

Biologic Joint Reconstruction: Alternatives to Arthroplasty

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Subjects: Articular cartilage lesions: Diagnosis and management of articular lesions in joint pathologies of knee, hip, shoulder, elbow, foot and ankle; basic sciences about articular cartilage pathology, nonoperative treatment and rehabilitation; arthroscopic, minimal invasive and open surgical treatment options of cartilage repair; nonprosthetic arthroplasty, biologic and prosthetic resurfacing techniques.

DESCRIPTION: A comprehensive source of information in the management of cartilage lesions of major joints using nonoperative or surgical techniques other than total joint replacement. The text also includes chapters in basic sciences, imaging and rehabilitation.

PURPOSE: The editors are aiming to provide a reference about the latest concepts and techniques in the treatment of cartilage lesions including future aspects by a comprehensive approach to the alternative joint restoration procedures such as biological, pharmacological and surgical techniques of cartilage repairing and partial resurfacing etc.

AUDIENCE: Orthopedic surgeons in sports medicine, orthopedic surgeons performing joint replacements, orthopedic resident and fellows will be the main audiences

FEATURES: The text is 349 pages, divided into 34 chapters in 7 sections. Section I is "Background-articular cartilage and allograft processing" including chapters about pathology, patient evaluation, imaging and allograft processing. Section II is "Nonoperative treatment" including chapters about neutraceuticals, pharmacological treatment and rehabilitation. Section III is "Operative treatment-knee" including chapters about arthroscopic debridement, microfracture, osteochondral autograft transplantation, mosaicplasty, osteochondral autograft transfer, osteochondral allografts, autologous chondrocyte implantation, existing cell-based technologies, minimally invasive second-generation autologous chondrocyte implantation, future development in cartilage repair, meniscus transplantation, management of OCD, patellafemoral chondral disease, proximal tibial and distal femoral osteotomies, unicompartmental arthritis current techniques, unicompartmental knee replacement. Section IV is "Operative treatment-Hip" including chapters about hip arthroscopy and arthroscopic partial resurfacing, related osteotomies. Section V is "operative treatment-shoulder" including chapters about arthroscopic debridement and

release, biologic resurfacing and limited prosthetic resurfacing. Section VI is "Operative treatment-elbow" including chapters arthroscopy, nonprosthetic elbow arthroplasty, biological resurfacing. The Section VII is "Operative treatment-foot and ankle" including chapters about ankle arthroscopy and cartilage repair in the ankle.

ASSESSMENT: The text is one of the most comprehensive and up-to-date references in the treatment of cartilage pathologies and biological joint reconstruction. Some other minimal invasive surgical techniques such as prosthetic partial resurfacing or some osteotomies are also subjected as other alternative treatments for joint restoration. Basic sciences, diagnostic imaging, pharmacological treatment and neutraceuticals, and rehabilitation are making the text. The chapter about future developments in cartilage repair is not only describing the recent technology, different types of tissue engineering and related centers in the world but also gives an idea for the possibilities of future in cartilage repair. Chapters about surgical techniques and procedures are uniformly composed of parts including introduction, preoperative evaluation, surgical technique, postoperative issues, results and references in which the techniques and management described in detail. Numerous high quality images, rich illustrations and figures, page design and also colored tables about key points, protocols, or helpful hints makes the reading and understanding easier.

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