvious. Therefore, it was with pleasure and great expectation that we looked at *Surgery for bone and soft-tissue tumors,* edited by Michael Simon and Dempsey Springfield. The list of over 50 authors reads like a who's who in orthopedic oncology in the United States, so the recommendations and guidelines given will have far-reaching implications, not only in North America but all over the world. The book is divided into 6 sections: general considerations, benign bone tumors, malignant bone tumors, fundamentals and complications of bone reconstruction, soft-tissue tumors and carcinoma metastatic to bone.

The editors have produced a complete and up-to-date volume although all has been said before in other textbooks or in review articles. Nevertheless, it is valuable to have the surgical basics of orthopedic oncology collected in one volume. Slightly harder editing would have been beneficial; in several sections the information is not always consistent. It is also tiresome to read four times of the need to be careful in the evaluation of pulmonary metastases. The readability of the book is greatly enhanced by the decision not to use references in the text. As the book will mostly be used as a dictionary, the extensive index is valuable. The schematic drawings of surgical approaches and procedures are of high quality throughout since the key to successful surgical treatment in orthopedic oncology is the placement of the incision; and much can be lost by an incorrectly placed biopsy.

As expected from the United States, much is said about how to perform an open biopsy, but little as to who should do it, and even less about the alternative, i.e., needle biopsy for histopathological or cytological diagnosis. One major criticism of this book is that the problem of patients not being referred to a sarcoma center is not discussed as fully as it should be. Although the importance of referral is stated in many places, criteria for referral are missing. Clear guidelines from such an influential group of orthopedic tumor surgeons would have important medico-legal implications and would lead to improved referral practices. Since the book is so complete, and the surgical procedures are so well described, there is considerable risk that the local surgeon will read the book and then proceed on his/her own. Indeed, on page 58 it is stated that an especially large tissue specimen should be procured by open biopsy if the pathologist is inexperienced. It should say that if the pathologist is inexperienced, one is not in a specialized center and should not do the biopsy.

In the two flow charts regarding diagnostics for bone and soft-tissue tumors, the biopsy is placed in the bottom. This is understandable if open biopsy was the only means of procuring a tissue diagnosis, but today we can start with a needle biopsy and thus obviate many expensive and time-consuming investigations. The needle biopsy does not disturb later staging studies, and the cytological or histopathological result will be useful in choosing additional diagnostic methods. We also doubt the value of bone or gallium scans in soft-tissue tumors, and CT of bony lesions will only occasionally give important additional information to plain radiographs and MRI.

Although this book was written for surgeons there are chapters on other treatments as well. The chapters on chemotherapy are valuable although the importance of the chemotherapy effect for local tumor control warrants more discussion. In particular, the conclusion that there is no basis for routine adjuvant chemotherapy for soft-tissue sarcoma. In the chapter on Ewing's sarcoma, the authors point out that it remains to be proven that surgical treatment gives better local control than radiotherapy as an adjuvant to chemotherapy.

The chapter on curettage is excellent with good illustrations of how the lesions can be approached. After curettage of a giant cell tumor, phenol is sometimes used to injure chemically remaining

tumor cells. Disappointingly, the authors would not tell us which phenol concentration to use.

The last section concerning skeletal metastases is probably the most important as orthopedic surgeons in general will have to care for patients with pathological fractures. It is good that the authors emphasize that the indication for skeletal metastatic surgery is pain, and that the relief of pain is more essential than the restoration of function. However, we believe that too much emphasis is placed on large and open procedures with prosthetic replacement of entire bones; this is seldom necessary. Most pathological fractures can be managed by closed techniques and by arthroplasties. Too many pictures are shown of obsolete techniques such as plates and glide-screw plates and unlocked or non-rigid intramedullary nails. The chapter on spinal metastases is disappointing and is hardly up-to-date. There are as many references (9) from the 1940s and 1950s as from the 1990s. Little is said about the difficulties in deciding on treatment, taking into consideration the patient's life expectancy, pain and neurological function, biomechanical aspects, and sensitivity to radio-, hormono- or chemotherapy. Furthermore, the author only emphasizes anterior approaches to the spine, although several authors have shown that posterior decompression and stabilization of the spine give comparable results.

All this said, we are certain that this book will quickly become a valuable reference volume in musculoskeletal tumor surgery. Even physicians with considerable experience in the treatment of these patients will find the volume useful to consult when confronted with a rare situation.

Pelle Gustafson
Orthopedic Oncology, Department of Orthopedic Surgery, Lund University Hospital, SE-221 85 Lund, Sweden

Henrik Bauer
Orthopedic Oncology, Department of Orthopedic Surgery, Western Infirmary, Glasgow G11 6NT, U.K.