Fakultät für Medizin

Dokumenttyp: journal article

Autor(en) des Beitrags:
Ossendorf, C; Steinwachs, MR; Kreuz, PC; Osterhoff, G; Lahm, A; Ducommun, PP; Erggelet, C

Titel des Beitrags:
Autologous chondrocyte implantation (ACI) for the treatment of large and complex cartilage lesions of the knee.

Abstract:
Complex cartilage lesions of the knee including large cartilage defects, kissing lesions, and osteoarthritis (OA) represent a common problem in orthopaedic surgery and a challenging task for the orthopaedic surgeon. As there is only limited data, we performed a prospective clinical study to investigate the benefit of autologous chondrocyte implantation (ACI) for this demanding patient population. Fifty-one patients displaying at least one of the criteria were included in the present retrospective study: (1.) defect size larger than 10 cm²; (2.) multiple lesions; (3.) kissing lesions, cartilage lesions Outerbridge grade III-IV, and/or (4.) mild/moderate osteoarthritis (OA). For outcome measurements, the International Cartilage Society's International Knee Documentation Committee's (IKDC) questionnaire, as well as the Cincinnati, Tegner, Lysholm and Noyes scores were used. Radiographic evaluation for OA was done using the Kellgren score. Patient's age was 36 years (13-61), defects size 7.25 (3-17.5) cm², previous surgical procedures 1.94 (0-8), and follow-up 30 (12-63) months. Instruments for outcome measurement indicated significant improvement in activity, working ability, and sports. Mean ICRS grade improved from 3.8 preoperatively to grade 3 postoperatively, Tegner grade 1.4 enhanced to grade 3.39. The Cincinnati score enhanced from 25.65
to 66.33, the Lysholm score from 33.26 to 64.68, the Larson score from 43.59 to 79.31, and Noyes score from 12.5 to 46.67, representing an improvement from Cincinnati grade 3.65 to grade 2.1. Lysholm grade 4 improved to grade 3.33, and Larson grade 3.96 to 2.78 (Table 1), (p< 0.001). Patients with kissing cartilage lesions had similar results as patients with single cartilage lesions. Our results suggest that ACI provides mid-term results in patients with complex cartilage lesions of the knee. If long term results will confirm our findings, ACI may be a considered as a valuable tool for the treatment of complex cartilage lesions of the knee.

Zeitschriftentitel / Abkürzung:
Sports Med Arthrosc Rehabil Ther Technol

Jahr: 2011
Band: 3
Seiten: 11
Sprache: eng

TUM Einrichtung:
dische Klinik und Poliklinik

Occurences:
- Einrichtungen > Fakultäten > Fakultät für Medizin > Kliniken und Institute > Klinik für Orthopädie und Unfallchirurgie > 2011

entries: