Preface

Our practice environment largely determines the pathways that our individual orthopaedic careers take. It has been a blessing to be in a position that enabled me to expand my surgical techniques and research interest in the evaluation and treatment of the multiple ligament injured knee. I believe the same situation exists for other contributors to this book. We all share a passion and a commitment to the treatment of complex instabilities of the knee. The purpose of this book is to provide experienced knee surgeons, general orthopaedic surgeons, fellows, residents, medical students, and other health-care professionals with an interest in the multiple ligament injured knee, a useful tool for the management of the complex injuries.

The Multiple Ligament Injured Knee: A Practical Guide To Management, Second Edition, is expanded from 18 chapters in the First Edition to 35 chapters in the Second Edition. The Second Edition is composed of nine functional segments with each segment having a number of chapters. New topics in the Second Edition include the addition of ACL-based multiple ligament knee injury chapters, mechanical graft tensioning, fracture dislocations, articular cartilage restoration, meniscus transplantation, extensor mechanism restoration, outcomes data, and the editor’s 21-year evolutionary experience in the evaluation and treatment of the multiple ligament injured knee. The chapters were organized and written so that they build upon each other, and also they are able to stand alone. This will enable the reader to leisurely explore the topic of the multiple ligament injured knee, or to use the text as a quick, practical reference when the need arises.

Chapter 1 presents the editor’s 21-year experience in the evaluation and treatment of the multiple ligament injured knee. Chapters 2 and 3 address anatomy and biomechanics of the knee, while Chaps. 4 through 8 address diagnosis, initial assessment, classification, and non-surgical management of the acutely dislocated knee. Chapters 9 through 20 provide multiple authors’ techniques and opinions in the surgical treatment of the ACL-based and PCL-based multiple ligament injured knee. Chapters 21 through 33 present methods to evaluate and manage associated complex conditions that occur in treating the multiple ligament injured knee. These include vascular injuries, nerve injuries, tendon transfers, fixed posterior tibial subluxation, revision surgery, the role of osteotomy, fracture dislocations, articular cartilage restoration, meniscus transplantation, extensor mechanism disruption, postoperative rehabilitation, special aspects of functional bracing, and complications. Chapter 34 presents the results of treatment of the multiple ligament injured knee from an outcomes data perspective. The final chapter, 35, presents seven case studies in the management of the multiple ligament injured knee. Each case study presents a different knee instability problem, and then takes the reader through the decision-making process, the surgical treatment, and the final outcome.

The multiple ligament injured knee is an extremely complex pathologic entity. I believe that through research, improved surgical techniques, the use of allograft tissue, advancement in surgical equipment, careful documentation, and experience, we are progressively improving our outcomes in treating this devastating knee injury. It is my personal hope that this book will serve as a launch pad for new ideas to further develop treatment plans and surgical techniques for the multiple ligament injured knee.

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