Results: According to the results of the FACIT-F, the patients were identified: no fatigue (52-34 points) – 99 (53.1%), the presence of fatigue (21-33 and less points) – 26 (14.3%) and severe fatigue (20 and less points) – 3 (10.6%). By patient with fatigue and severe fatigue significant worse in all activity indexes and PROs than in patients not experiencing fatigue (p<0.001 and p<0.0001), Table 1). Similar results were demonstrated across all PsAID12 domains (Figure 1), especially the domains “Pain”, “Skin problems”, “Work and/or leisure activity”, “Sleep disturbance”, “Function capacity” and “Discomfort” (p<0.0001).

Conclusion: In patients with PsA fatigue affected significant and clinically considerably impairment of PsA activity and PROs.

Disclosure of Interests: None declared.

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Osteoarthritis

AB0582 KNEE OSTEOARTHRITIS PHENOTYPES STRATIFICATION

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Background: Osteoarthritis (OA) relevance is determined by its record prevalence with progredient growth throughout the world [1]. Clinical and pathogenic heterogeneity of disease actualizes problem of its stratification [2]. Lack of unified understanding of OA and its phenotype determination results in incredible number of attempts to group OA, using of different classification criteria in last decade.

Objectives: To analyze and systematize available OA classifications, proposals and phenotypes, to highlight the most promising of them.

Methods: We studied publications from MEDLINE / PubMed and Google Scholar databases found by the keywords “osteoathritis”, “phenotypes”, “subphenotypes”, “classification”, “subtypes”, “subsets”, “subgroups”, “subpopulations”, “profiles” and “endotypes” in various combinations in English and Russian. We did not set a time frame, but aimed to include as many different methods as possible in order to reflect evolution of scientists’ views on structuring of this disease.

Results: A total of 55 OA grouping methods were covered so that OA was structured by different determinants into 6 big boxes.

First OA classifications were characterized by complex etiopathogenetic approach, while subsequent studies differed in joint-mediated approach, and the knee joint was undisputed “champion” in this race. One of the first attempts to group OA was division into primary, or idiopathic, and secondary, due to known causes. It is now obvious that it is becoming obsolete, and criteria for OA primacy are difficult to determine. Genomic highly specialized studies based on isolation of “favorable” and “unfavorable” genes develops prerequisites to genetic OA classifying. Clinical variants occupy central place as they are the most fully consistent with modern phenotype conception [3], considering as subtypes of disease shared by underlyng pathological and pain mechanisms and their structural and functional consequences. Trajectories of OA progression are distinguished by longitudinal design, that is, the determinants for grouping here are disease characteristics in dynamics. The ancestors of structural OA trajectories can be considered Kellgren-Lawrence grades;
subsequent studies identified complex of clinical, laboratory and morphological factors contributing to development of trajectories. Structural OA variants are diverse depending on visualization methods, and many of them can be naturally considered phenotype since they drive certain clinical OA manifestations. Morphological changes were described at macro- and microscopic levels; it is interesting to note the absence of histopathological norm in patients without OA. Laboratory profiles of patients are determined by content of systemic (serum, urinary) or local, "proximal" (in synovial fluid) biomarkers, which seem to be more precise. Metabolomic analysis is perspective new direction of laboratory studies based on joint metabolic product identification in the synovial fluid. New trend in OA research is molecular phenotyping. The specific molecular pathway explaining observed phenotype properties is called "endotype." Endotype is related to certain pathobiological scenario, and laboratory markers are potentially effective for its diagnosis.

Conclusion: Thus, a large amount of accumulated information and its diversity soon will probably lead to qualitatively new knowledge level with deep understanding of phenotype-associated strategy for managing OA patients.

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AB0583

FRAILTY IN THE PATIENTS WITH OSTEOARTHRITIS OF THE KNEE WAS NOT CAUSED BY SARCOPENIA

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Background: Osteoarthritis of the knee (knee OA) decreases mobility of the elderly, which could be significantly improved with artificial joint replacement in many cases. Successful results of the surgery depend on several factors including preoperative muscle strength of lower limbs.

Objectives: We assessed morbidity and skeletal muscle mass and strength in patients with knee OA immediately before undergoing arthroplasty and investigated the relationship between impairment of mobility and skeletal muscle function.

Methods: All patients scheduled to undergo knee arthroplasty at our hospital after July 2020 were assessed for basic attributes, clinical assessment, blood tests, radiography, whole-body mode DXA, knee muscle strength by dynamometry with written consent (UMIN ID: 000040940). And Japanese Cardiovascular Health Study criteria for frailty, and sarcopenia by Asian Working Group for Sarcopenia 2019 criteria were evaluated.

Results: Among 46 patients (40 women, mean age 75.4 years) the overall distribution in frailty is as follows: pre-frailty: 56.8% and frailty: 27.3%. That in sarcopenia 2019 criteria was evaluated.

Conclusion: In the patients with knee OA immediately before arthroplasty, frailty was not caused by sarcopenia.

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AB0584

THE QUALITY OF REPORTING IN RANDOMIZED CONTROLLED TRIALS OF HYALURONIC ACID: COMPARISON OF THE EFFECTIVENESS OF HYALURONIC ACID PREPARATIONS WITH DIFFERENT MOLECULAR WEIGHTS AND IN COMBINATION WITH CHONDROITIN SULFATE DEPENDING ON THE STAGE OF OSTEOARTHRITIS OF THE KNEE JOINT

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Background: Osteoarthritis of the knee (KOa) is a very common rheumatic disease, and its global burden is gradually increasing (1). The benefits of exercise in patients with KOA are supported by high-level evidence and take their place in primary care therapy (2). Today, coronavirus disease 2019 has developed as a pandemic all over the world, creating difficulties in healthcare and highlighting home-based rehabilitation (HBr) (3). Randomized controlled trials (RCTs) are considered the gold standard for evaluating the effects of clinical interventions, but poorly reported results can have negative consequences. The Physiotherapy Evidence Database (PEDro) evaluates the methodological quality of RCTs (4). The CONSORT (Consolidated Standards of Reporting Trials) statement has been developed to improve the reporting quality of RCTs (5). There are no studies examining the quality of RCTs related to HBr in patients with KOA.

Objectives: The aim of this study was to assess the reporting quality of HBr trials for KOA, and explore the factors associated with the reporting.

Methods: Two independent researchers investigated HBr RCTs in patients with KOA published between 1999 and 2020 were sourced from PubMed, the Cochrane Reviews and Web of Science. Each researcher evaluated the methodological quality of the included studies using the PEDro scoring and reporting aspects using 9 items from CONSORT. The relationship between adherance to the CONSORT criteria and the PEDro score were evaluated.

Results: Twenty-five RCTs met our eligibility criteria. The mean PEDro score of studies is 5.76 ± 1.48. Only one study found high quality (PEDro score ≥ 9). The PEDro scores were: randomization type (96%, 24/25) and baseline comparability (92%, 23/25); all studies described group comparisons and variability measures. In contrast, concealed allocation (18%, 7/25), blinding of participants (16%, 4/25) and therapists (0%) were not included in most studies. The CONSORT criteria were: flow diagram (92%, 23/25), sample size, subgroup analysis and sources of funding (100%, 25/25). While the majority of studies the trial registration number (16%, 4/25) was not available. A high level of correlation was found between meeting the CONSORT criteria and PEDro scores (r=0.820, p<0.001).

Conclusion: The majority of RCTs based on HBr for KOA are low-to-moderate quality studies based on the PEDro score. Adherence to the CONSORT criteria is linked to high quality scores. If the studies are planned and written in accordance with the CONSORT criteria, we think that better quality studies will emerge.

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