

Expert Consensus - Knee Osteoarthritis

WS 2: REDUCE PAIN, MAINTAIN CARTILAGE, IMPROVE 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: Less active, walking pain

Treatment objective: Reduce pain, maintain cartilage, improve activity level

Expert panel: B. Pietrosimone (USA) | P. Trikha (UK) | S. Patel (IND) | M. Hadod (GER) | A. Hamadou (GER) | C. Botha (UK) | M. Lal (UK) | W. Bruke (UK) | S. Ferns (UK) | L. Oliver-Welsh (UK) | J. Lisk (UK) | T. Beadle (UK) | A. Vajramani (UK) | H. Hassouna (UK) | K. T. Naik (UK) | S. Smallbone (UK) | S. Whalen (USA) | R. Kruse (USA) | D. Wang (USA) | S. Chandran (USA)

Diagnosis:	Acute Phase: Week 0–6	Subacute Phase: Week 7–12		Ongoing Phase: Week >13		Comments:
		Responder	Non-Responder	Responder	Non-Responder	
<ul style="list-style-type: none"> • Clinical investigation • Functional inspection • Psych/Social anamnesis • X-ray (full weight bearing, long leg) • Baseline functional • PROMS • Gait analysis 	X	X	X	X	X	Root cause analysis to determine referred pain
<ul style="list-style-type: none"> • Ultrasound • MRI 			optional		Yes, if available	Ultrasound in case of swelling
Core Treatment:						
<ul style="list-style-type: none"> • BMI optimization • Self management & education • Manage expectations • Activation/exercise 	X	X	X	X		Specific muscle strengthening, gait retraining, if misalignment correction
Biomechanical Intervention:						
Appropriate footwear	X	X		X		
<ul style="list-style-type: none"> • Functional insoles • Unloader brace • Walking aid 		X		X		

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Diagnosis:	Acute Phase: Week 0–6	Subacute Phase: Week 7–12		Ongoing Phase: Week >13		Comments:
		Responder	Non-Responder	Responder	Non-Responder	
Pharmaceutical Treatment:						
NSAIDs oral/topical	Oral temp. 1 W, topical optional	Stop	Change	Stop	Stop	
Paracetamol	optional					
Weak opioids			Consider		Adapt dose	discontinue
Steroid injections	optional		Consider		Consider	Max. 2 Corticosteroid-Injections
Antidepressants						Refer to specialist
Capsaicin	optional					
DMOADs:						
<ul style="list-style-type: none"> • Glucosamine • Chondroitin 	optional	ongoing		ongoing		Patient discussion, no clinical evidence. Continue use if OA diagnosed for min. 3 month
<ul style="list-style-type: none"> • Hyaluronic acid • PRP 	X		X	X		Ongoing treatment with HA for cartilage preservation 1/year. If not successful, switch PRP/HA every 4 months if respond
<ul style="list-style-type: none"> • Collagen (oral) • Adipocytes • Placenta derivatives • Stem cells 	optional	Optional – patient discussion no recommendation				
Other Conservative Treatment:						
<ul style="list-style-type: none"> • Spa therapy • Yoga • Tai Chi • Cold therapy • Shock wave • Induction therapy • Acupuncture • X-ray radiation • Medical flossing • Ablation genicular nerve 	optional	X		X		
Quad stimulation	optional	optional				
Supplements	optional	ongoing	ongoing	ongoing	stop	
Surgical Treatment:						
Osteotomy			consider		consider	
Arthroscopy					consider	
Cartilage repair procedure			consider			
Arthroplasty					consider	

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