



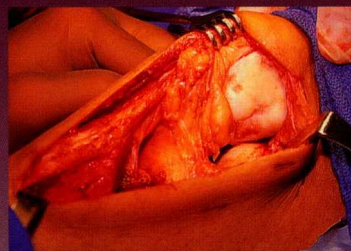
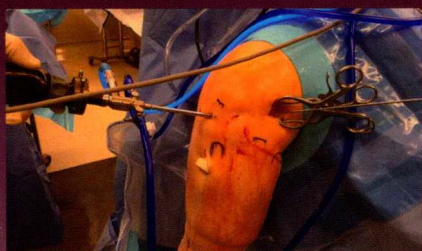
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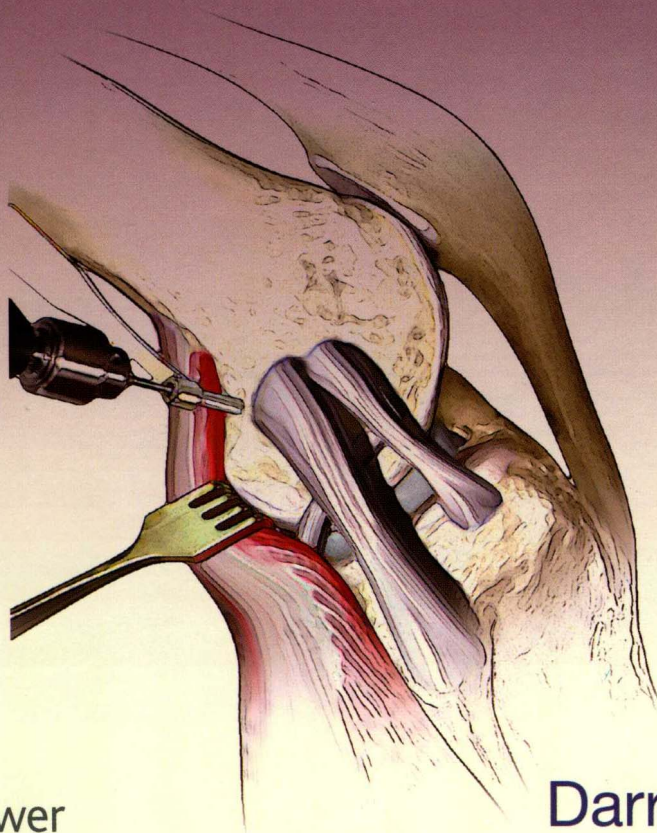
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Reconstructive Knee Surgery

FOURTH EDITION

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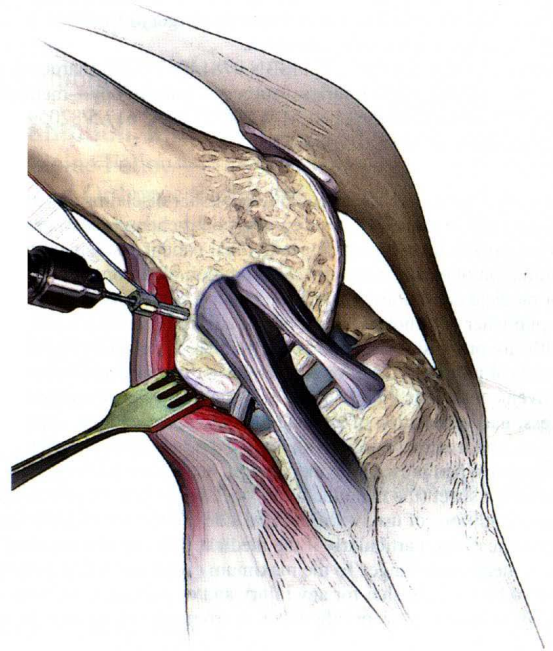
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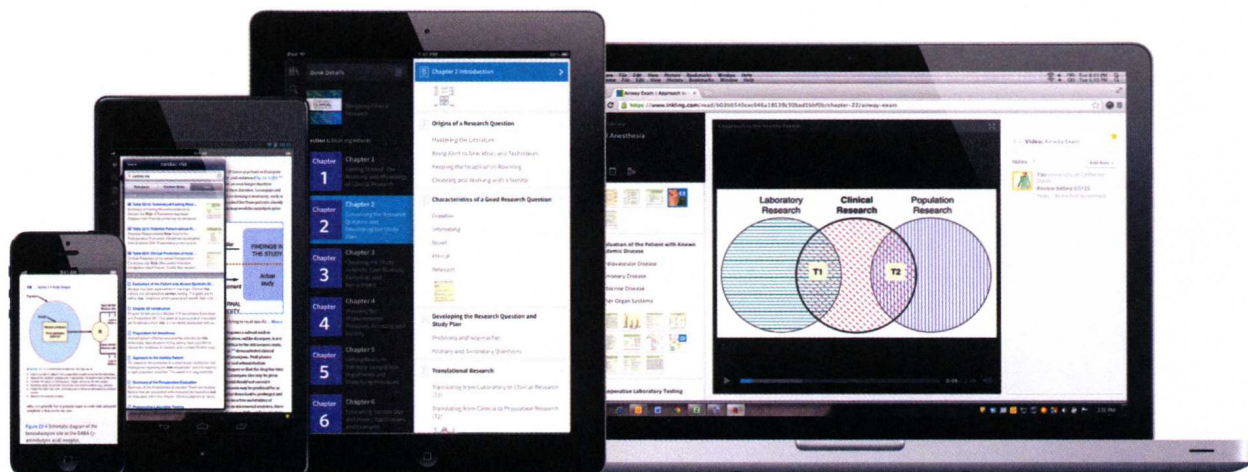
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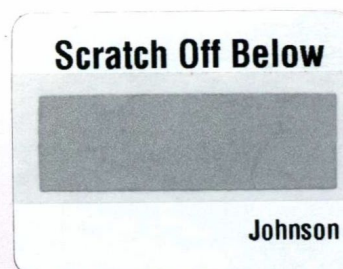


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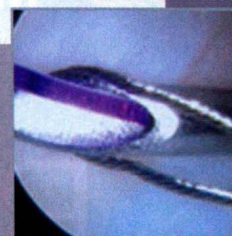
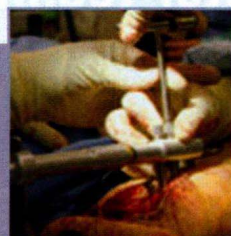
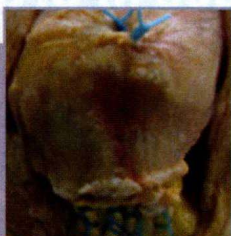
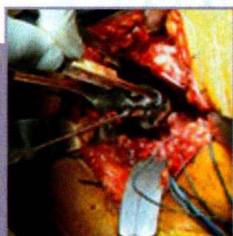
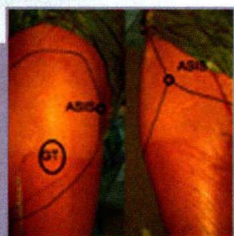
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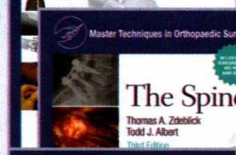
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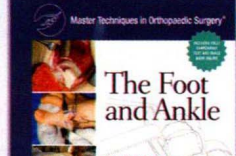
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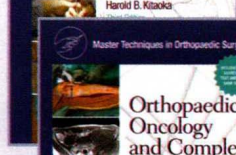
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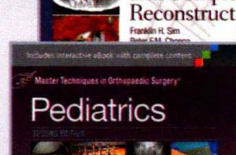
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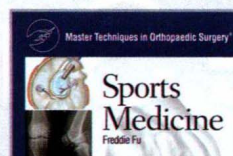
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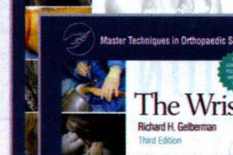
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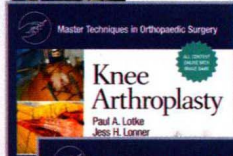
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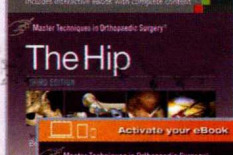
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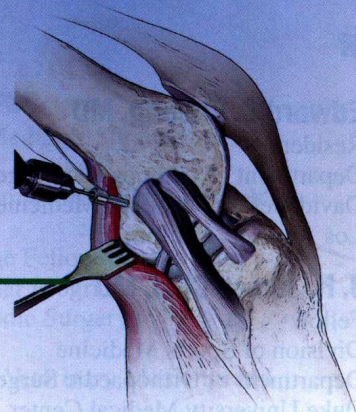
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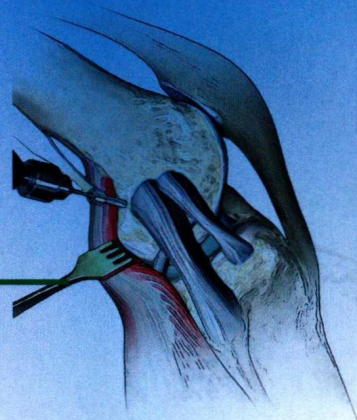
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Foreword



It is my distinct pleasure to introduce the fourth edition of the “*Master Techniques in Orthopaedic Surgery, Reconstructive Knee Surgery*,” edited by Darren Johnson, MD. This edition represents a continuum of improved knowledge, science, and surgical techniques in the management of common and complex knee disorders. This volume is in keeping with the established reputation of this work as one of the foremost treatise on instruction in the surgical care of these knee disorders.

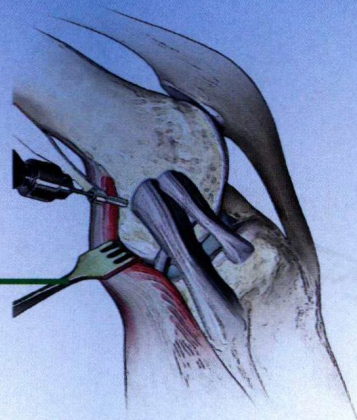
The highlights of this particular work is the format of providing tips and pearls from some of the leading surgeons in the world. It is refreshing to observe the generosity of these leading surgeons in sharing their clinical and surgical expertise on so many different topics. This is a true reflection that the patient comes first, so that many other treating surgeons can learn and apply the principles demonstrated in this book and apply them in their individual clinical practice.

A review of the offerings in this new book will show in Part I the latest techniques and indications for extensor mechanism disorders to include not only medial patellofemoral ligament reconstruction and tibial tubercle osteotomy but also the newer and perhaps controversial topics of trochleoplasty and patellofemoral replacement. Part II will feature meniscal repair surgery to include inside-out, and all-inside techniques as well as meniscal transplantation. Part III will feature “everything you wanted to know about knee ligament surgery.” The topics of ACL reconstruction, extra-articular augmentation, three different types of PCL reconstruction, posterolateral corner reconstruction, MCL, and the role of osteotomy in managing chronic knee ligament deficient knees are outstanding chapters. Finally, Part IV is devoted to articular cartilage injuries and potential surgical solutions and options. The topics range from microfracture to bulk allograft and autograft and include cell-based techniques.

In short, this is simply an outstanding textbook that will serve as up-to-date education on current effective techniques and demonstrated by leaders in the field. The book will serve as instruction and a ready reference for the practicing surgeon as he or she prepares for any of these types of cases. The constellation of topics, illustration, and authorship by experts in these areas make the *Master Techniques in Orthopaedic Surgery, Reconstructive Knee Surgery* an important resource for the practicing orthopaedist.

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Preface



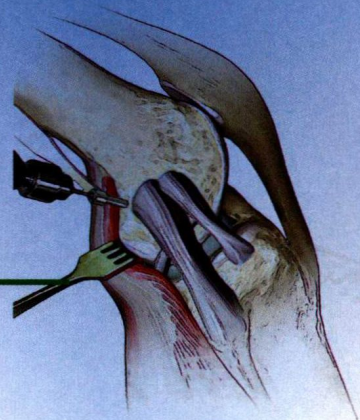
It is my distinct pleasure to serve as the editor of the fourth edition of the *Master Techniques in Orthopaedic Surgery, Reconstructive Knee Surgery*. I am personally humbled and honored to serve as your guest editor. This is a fully updated version of the *Reconstructive Knee Surgery* volume edited by Douglas W. Jackson, MD, in 2008. Much has changed in our field over the last 9 years. This fourth edition represents a continuum of knowledge, science, and latest surgical techniques in the management of common and complex knee disorders. I want to personally thank each of the authors who have contributed valuable time and expertise to this outstanding volume. They have worked tirelessly over the last year to make this a truly exceptional knee surgical textbook/atlas on surgical techniques. I firmly believe that this volume will be a great addition to any master knee surgeon.

Since the publication of the first edition of the series/textbook in 1995, much has changed in the field of surgical treatment about the knee. This edition represents the most important, time-tested operations over the last 20-plus years. You will see that we have added new chapters, new topics, with improved surgical technical experience outlined by master technique knee surgeons who are the authors. I want to congratulate each of the authors on a job well-done making this a corner stone of any knee surgeon's library when learning or reviewing about surgical techniques around the knee.

The surgeon masters contributing to this volume were carefully chosen for their expertise and experience in the clinical application and the latest techniques and technologies of specific knee disorders. They present surgical innovations, clinical judgment expertise, operation room methodology, and decision making. They share their indications and contraindications, as well as the pitfalls they may occur during surgery. Each chapter includes specific details that lead to success in the operating room but more importantly improved patient outcomes. Each chapter represents a selected individual author's approach to a specific knee problem; the references at the end of each chapter are limited. These authors have given us the specific surgical technical pearls that lead to outstanding patient outcomes. My personal involvement in selecting the authors, reviewing, and editing these chapters has drastically improved the surgical care that I am personally able to offer my patients. I am forever in debt to them for their expertise knowledge they have shared. I am thoroughly convinced that this fourth edition of *Master Techniques in Orthopaedic Surgery, Reconstructive Knee Surgery* will be a tremendous benefit and will help all of those who desire to be master knee surgeon. It has been a pleasure and lifelong learning experience to serve as your editor.

Darren L. Johnson, MD

Series Preface



Since its inception in 1994, the *Master Techniques in Orthopaedic Surgery* series has become the gold standard for both physicians in training and experienced surgeons. Its exceptional success may be traced to the leadership of the original series editor, Roby Thompson, whose clarity of thought and focused vision sought “to provide direct, detailed access to techniques preferred by orthopedic surgeons who are recognized by their colleagues as ‘masters’ in their specialty,” as he stated in his series preface. It is personally very rewarding to hear testimonials from both residents and practicing orthopedic surgeons on the value of these volumes to their training and practice.

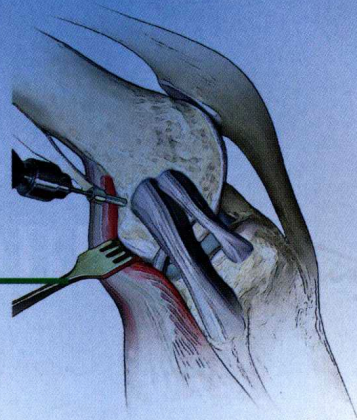
A key element of the success of the series is its format. The effectiveness of the format is reflected by the fact that it is now being replicated by others. An essential feature is the standardized presentation of information replete with tips and pearls shared by experts with years of experience. Abundant color photographs and drawings guide the reader through the procedures step by step.

The second key to the success of the *Master Techniques* series rests in the reputation and experience of our volume editors. The editors are truly dedicated “masters” with a commitment to share their rich experience through these texts. We feel a great debt of gratitude to them and a real responsibility to maintain and enhance the reputation of the *Master Techniques* series that has developed over the years. We are proud of the progress made in formulating the third edition volumes and are particularly pleased with the expanded content of this series. Six new volumes will soon be available covering topics that are exciting and relevant to a broad cross section of our profession. While we are in the process of carefully expanding *Master Techniques* topics and editors, we are committed to the now-classic format.

The first of the new volumes is—*Relevant Surgical Exposures*—which I have had the honor of editing. The second new volume is *Pediatrics*. Subsequent new topics to be introduced are *Soft Tissue Reconstruction*, *Management of Peripheral Nerve Dysfunction*, *Advanced Reconstructive Techniques in the Joint*, and finally *Essential Procedures in Sports Medicine*. The full library thus will consist of 16 useful and relevant titles. I am pleased to have accepted the position of series editor, feeling so strongly about the value of this series to educate the orthopedic surgeon in the full array of expert surgical procedures. The true worth of this endeavor will continue to be measured by the ever-increasing success and critical acceptance of the series. I remain indebted to Dr. Thompson for his inaugural vision and leadership, as well as to the *Master Techniques* volume editors and numerous contributors who have been true to the series style and vision. As I indicated in the preface to the second edition of *The Hip* volume, the words of William Mayo are especially relevant to characterize the ultimate goal of this endeavor: “The best interest of the patient is the only interest to be considered.” We are confident that the information in the expanded *Master Techniques* offers the surgeon an opportunity to realize the patient-centric view of our surgical practice.

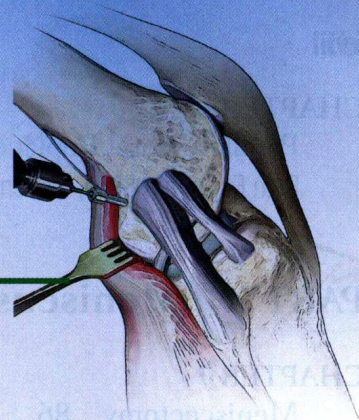
Bernard F. Morrey, MD

Video Content



- VIDEO 1-1** After passage of locking sutures, the quadriceps tendon is easily mobilized to the proximal patella.
- VIDEO 1-2** Preparation of proximal patellar pole with burr.
- VIDEO 1-3** Extensor lag associated with chronic failed quad tendon repair.
- VIDEO 6-1** Patellofemoral joint replacement.
- VIDEO 9-1** All-inside meniscus repair FasT-Fix.
- VIDEO 10-1** Inside-out meniscus repair technique of the medial meniscus using zone specific instrumentation.
- VIDEO 14-1** How I do a BCB ACL reconstruction.
- VIDEO 28-1** Lachman exam under anesthesia.
- VIDEO 28-2** Arthroscopic exam under anesthesia.
- VIDEO 30-1** Chondroplasty and synovectomy.
- VIDEO 36-1** Proximal tibial osteotomy for management of unicompartmental arthritis.

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