

Expert Consensus

KNEE OSTEOARTHRITIS – KNEE OA OF YOUNGER PATIENTS

Management of Knee OA is a multi-disciplinary task where positive self-motivation of the patient is foundation for successful outcomes. Beside pharmaceutical treatment options, physical activity, body weight management, exercise, biomechanical interventions (such as insoles) and Unloader braces are recommended by guidelines for knee OA management and recent meta-analysis^{1,2,3,4}.

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



As there are no clear recommendations on how to address treatment objectives addressing patient's expectations available, Össur conducted a global consensus meeting with experienced medical professionals such as physiotherapists, general practitioners, rheumatologists and orthopedic surgeons to develop recommendations on knee OA management for three treatment objectives:

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

In preparation for the 1.5-day "Face-to-Face" Meeting in London, standardized questionnaires were sent out to participants and speakers to capture their current treatment strategies. Evaluation of the questionnaires served as basis for the discussion in the workshops of the expert meeting. The outcome of the meeting was consented in one Delphi round following the meeting.

The outcomes of the individual workshops achieved are clear recommendations for diagnosis, conservative (core treatment, biomechanical, pharmaceutical and alternative treatment options) and surgical treatment options.

Patient characteristics: Moderate-to-severe pain, normal activity level

Treatment objective: Reduce pain, keep activity level

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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	
<ul style="list-style-type: none"> • Anamnesis • Clinical investigation • Functional inspection • X-ray (tunnel, pa, lateral in full weight bearing, long leg) 	X		X		X	Long leg x-ray if varus-/valgus malalignment exists
<ul style="list-style-type: none"> • Ultrasound • MRI 	optional		optional		Yes	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	X	
Biomechanical Intervention						
Appropriate footwear	X					
<ul style="list-style-type: none"> • Functional insoles • Unloader brace 			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	No-Responder	
Pharmaceutical Treatment						
NSAIDs oral/topical	Oral temp. 1 W, topical optional	Stop	Change	Stop	Stop	
Paracetamol	optional					
Weak opioids			Consider		Adapt dose	
Steroid injections	optional		Consider		Consider	Max. 2 Corticosteroid- Injections
Supplements Phytotherapy	optional	ongoing	ongoing	ongoing	stop	
i.a. Ketoprofen	optional					
Capsaicin	optional					
DMOADs						
• Glucosamin • Chondroitin	optional	ongoing	ongoing	ongoing	ongoing	Continue use if OA diagnosed for min. 3 month
• Collagen (oral) • Hyaluronic acid • PRP • Adipocytes • Placenta derivatives • Stem cells	optional		X	X	X	Ongoing treatment with HA for cartilage preservation 1/year. If not successful, switch PRP/HA
Other conservative Treatment						
• Spa therapy • Yoga • Shock wave • Induction therapy • Acupuncture • X-ray radiation • Medical flossing • Ablation genicular nerve	optional			X		
• Kinesio Tape • Sleeve • Ice compression	optional					
Surgical Treatment						
Osteotomy			consider		consider	
Arthroscopy					consider	
Arthroplasty					consider	

1. Osteoarthritis: Care and management in adults [Internet] [cited 2014 Jul 21]. Available from: <http://www.nice.org.uk/Guidance/CG177>

2. Stöve J, Deutsche Gesellschaft für Orthopädie und Orthopädische Chirurgie (DGOOC), 2018. Gonarthrose S2k Leitlinie, AWMF online Das Portal der wissenschaftlichen Medizin, download 04.04.2018

3. Moyer R, Birmingham T, Marriot K, Bryant D, Leitch K, Giffin J, Marriot K, Leitch M. Valgus bracing for knee osteoarthritis: a meta-analysis of randomized trials. Arthritis Care & Research. 2015;67(4), 493–501.

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

5. Phillips et al. (2016) Treatment of Osteoarthritis of the Knee with Bracing: A Scoping Review. Orthopedic Reviews 2016; volume 8.

6. Briggs KK, Matheny LM, Steadman JR. Improvement in quality of life with use of an unloader knee brace in active patients with OA: a prospective cohort study J Knee Surg. 2012 Nov; 25(5):417-21.