

Literatur

1. Biant, L. C., Bentley, G., Vijayan, S., Skinner, J. A. & Carrington, R. W. J. Long-term Results of Autologous Chondrocyte Implantation in the Knee for Chronic Chondral and Osteochondral Defects. *Am. J. Sports Med.* 42, 2178–83 (2014).
2. Knutsen, G. et al. Autologous chondrocyte implantation compared with microfracture in the knee. A randomized trial. *J. Bone Joint Surg. Am.* 86-A, 455–64 (2004).
3. Jäger, M., Feser, T., Denck, H. & Krauspe, R. Proliferation and osteogenic differentiation of mesenchymal stem cells cultured onto three different polymers in vitro. *Ann. Biomed. Eng.* 33, 1319–32 (2005).
4. Gooding, C. R. et al. A prospective, randomised study comparing two techniques of autologous chondrocyte implantation for osteochondral defects in the knee: Periosteum covered versus type I/III collagen covered. *Knee* 13, 203–10 (2006).
5. Chen, J. M., Willers, C., Xu, J., Wang, A. & Zheng, M.-H. Autologous tenocyte therapy using porcine-derived bioscaffolds for massive rotator cuff defect in rabbits. *Tissue Eng.* 13, 1479–91 (2007).
6. Jäger, M. et al. Bone healing and migration of cord blood-derived stem cells into a critical size femoral defect after xenotransplantation. *J. Bone Miner. Res.* 22, 1224–33 (2007).
7. Iwasa, J., Engebretsen, L., Shima, Y. & Ochi, M. Clinical application of scaffolds for cartilage tissue engineering. *Knee Surg. Sports Traumatol. Arthrosc.* 17, 561–77 (2008).
8. Gomoll, A. H., Probst, C., Farr, J., Cole, B. J. & Minas, T. Use of a type I/III bilayer collagen membrane decreases reoperation rates for symptomatic hypertrophy after autologous chondrocyte implantation. *Am. J. Sports Med.* 37 Suppl 1, 20S–23S (2009).
9. Brittberg, M. Cell carriers as the next generation of cell therapy for cartilage repair: a review of the matrix-induced autologous chondrocyte implantation procedure. *Am. J. Sports Med.* 38, 1259–71 (2010).
10. Harris, J. D. et al. Failures, re-operations, and complications after autologous chondrocyte implantation--a systematic review. *Osteoarthritis Cartilage* 19, 779–91 (2011).
11. Saris, D. et al. Matrix-Applied Characterized Autologous Cultured Chondrocytes Versus Microfracture: Two-Year Follow-up of a Prospective Randomized Trial. *Am. J. Sports Med.* 42, 1384–1394 (2014).
12. Brittberg, M., Price, A., Yu, Q., Kili, S. & Saris, D. Poster: SUMMIT Trial : Matrix-induced Autologous Chondrocyte Implant versus Microfracture at 3 Years. in Poster AAOS Annu. Meet. 2015, Las Vegas, Nevada (2015).
13. Dhollander, A. A. M. et al. Autologous matrix-induced chondrogenesis combined with platelet-rich plasma gel: technical description and a five pilot patients report. *Knee Surg. Sports Traumatol. Arthrosc.* 19, 536–42 (2010).
14. Gille, J. et al. Cell-Laden and Cell-Free Matrix-Induced Chondrogenesis versus Microfracture for the Treatment of Articular Cartilage Defects: A Histological and Biomechanical Study in Sheep. *Cartilage* 1, 29–42 (2010).
15. Gille, J. et al. Mid-term results of Autologous Matrix-Induced Chondrogenesis for treatment of focal cartilage defects in the knee. *Knee Surg. Sports Traumatol. Arthrosc.* 18, 1456–64 (2010).
16. Anders, S., Volz, M., Frick, H. & Gellissen, J. A Randomized, Controlled Trial Comparing Autologous Matrix-Induced Chondrogenesis (AMIC®) to Microfracture: Analysis of 1- and 2-Year Follow-Up Data of 2 Centers. *Open Orthop. J.* 7, 133–43 (2013).
17. Gille, J. et al. Outcome of Autologous Matrix Induced Chondrogenesis (AMIC) in cartilage knee surgery: data of the AMIC Registry. *Arch. Orthop. Trauma Surg.* 133, 87–93 (2013).
18. Bark, S. et al. Enhanced microfracture techniques in cartilage knee surgery: Fact or fiction? *World J. Orthop.* 5, 444–9 (2014).
19. Lee, Y. H. D., Suzer, F. & Thermann, H. Autologous Matrix-Induced Chondrogenesis in the Knee: A Review. *Cartilage* 5, 145–153 (2014).
20. Benthien, J. P. & Behrens, P. Nanofractured autologous matrix-induced chondrogenesis (NAMIC®) — Further development of collagen membrane aided chondrogenesis combined with subchondral needling. *Knee* (2015). doi:10.1016/j.knee.2015.06.010
21. Benthien, J. P. & Behrens, P. Reviewing subchondral cartilage surgery: considerations for standardised and outcome predictable cartilage remodelling: a technical note. *Int. Orthop.* 37, 2139–45 (2013).
22. Behrens, P., Varoga, D., Niemeyer, P. & Salzmänn, G. Intraoperative biologische Augmentation am Knorpel. *Arthroskopie* 26, 114–122 (2013).
23. Min, B.-H. et al. Effect of different bone marrow stimulation techniques (BSTs) on MSCs mobilization. *J. Orthop. Res. Off. Publ. Orthop. Res. Soc.* 31, 1814–1819 (2013).
24. Eldracher, M., Orth, P., Cucchiari, M., Pape, D. & Madry, H. Small Subchondral Drill Holes Improve Marrow Stimulation of Articular Cartilage Defects. *Am. J. Sports Med.* 42, 2741–2750 (2014).
25. Benthien, J. P. & Behrens, P. The treatment of chondral and osteochondral defects of the knee with autologous matrix-induced chondrogenesis (AMIC): method description and recent developments. *Knee Surg. Sports Traumatol. Arthrosc.* 19, 1316–9 (2011).
26. Piontek, T., Cierniewska-Gorzela, K., Szulc, A., Naczk, J. & Stomczykowski, M. All-arthroscopic AMIC procedure for repair of cartilage defects of the knee. *Knee Surg. Sports Traumatol. Arthrosc.* 20, 922–5 (2012).
27. Hunziker, E. B. & Stähli, A. Surgical suturing of articular cartilage induces osteoarthritis-like changes. *Osteoarthritis Cartilage* 16, 1067–73 (2008).