Methods: mFSST administered on 22 patients undergoing rTKA. mFSST is performed by using tapes to make one horizontal and one vertical line like a cross to create 4 quadrants. Patients' performances were timed as patients were successfully stepping clockwise and counter-clockwise while avoid touching on tapes, turning their body or losing balance. Two trials performed and patients rested between trials and were encouraged to rest as often as they required to prevent fatigue.

Results: ICC^(2,1) for mFSST was 0.83. The standard error of measurement and MCID were 0.67 and 1.85 respectively (95 % confidence level).

Conclusion: The mFSST has a good test-retest reliability in patients with rTKA. It is a reliable and responsive tool for measuring fall risk, dynamic balance and mobility. The mFSST is an excellent measure of gait variability, stepping in multiple directions and dynamic balance, also can easily identify real clinically important changes in patients with rTKA in simple environments and minimal equipment.

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AB0884 METABOLIC UNHEALTHY PHENOTYPE OF OBESITY IN PATIENTS WITH KNEE OSTEOARTHRITIS: THE EFFECTIVENESS OF ORLISTAT.

E. Strebkova¹, L. Alekseeva¹. ¹Federal State Budgetary Scientific Institution "Scientific Research Institute of Rheumatology named after V.A. Nasonova", Moscow, Russian Federation

Background: Obesity is an important socio-medical problem of mankind. Since the number of obese people in the world is increasing by about 1% per year, the immediate prospects do not look optimistic. One of the important risks of the development and progression of osteoarthritis (OA) is the metabolically unhealthy phenotype of obesity, which is accompanied by a violation of lipid and carbohydrate metabolism, a violation of cytokine regulation. An important step in the treatment of patients with obesity and OA of the knee joints is weight loss.

Objectives: To evaluate the effectiveness of complex therapy of metabolic unhealthy phenotypes of obesity using orlistat (an intestinal lipase inhibitor) in the clinical manifestations of knee OA, dynamic markers of lipid and carbohydrate metabolism, dynamic CRP and leptin.

Methods: The study included 50 female patients with knee OA Kellgren-Lawrence stage II-III and obesity (body mass index (BMI) >30 kg/m²), aged 45–65yo. Group 1 (25 patients) was administered orlistat at 120 mg (1 capsule) 3 times a day for 6 months combined with low-calorie diet and therapeutic physical exercise. Group 2 (25 patients) was administered only life-modifying therapy for 6 months. The clinical parameters of the course of knee OA (WOMAC), an assessment of the quality of life (EQ-5D) were assessed at initially and after 6 months. Also initially and after 6 months a laboratory study of peripheral blood was performed glucose, HDL, LDL, TG, CRP, leptin, and the index of visceral obesity (IVO) was calculated.

Results: Initially, all patients had signs of a metabolically unhealthy phenotype of obesity: waist circumference (WC) > 88 cm, high IVO, dyslipidemia, arterial hypertension, hyperleptinemia. After 6 months of complex therapy of obesity using orlistat in patients of group 1, a significant decrease in body weight by 10.07% ($p < 0.05$), a decrease in WC by 8 cm ($p < 0.05$), a significantly significant decrease were achieved IVO ($p < 0.05$), glucose ($p < 0.05$). Analysis of cytokines showed a significant decrease in leptin ($p < 0.05$) and CRP ($p < 0.05$) in patients with a weight loss of more than 10%. The reduction in body weight in group 1 patients reduced pain by 52% ($p < 0.05$), stiffness by 51% ($p < 0.05$), improved joint functional failure by 51% ($p < 0.05$) and improved quality life by 52% ($p < 0.05$). In patients of group 2, against the background of non-drug therapy of obesity, body weight decreased by 0.84% ($p > 0.05$), slightly decreased WC ($p > 0.05$). Indicators of lipid metabolism, IVO, glucose, leptin remained unchanged ($p > 0.05$). The increase in CRP in patients of the 2nd group was determined by 24.54% ($p < 0.05$).

Conclusion: The results of our study demonstrate the effectiveness of the use of a comprehensive drug regimen for the treatment of metabolically unhealthy phenotype of obesity for the clinical manifestations of osteoarthritis of the knee joints; it contributes to the improvement of metabolic parameters: a decrease in WC, lipid and carbohydrate metabolism, CRP and leptin. Thus, the use of complex therapy using orlistat in patients with osteoarthritis

and obesity leads to a decrease in the metabolic activity of adipose tissue, helps to reduce cardiometabolic risk and to improve the clinical course of osteoarthritis.

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AB0885 EFFECTIVENESS AND SAFETY OF GLUCOSAMINE AND CHONDROITIN COMBINATION IN PATIENTS WITH KNEE AND HIP OSTEOARTHRITIS: INTERIM ANALYSIS RESULTS OF AN OBSERVATIONAL STUDY

K. Telyshev¹, L. Alekseeva¹, A. Lila², A. Baranov³, E. Trofimov⁴. ¹Scientific Research Institute of Rheumatology named after V.A. Nasonova, Laboratory of Osteoarthritis, Moscow, Russian Federation; ²Scientific Research Institute of Rheumatology named after V.A. Nasonova, Moscow, Russian Federation; ³Yaroslavl State Medical University, Yaroslavl, Russian Federation; ⁴North-Western State Medical University named after I.I. Mechnikov, Saint Petersburg, Russian Federation

Background: Combined treatment with oral glucosamine hydrochloride (GH) and chondroitin sulfate (CS) was shown to be efficient for pain relief and functional improvement in osteoarthritis patients with moderate to severe knee pain [1,2].

Objectives: To investigate demographic and clinical characteristics, changes in pain, functions of daily living, quality of life and treatment satisfaction of patients with knee osteoarthritis (KOA) or hip osteoarthritis (HOA) receiving long-term treatment with oral GH and CS combination in routine clinical practice.

Methods: An open-label, multicenter, observational prospective study is being conducted in the Russian Federation. Patients of both sexes with KOA or HOA (Kellgren and Lawrence grades I–III) who receive GH 500 mg+CS 400 mg capsules three times a day for the first 3 weeks of treatment, then twice daily, are included in the study. The interim analysis has been conducted after the first 550 enrolled patients (50% of the total sample size) had completed the first follow-up visit (Week 16–24 after the start of treatment).

Results: The study group included 406 (73.8%) patients with KOA and 144 (26.2%) patients with HOA enrolled in 43 centers in Russia. The mean age of the patients was 61.1 years; most patients were women (88.7%). The predominant risk factors for OA were non-genetic causes (excess weight, hormonal disorders, malformations of bones and joints, joint operations) (52.8% of patients), exogenous risk factors (professional activity, trauma, sports) and hereditary diseases of bones and joints were reported in 15.5% and 4.1% of patients, respectively.

Interim analysis showed clinically significant improvement in each of the KOOS and HOOS subscales at 4–6 months after the start of treatment. In patients with KOA, the mean score increase was 15.7 for the Pain subscale, 14.6 for the Quality of Life subscale, 13.8 for the Physical function (KOOS-PS), and 11.7 for the Symptoms subscale. The percentage of patients who rated the pain frequency as 'always' or 'daily' decreased from 60% to 25%.

In patients with HOA, the mean score increase was 16.0 for the Pain subscale, 14.3 for the Quality of Life subscale, 16.1 for the Physical function (HOOS-PS), and 10.3 for the Symptoms subscale. The percentage of patients who rated the pain frequency as 'never' or 'monthly' increased from 34% to 60%.

Most patients (89.1%) were receiving the medicinal product for ≥3 months. Treatment-related AEs were reported in 16 (3.0%) patients and mainly included gastrointestinal tract disorders (in 12 (2.2%) patients).

Conclusion: The results obtained at 4–6 months after the start of treatment demonstrate clinically significant reduction of frequency and intensity of pain and other OA symptoms, as well as improvement of functions in daily living and quality of life in patients with KOA or HOA after the first course of treatment with GH + CS capsules. The majority of patients (72.5%) were satisfied with the treatment. The incidence of drug-related AEs was low, and the nature of AEs was consistent with known safety profile of GH and CS combination.

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