Table 1. Comparative characteristics of patients with OA with or without DM.

Parameters	1 group (n=26)	2 group (n=227)	p
Age, years, Me	65.5 (60- 68)	59 (52- 65)	0.002
BMI, кg/m2, Me	33.5 (29.4- 35.8)	28.7 (25.6- 32.3)	0.0006
OA duration, years, Me	11 (7- 18)	4 (2-10)	0.0032
Generalized OA, %	50	24.5	0.009
WOMAC pain, mm, Me	199 (158- 230)	120 (45- 190)	0.005
X-ray stage (K&L), %			
I	8.7	32.5	0.04
II	65.2	57.3	
III	26.1	10.2	
Medial knee joint space, mm, Me	2 (0.6- 3.1)	3.4 (2.2- 4.5)	0.03
Cartilage thickness in posterior-lateralis area of knee joint, mm, Me	1.5 (1.4-1.7)	1.7 (1.6- 1.9)	0.05
HbA1c, %; Me	7.2 (5.4-7.7)	5.4 (5-5.7)	0.01
Glucosae, mmol/l, Me	6.6 (5.1-6,9)	5.3 (4.9- 5.7)	0.003
Hypertension, %	84.6	60.8	0.01
Metabolic syndrome, %	92.3	54.2	0.0002
Medial knee joint space, mm, Me	2 (0.6- 3.1)	3.4 (2.2- 4.5)	0.03
Cartilage thickness in posterior-lateralis area of knee joint, mm, Me	1.5 (1.4-1.7)	1.7 (1.6- 1.9)	0.05
BMD total hip, g/cm2, Me	0.966 (0.955-1.054)	0.878 (0.801-0.944)	0,04
Number of components of MS, %			
0	0	21.1	0.0009
I	10.5	32.8	
II	47.4	36.7	
III and more	41.2	9.4	
Nonalcoholic steatohepatitis, %	18.8	0.8	0.003

In the Spearman correlation analysis are confirmed positive associations between DM and more difficult and prolonged course of OA. We found out that higher WOMAC pain subscale (r=0.18), total hip BMD at DXA (r=0.25), smaller size of medial joint space (r=-0.24) and thickness of the cartilage at ultrasound (r= -0.13) are associated with DM (p<0.05 for all parameters). Positive relationships also are indicated with BMI (r=0.21), hypertension (r=0.15), MS (r=0.24), type, such as nonalcoholic steatohepatitis (r=0.26) and number of components of MS (r=0.39).

Conclusion: The patients with OA are high frequent comorbidity with DM (10.3%). Association OA and DM lead to severe OA and higher comorbidity.

REFERENCES: None

Disclosure of Interests: None declared

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AB0975

MINIMAL CLINICALLY IMPORTANT DIFFERENCE OF TOTAL KNEE ARTROPLASTY PATIENT-REPORTED OUTCOME MEASURES

K. S. Kacmaz[1], T. Ünver[2], B. Unver[2]. *[1]izmir katip celebi university, physical therapy and rehabilitation, izmir,Turkey; [2]dokuz eylul university, physical therapy and rehabilitation, izmir,Turkey*

Background: Total knee arthroplasty (TKA) is one of the commonest operations performed for end-stage osteoarthritis. Patient-reported outcome scales (PROMs) are optimal measures of the patient' aspects of their current condition and response to treatment. However, a statistically significant change does not always mean or create an effect that clinically meaningful. Clinicians can use a greater change than minimal clinically important difference (MCID) value as a meaningful change in patients with TKA [1]. Nevertheless, there are variations in MCID values in studies analyzing the same outcome measures or patient populations.

Objectives: The aim of this study is to create a global summary of literature of the MCID for PROMs for TKA.

Methods: A comprehensive literature search administered using PubMed database from their years of inception to January 2022. Original articles calculating MCID of PROMs for TKA were identified, and the full texts of these publications, as well as their bibliographies were reviewed. Keywords included "outcome scale," "TKA," and "MCID."

Results: This review examined 43 studies, in which 15 different outcome scales were administered to patients with TKA. MCIDs of the PROMs had distinct value or measurement process depending on the patients and clinical context. Distribution-based and anchor-based approaches were the most commonly used methods for calculating MCID. According to the analysis'; the WOMAC, KOOS, SF-12 and KSS were the most commonly used scales and there were so little research regarding the MCID of outcome instruments for TKA.

Conclusion: The reporting of outcomes in TKA were traditionally focused on implant survivorship and objective outcomes such as radiographic alignment, range of motion and, knee stability. However, patients and clinicans can have different perceptions of outcome, especially in the domains of subjective quality of life [2]. Therefore, it is recommended to use a combination of both objective and subjective measures to assess outcomes after TKA. In general, a wide range of MCID values was observed according to the scales. This can be due to the heterogenity in patient' clinical conditions recruited for the studies. Apart from the differences, MCIDs of the Oxford Knee Score and KOOS were lower than the WOMAC score therefore we can interpret that they are more sensitive as an outcome scale. However, the MCID values must be interpreted in light of all variables, including the participants which were administered to. Each method for determining MCID has advantages and disadvantages, and the best way to calculate an MCID is to combine the results of both methods. The MCID is not flawless in detecting a clinically significant change, as sensitivity and specificity play a role.

REFERENCES:

[1] Tubach F, Ravaud P, Beaton D et al. Minimal clinically important improvement and patient acceptable symptom state for subjective outcome measures in rheumatic disorders. 2007; 34: 1188-1193.

[2] Zacharia B, Paul M, Thanveeruddin Sherule M. Patient-based outcome analysis is important to determine the success of total knee arthroplasty: result of a focus group discussion. Med Devices (Auckl) 2016; 9: 125-130.

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AB0976

DETERMINATION AND CHARACTERIZATION OF PATIENT SUBGROUPS WITH DIFFERENT PAIN PROGRESSION IN HAND OSTEOARTHRITIS

C. Van der Meulen[1], L. Van de Stadt[1], F. Rosendaal[2], J. Runhaar[3], M. Kloppenburg[1]. *[1]Leiden University Medical Center (LUMC), Rheumatology, Leiden, Netherlands; [2]Leiden University Medical Center (LUMC), Clinical Epidemiology, Leiden, Netherlands; [3]Erasmus MC, Department of General Practice, Rotterdam, Netherlands*

Background: Hand pain is common in hand osteoarthritis (OA). Previous cohort studies reported stable average pain levels on the short to midterm. Subgroups with different pain trajectories have been found in knee OA. Similar subgroups of hand OA patients may exist. Knowledge of such subgroups in hand OA patients may help inform decisions for pain treatment.

Objectives: To determine and characterize subgroups with different hand pain trajectories over four years in hand OA patients.

Methods: Data from the ongoing HOSTAS (Hand OSTeoArthritis in Secondary care) cohort were used, collected from consecutive patients at the LUMC Rheumatology outpatient clinic with primary hand OA followed for four years. Hand pain measurements were collected annually starting at baseline with the AUSCAN pain questionnaire (range 0-20). Development of pain over time was modelled using latent class growth analysis (LCGA), dividing the cohort into subgroups based on differences in pain development. The optimal model was selected based on the AIC, BIC, entropy and likelihood ratio test for models with n vs n-1 classes. LCGA requires ≥2 measurements per case, so patients with less were excluded. Associations of LCGA classes with baseline demographics and factors associated with hand pain were analyzed using multinomial logistic regression.

Results: Of 538 participants, 484 completed the AUSCAN at ≥2 timepoints. Data of excluded patients were missing at random. Included and excluded patients were comparable. Of included participants 86% were women, mean (SD) age was 60.8 (8.5), 29% had erosive disease, median (IQR) symptom

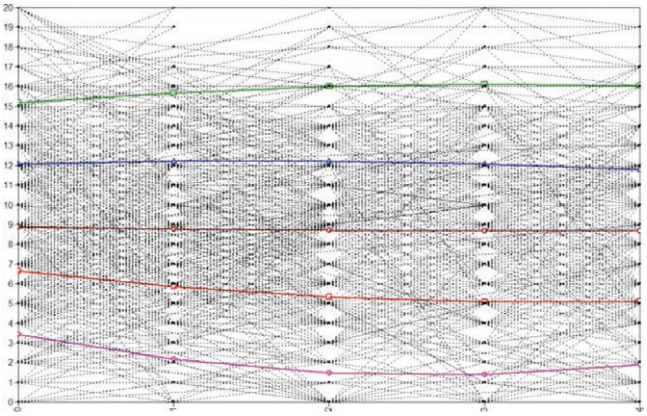

Figure 1. LCGA trajectories. *Trajectories of AUSCAN pain identified by latent class growth analysis.* Least pain to most pain, named class 1 (pink), class 2 (red), class 3 (brown), class 4 (blue) and class 5 (green).

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