

Expert Consensus - Knee Osteoarthritis

WS 1: PRESERVE CARTILAGE - MAINTAIN HIGH ACTIVITY LEVEL

Management of knee OA is a multi-disciplinary task where a patient's positive self-motivation is the foundation to a successful outcome. Recent meta-analysis and guidelines for knee OA management include pharmaceutical treatment options, physical activity, body weight management, exercise, biomechanical intervention (such as insoles) and Unloader® knee braces^{1,2,3,4}.

Patient's expectations and professional medical expertise should match each other to create clear and realistic treatment objectives.

Participants of the Expert Consensus "Knee Osteoarthritis – Biomechanics & Biologics", London 2019



As there are no clear guidelines on patient treatments for knee OA available, Össur conducted a global consensus with experienced medical professionals such as physiotherapists, family practice physicians, PM&R and pain management doctors, rheumatologists and orthopedic surgeons. The goal of the consensus was to develop recommendations on knee OA management for three different treatment objectives:

- Preserve cartilage - maintain moderate-to-high activity level
- Reduce pain, maintain cartilage, and improve activity level
- Reduce pain, keep activity level

In preparation for the 2-day meeting in London, standardized questionnaires were sent to participants and speakers to capture their current treatment strategies. Evaluation of the questionnaires served as the basis for discussion during the workshops (WS). The outcomes were consented in one Delphi round following the meeting. They included clear recommendations for the diagnosis, conservative treatment and surgical options for patients with knee OA as determined by patient characteristics and treatment objectives.

Patient characteristics: Active lifestyle although moderate impact on activities of daily life due to knee OA

Treatment objective: Preserve cartilage - maintain high activity level

Expert panel: A. Anz (USA) | B. Devitt (AUS) | W. Potthast (GER) | C. Stolz (GER) | P. Heinzlmann (GER) | P. Crocker (UK) | C. Oliva (UK) | T. Williams (UK) | C. Minshull (UK) | M. Aunger (UK) | T. Billers (UK) | A. Hegab (UK) | Y. Kordofani (UK) | N. Boyd (UK) | V. Ford (UK) | B. Busfield (USA) | A. Patel (USA) | J. Boyer (USA)

Diagnosis:	Acute Phase: Week 0–6	Subacute Phase: Week 7–12		Ongoing Phase: Week >13	Comments:
		Responder	Non-Responder		
X-ray: Long leg standing	X				
Patient's history	X	X	X	X	
Physical exam	X	X	X	X	
Ultrasound			X		
MRI			X		Consider acute phase if mechanical symptoms
Psychosocial factors	X	X	X	X	
Sport-specific performance test		X		X	
Functional biomechanical test		X		X	
Diagnostic arthroscopy			X	X	Mechanical symptoms persist
Core Treatment:					
Self-management and education	X	X	X	X	
Water-based exercises	X	X	X	X	
Strength training	X pst	X	X	X	
Land-based exercises	X	X	X	X	
Weight management	X	X	X	X	

EXPERT CONSENSUS KNEE OA: PRESERVE CARTILAGE - MAINTAIN HIGH ACTIVITY LEVEL

Diagnosis:	Acute Phase: Week 0–6	Subacute Phase: Week 7–12		Ongoing Phase: Week >13	Comments:
		Responder	Non-Responder		
Biomechanical Intervention:					
Unloader brace	X BT	X	X	X	
Insoles	X	X	X	X	If indicated, biomech deviations
Sport equipment advice e.g. footwear/surfaces	X begin conversation	X		X	
Dynamic taping			X	X	
Gait strategies		X	X	X	
Neuromuscular control		X	X	X	
Pharmaceutical Treatment:					
NSAIDs oral/topical	X				
Paracetamol	X				
IA steroids			X		
DMOADs:					
HA			X	X	
PRP			X	X	
Other Conservative Treatment:					
Physiotherapeutic modalities	X	X	X	X	
RICE/Cryotherapy	X				
Psychological support	X		X	X	
Surgical Treatment:					
Arthroscopy					Mechanical symptoms KL 2/3
Osteotomy/realignment					With evidence of mechanical overload and after failure of other non-operative treatments

BT = Brace Test
KL = Kellgren-Lawrence Scale



Unloader One® braces from Össur are the best examined unloading knee braces and clinically proven to reduce pain and improve quality of life^{5,6}.

The Dynamic Force Straps with SmartDosing™ dials allow patients to control the amount of unloading and take an active part of their treatment.

Unloader One and Unloader One X are indicated for moderate to severe osteoarthritis, while the Unloader One Lite is indicated for mild to moderate OA.

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4. Gohal C, Shanmugaraj A, Bedi A, Adili A, Khan M. Effectiveness of Valgus Offloading Knee Braces in the Treatment of Medial Compartment Knee Osteoarthritis: A Systematic Review, Sports Health. 2018; 10(6):500-514

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