

1. Record Nr.	UNINA9910254549803321
Titolo	ACL Injury and Its Treatment // edited by Mitsuo Ochi, Konsei Shino, Kazunori Yasuda, Masahiro Kurosaka
Pubbl/distr/stampa	Tokyo : , : Springer Japan : , : Imprint : Springer, , 2016
ISBN	4-431-55858-6
Edizione	[1st ed. 2016.]
Descrizione fisica	1 online resource (546 p.)
Disciplina	610
Soggetti	Orthopedics Sports medicine Rehabilitation Surgical Orthopedics Sports Medicine
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references at the end of each chapters.
Nota di contenuto	Part I Anatomy and Histology of the ACL -- Chapter 1 Functional Anatomy of the ACL Fibers on the Femoral Attachment -- Chapter 2 The Anatomical Features of ACL Insertion Sites and Their Implications for Multi-Bundle Reconstruction -- Chapter 3 Discrepancy Between Macroscopic and Histological Observations -- Chapter 4 Tibial Insertion of the ACL: 3D-CT Images, Macroscopic, and Microscopic Findings -- Chapter 5 Mechanoreceptors in the ACL -- Part II Biomechanics of the ACL -- Chapter 6 Mechanical Properties and Biomechanical Function of the ACL -- Chapter 7 Biomechanics of the Knee with Isolated One Bundle Tear of the Anterior Cruciate Ligament -- Chapter 8 Function and Biomechanics of ACL Remnant -- Chapter 9 Biomechanics of Single- and Double-Bundle ACL Reconstruction -- Chapter 10 ACL Injury Mechanisms -- Part III Diagnostics of ACL Injury -- Chapter 11 Physical Examinations and Device Measurements for ACL Deficiency -- Chapter 12 Diagnostics of ACL Injury Using Magnetic Resonance Imaging (MRI) -- Chapter 13 Diagnosis of Injured ACL Using Three-Dimensional Computed Tomography: Usefulness for Preoperative Decision Making -- Part IV Basic Knowledge of ACL Reconstruction -- Chapter 14 Graft Selection -- Chapter 15 Portal Placement -- Chapter

16 Femoral Bone Tunnel Placement -- Chapter 17 Tibial Bone Tunnel Placement in Double-Bundle Anterior Cruciate Ligament Reconstruction Using Hamstring Tendons -- Chapter 18 Tensioning and Fixation of the Graft -- Chapter 19 Tendon Regeneration after Harvest for ACL Reconstruction -- Chapter 20 Second-Look Arthroscopic Evaluation after ACL Reconstruction -- Chapter 21 Bone Tunnel Changes After ACL Reconstruction -- Chapter 22 Graft Impingement -- Chapter 23 Fixation Procedure -- Part V Multiple bundle ACL Reconstruction -- Chapter 24 Single- vs. Double-Bundle ACL Reconstruction -- Chapter 25 Anatomic Double-Bundle Reconstruction Procedure -- Chapter 26 Triple-Bundle ACL Reconstruction with the Semitendinosus Tendon Graft -- Part VI ACL Augmentation -- Chapter 27 History and Advantages of ACL Augmentation -- Chapter 28 Surgical Technique of ACL Augmentation -- Part VII ACL Reconstruction Using Bone-Patella Tendon-Bone -- Chapter 29 An Overview -- Chapter 30 Anatomical Rectangular Tunnel ACL Reconstruction with a Bone-Patellar Tendon-Bone Graft -- Chapter 31 Rectangular vs. Round Tunnel -- Part VIII Computer-Assisted Navigation in ACL Reconstruction -- Chapter 32 Intraoperative Biomechanical Evaluation Using a Navigation System -- Chapter 33 Application of Computer-Assisted Navigation -- Part IV ACL Injury in Patients with Open Physes -- Chapter 34 ACL Reconstruction with Open Physes -- Chapter 35 Avulsion Fracture of the ACL -- Part V Revision ACL Reconstruction -- Chapter 36 Double-Bundle Technique -- Chapter 37 Bone-Patellar Tendon-Bone Graft via Round Tunnel -- Chapter 38 Anatomical Revision ACL Reconstruction with Rectangular Tunnel Technique -- Chapter 39 One- vs. Two-Stage Revision Anterior Cruciate Ligament Reconstruction -- Part VI Complications of ACL Reconstruction -- Chapter 40 Complications of ACL Reconstruction -- Part VII Future of ACL Reconstruction -- Chapter 41 Future Challenges of Anterior Cruciate Ligament Reconstruction: Biological Modulation Using a Growth Factor Application for Enhancement of Graft Healing -- Chapter 42 Strategies to Enhance Biological Tendon-Bone Healing in Anterior Cruciate Ligament Reconstruction -- Chapter 43 Tissue engineering approach for ACL healing.

Sommario/riassunto

This volume presents detailed information on surgically relevant anatomy and histology of the anterior cruciate ligament (ACL), biomechanics, diagnostics, and ACL reconstruction. In light of the growing body of evidence demonstrating the advantages of anatomic ACL reconstruction over traditional methods, there are also discussions of single anteromedial bundle reconstruction and anatomic ACL reconstruction with abundant descriptions of experimental and clinical studies. In addition, particular attention is given not only to techniques such as ACL augmentation, bone-patella tendon-bone reconstruction and computer-assisted navigation, but it also presents expert analysis of revision of ACL reconstruction, complications, and the future perspectives of ACL reconstruction. Edited by authoritative orthopedic surgeon from the Japanese Orthopaedic Society of Knee, Arthroscopy and Sports Medicine (JOSKAS), this book provides up-to-date information for orthopedic surgeons and physical therapists specializing in the ACL. The research evidence will broaden readers' understanding and enable them to optimize outcomes for patients. As ACL rupture is a common injury especially for high-level athletes, it will also attract sports trainers and team physicians who are interested in a recent update on this field.
