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# Complex Cases in Total Knee Arthroplasty

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Alfred J. Tria • Giles R. Scuderi  
Fred D. Cushner  
Editors

# Complex Cases in Total Knee Arthroplasty

A Compendium of Current  
Techniques

 Springer

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## Foreword

Total knee arthroplasty is arguably the most successful musculoskeletal surgical intervention of the last century—having now surpassed even Charnley’s seminal total hips in numbers, social impact, and longevity. Emboldened by the power of this procedure, we have now extended its indications to younger, older, and more complex patients. Mechanically and materially, there have been many triumphs, especially over the last two decades. Biologically, there remain more challenges, from allergy to particular osteolysis to infection, where we remain embarrassingly ineffective.

The price for this great gift is, however, a far more diverse set of options and decisions for us to address in the beginning of the procedure and more catastrophic consequences when our devices—or their host—fail at the end. As surgeons, we must be prepared to harvest the seeds we have sown.

This superlative text addresses a great number of those issues, not with dogmatic directives, but rather with options and decision points. They are presented by an international group of supremely gifted surgeons who have devoted their careers to vetting and refining the ensuing solutions and techniques to our recurrent challenges in total knee arthroplasty.

The editors are to be commended for their exceptional choice of authors, for their very appealing case model compendium of special problems with bulleted solutions, and for their courage to address many controversial and complex challenges whose successful resolution this volume will hopefully effect. This effort is very much in the spirit of the editors’ common mentor, John N. Insall, the true father of modern knee arthroplasty, who would be very proud to witness this text today. It should reside on the desk of every thoughtful knee surgeon who will inevitably be confronted with unique or problematic arthroplasty issues.

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## Preface

Total knee arthroplasty has become a routine procedure for the management of the arthritic knee, and the surgical technique has become more reproducible, yet there are complex cases that pose a challenge for surgeons. This book was produced with a clinical case-based approach to provide surgeons with strategies and surgical options for dealing with these challenging cases. Divided into two main sections covering both primary and revision total knee arthroplasty, each chapter opens with a brief introduction, followed by a handful of case studies demonstrating different surgical techniques, providing more than one method to approach the specific knee condition. To assist us in preparing this book, we brought together leading experts in total knee arthroplasty and asked them to share with us their experience for dealing with complex issues in primary and revision surgery. We are honored that each of them has helped us complete this practical real-world case-based approach to total knee arthroplasty, which is intended to be a resource for residents, fellows, and orthopedic surgeons. We are also honored to have Dr. Robert Booth write the foreword for our book and acknowledge the impact that our past mentor, John N. Insall, MD, has had on our careers and teachings.

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