The identification of therapies and factors that affects and improve QoL in KOA patients may mitigate the clinical, economic, and social burden of this disease². Thus, the assessment of QoL in KOA is becoming increasingly common in both research and clinical practice³. Still a general recompilation of the factors of interest as demographic features, lifestyle characteristics and comorbidity are missing.

Objectives: Our aim was to recapitulate the existing information on QoL in KOA patients as an international tool to raise awareness on their condition and guide future actions for patient's management

Methods: We conducted a systematic review examining the breadth of the literature regarding the QoL in patients with KOA (up to 2017). We identify articles using MEDLINE, EMBASE, Cochrane, and PsycINFO using relevant keywords as KOA, QoL and well-being and their short forms. All articles were reviewed for inclusion by 3 independent reviewers. QoL domains and items relevant to patients with KOA were extracted. Only original articles were included when containing information on QoL of patients with KOA. Inclusion criteria were QoL compared to one or more demographic factors (e.g., age, gender), lifestyle factor (e.g., functional independence), or comorbidity factor (e.g., diabetes, obesity) or a control group. The quality of included studies was assessed using a quality appraisal tool.

Results: We retrieved 610 articles, of which 62 articles fulfilled inclusion criteria for review. Most of the studies were carried out in Europe, American Continent and Asia. The mean of participants in these 62 studies was 561 patients and the majority of them were female, the mean age was 63 years. All the studies described a worse QoL in KOA patients when compared to a control group having women a worst QoL perception than men.

A higher BMI, a lower level of physical activity and higher energy expenditure were one of the main factors that correlated with worse QoL. Educational level and higher total mindfulness were shown to improve QoL while poverty, physiological distress, depression and having severely dysfunctional families reduce it. The delivery of a knee self-management program by health care professionals was proven to improve QoL. Finally, surgical KOA interventions generally resulted in good outcomes these results were influenced by individual factors as age, weight, and depression

Conclusion: This is the first review pertaining to QoL in KOA patients. KOA has a strong impact on QoL. Individual factors (sex, weight, exercise, mental health, education) can influence QoL. These factors affect treatment outcomes and should be considered for a better patient's management. These data are a valuable tool for health professionals, to better understand the disease and to implement more adequate standard of care.

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AB0815

THE INFLUENCE OF NON-STEROIDAL ANTI-INFLAMMATORY DRUGS ON INFLAMMATORY SONOGRAPHIC FEATURES IN EROSION HAND OSTEOARTHRITIS

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Background: Erosive hand osteoarthritis (HOA) is a subtype of hand osteoarthritis affecting the interphalangeal (IP) finger joints, characterized by a more inflammatory burden. Hitherto, pharmacologic treatment options are restricted to symptomatic therapy like paracetamol and/or non-steroidal anti-inflammatory drugs (NSAIDs)(1). The latter may affect the presence of inflammatory features on ultrasound (US). Hence, assessment of the disease activity could be influenced by this treatment.

Objectives: To examine whether inflammatory US features (i.e. synovial proliferation (SP), effusion (EFF) and Power Doppler (PD) signal) in erosive HOA patients change when discontinuing NSAIDs intake for two weeks before the US assessment.

Methods: Ninety-nine patients with erosive HOA, according to American College of Rheumatology criteria (2) were enrolled. Presence of central erosions on conventional radiographs and any clinical sign of inflammatory activity (soft tissue swelling) in at least one proximal or distal IP finger joint were present. The patients were allocated to the NSAIDs or control group according to their intake before baseline (if no NSAIDs use = control group; if intake of NSAIDs on a regular base = NSAIDs group). At baseline (T0), 16 IP finger joints were examined by US. Patients in the NSAIDs group were asked to discontinue all NSAIDs intake for two weeks, when another US was performed (T1). The inflammatory features were scored at T0 and T1 using a semi-quantitative scale ranging from 0-3 (3).

Binomial mixed models with logit function were fitted for ultrasound scores SP (score>2), EFF (score>2), and PD (score>1) with a random intercept for patient and with age (in years), sex (female vs. male), duration of illness (in years), joint, side (left vs. right), anatomical phase group (N, S, J vs. E/R, R, E, F), NSAID group (NSAIDs withdrawal vs. No NSAIDs), time (t1 vs. t0), and a two-way interaction between NSAIDs group * time as fixed factors. The Odds ratios (OR, 95% confidence interval (CI)) of having an ultrasound score of at least '2' versus at most '1' for SP and EFF, and '0' vs. '≥1' for PD are shown.

Results: Forty seven patients were included in the NSAIDs group and 52 in the control group. Both groups were comparable at baseline for VAS pain, disease duration, number of radiographic affected joints and body mass index, but not for age (p=0.005). The US baseline data were comparable between both groups (all p>0.05). At T1, in the NSAIDs withdrawal group, more SP and PD was seen compared to baseline (p = 0.018 and 0.031, respectively). However, the interaction term time*NSAIDs was not found significant for any variable (table 1).

Abstract AB0815 Table 1. Association (Odds ratio (OR), 95% confidence interval (CI)) and comparison between T1 and T0 sonographic inflammatory features between groups

Variable	Group	OR*	95% CI	P-value
SP	No Nsaids	1.304	0.958 - 1.775	0.091
	Nsaids withdrawal	1.552	1.079 - 2.232	0.018
	Interaction term time*Nsaids	-	-	0.470
EFF	No Nsaids	1.027	0.761 - 1.387	0.860
	Nsaids withdrawal	1.164	0.872 - 1.554	0.303
	Interaction term time*Nsaids	-	-	0.560
PD	No Nsaids	1.016	0.715 - 1.444	0.929
	Nsaids withdrawal	1.480	1.036 - 2.116	0.031
	Interaction term time*Nsaids	-	-	0.140

*Odds of showing a score of at least 2 versus at most 1 for synovial proliferation and effusion, and Odds of showing a score of at least 1 versus 0 for Power Doppler signal (PD)

Conclusion: No significant changes in inflammatory US features were seen in erosive HOA patients after withdrawal of NSAIDs for two weeks. This study suggests that an NSAIDs free period is not necessary before assessing inflammatory disease activity in erosive HOA patients.

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