Rebound® Cartilage

Supports successful rehabilitation following surgical repair of poorly contained cartilage lesion

Rehabilitation following cartilage repair is a key component to ensure good clinical outcomes. Although evidence for the available treatment options is growing, clear guidance for rehabilitation is diverging and managing patient expectations is clinically challenging.[1,2,3,4] Therefore Össur conducted an expert consensus meeting to discuss the key components of rehabilitation following surgical repair of poorly contained, full thickness cartilage lesion with global key opinion leaders. In preparation of a 1.5 day face to face meeting, current rehab protocols of the experts were gathered via a standardized questionnaire. Based on these findings, the experts discussed the different protocols and reached a consensus on the rehabilitation following marrow stimulation, surface restoration and surface reconstruction of a 2.5cm² contained full thickness (Outerbridge 4°) cartilage lesion of the medial condyle of a 28-year-old male (normal BMI, athletic type, non-smoker, normal sports activities) who injured his knee while playing soccer on weekends with friends 2 month ago. The recommendations address key components of rehabilitation such as weight-bearing, range of motion (ROM), bracing and physical therapy.

REBOUND CARTILAGE BRACE - RECOMMENDED BY GLOBAL EXPERTS

As bracing, either for immobilization, ROM restriction or unloading of the repaired femoro-tibial compartment is often indicated - Össur has developed innovative functional knee braces to support rehabilitation of patients with knee injuries - beside the immobilizing and ROM restriction braces (Formfit Knee Immobilizer® and the intuitive Rebound Post-Op Knee brace), the Rebound Cartilage brace can play an important role within rehabilitation of knee cartilage injuries due to its dynamic and adjustable unloading.

Key Opinion leader panel: Mats Brittberg (SWE), Robert LaPrade, Bert Mandelbaum, Craig Bennett, Alexander Vap, John Grant, Ronna Parsa, Nirav Amin, Jonathan Orjala (USA), Jörg Jerosch, Mustafa Hadod, Michael Lapp, Marco Hartl, Frank Wiedersheim (GER), Richard von Bormann (SA), Sivalingam Raja Gopal (MY), Mohammed M. Khan (CA)

Participants of the Global Cartilage & Meniscus Expert Consensus Meeting, Munich, Germany; September 2018

The Data:

1. Ebert et al. (2017) Two-Year Outcomes of a Randomized Trial Investigating a 6-Week Return to Full Weightbearing After Matrix-Induced Autologous Chondrocyte Implantation.HYPERLINK \l "Am J Sports Med. 2017 Mar;45(4):838-848. **2.** Marder RA, Hopkins GJ, Timmerman LA. Arthroscopic microfracture of chondral defects of the knee: a comparison of two postoperative treatments. Arthroscopy. 2005;21:152–158. **3.** Steadman JR, Rodkey WG, Briggs KK. Microfracture to treat full-thickness chondral defects: surgical technique, rehabilitation, and outcomes. J Knee Surg. 2002;15: 170–176. **4.** Wondrasch et al. (2015) Am J Sports Med. 2015 Jan;43(1):146-53.Effect of accelerated weightbearing after matrix-associated autologous chondrocyte implantation on the femoral condyle: a prospective, randomized controlled study presenting MRI-based and clinical outcomes after 5 years

Expert Consensus - Poorly Contained Cartilage Lesion

REHABILITATION FOLLOWING CARTILAGE REPAIR OF A POORLY CONTAINED CARTILAGE LESION

	PHASE I WEEK 0-2	PHASE II WEEK 3-6	PHASE III WEEK 7-12	PHASE IV WEEK 13 - 26
WB	NWB	NWB	Progressive PWB	FWB
Brace	Immobilizer/ROM	Immobilizer/ROM	Unloader®	Unloader during activities
ROM	Passive ROM w/without CPM 0-90 (Stable); or locked in extension (fragile)	Full passive	Full active	Full active
Physio Therapy	+/- CPM, passive motion, edema control, patella mobilization, quad activation, cryotherapy	+/- CPM, passive motion, edema control, patella mobilization, quad activation, cryotherapy	PPWB, slow progressive strengthening, progressive stationary bike, hydrotherapy	Progressive strengthening, neuromuscular training, home exercise program
Other	Consider DVT prophylaxis	Consider DVT prophylaxis	Consider DVT prophylaxis de-pending on weight bearing status	

NWB. Non weight bearing; PWB. Partial weight bearing; FWB. Full weight bearing; ROM. Range of Motion; CPM. Continuous passive motion; DVT. Deep vein thrombosis; PPWB. Progressive partial weight bearing

REBOUND® CARTILAGE

Protective Support Solution

Effectively unloads the knee joint

Based on the clinically-proven 3-Point Leverage System, the patented Cartilage Protection Straps™ maintain joint unloading in flexion for protection of the cartilage during the healing process.

Optional flexion/extension control

For protocols requiring range-of-motion restrictions, an optional Flexion/ Extension Control Kit containing an additional upright and extra strapping is available.

Secure, yet comfortable

The breathable, wraparound sleeve features an integrated Sensil® silicone calf liner and a doeskin thigh liner to prevent migration while ensuring ultimate comfort.

Formfit® Knee immobilizer

Rebound® Post-Op Knee

Rebound® Cartilage