Table 1. Comparison of patients depending on phenotype

Index	Metabolic phenotype (n=149)	No metabolic phenotype (n=135)	p
K&L radiologic grade			0.01
I grade	13.6%	56.7%	
II grade	62.7%	36.7%	
III grade	23.7%	6.6%	
Posterior lateral tibial cartilage, mm, Me	1.5 (1.4-1.8)	1.7 [1.6;1.8]	0.05
Posterior medial tibial cartilage, mm, Me	1.6 (1.3-1.8)	1.7 [1.6;1.8]	0.014
Medial knee joint space, mm, Me	2.6 (1-4.6)	3.6 [3;4.3]	0.023
Osteophytes of the medial tibial condyle, mm, Me	1 (1-2)	0 [0;0]	0.025
Osteophytes of the lateral tibial condyle, mm, Me	1 (1-2)	0[0;1]	0.042
Synovium thickness, mm, Me	3.1 (2.9-3.5)	2.9 (2.6-3.1)	0.02
Total hip BMD, (g/cm^2), mm, Me	0.95 (0.87-1.02)	0.87 (0.77-0.99)	0.03
CRP, mg/l, Me	2.8 (1.4-5.1)	1.1 (0.49-2.0)	0.0001
HbA1c, %, Me	5.7 (5.4-5.9)	5.2 (4.9-5.6)	0.0001
Uric acid, mcmol/l, Me	312 (268-391)	269.7 (233.9-324.5)	0.0002
Cholesterol, mmol/l, Me	6.4 (5.33-6.85)	5.4 (4.78-5.82)	0.002
LDL, mmol/l, Me	4 (3.38-4.59)	3.1 (2.6-3.89)	0.0009
Triglycerides, mmol/l, Me	1.6 (1.19-2.44)	1.1 (0.76-1.48)	<0.0001
ALT/AST, units/l, Me	21 (17.15-28.9)/ 20.6 (17.6-25)	15.9 (11.4-19.8)/ 18.1(14.9-21.6)	0.0006
Glucose, mmol/l, Me	5.6 (5.1-6,155)	5.2 (4.97-5.53)	0.001
Leptin, ng/ml, Me	35.6 (25.5-55.6)	20 (14.7-31)	<0.001
COMP, ng/ml, Me	1415 (1115-2100)	712.2 (484.5-1015)	<0.001
IL-6, pg/ml, Me	0.55 (0.25-0.8)	0.03 (0.01-0.4)	<0.005

Spearman correlation analysis showed positive correlations (p <0.05) between the metabolic phenotype and OA radiologic stage (r=0.44), size of tibial osteophytes (r=0.31), synovium thickness (r=0.28), hsCRP (r=0.44), HbA1c (r=0.45), cholesterol (r=0.29), LDL (0.3), triglycerides (r=0.36), uric acid (r=0.3), leptin (r=0.46), IL-6 (r=0.38), COMP (r=0.51). Negative correlations (p <0.05) were established with medial joint space (via X-ray): (r=-0.24) and cartilage thickness (via ultrasound) (r=-0.25).

Conclusion: Comprehensive examination of patients with the use of imaging and biochemical methods showed that metabolic phenotype of osteoarthritis is more severe (with correction for age taken into account). Patients with metabolic phenotype showed higher levels of hsCRP, leptin, IL-6, COMP, which possibly demonstrate a more active form of low-grade inflammation (the underlying mechanism of OA pathogenesis) and more significant cartilage damage

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AB0996 THE POSSIBILITY OF LONG-TERM PAIN CONTROL IN PATIENTS WITH OSTEOARTHRITIS

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Background: In some patients with osteoarthritis (OA), moderate or severe joint pain may persist for a long time and functional limitations may increase, which requires long-term administration of nonsteroidal anti-inflammatory drugs (NSAIDs).

Objectives: To evaluate the efficacy and safety of long-term use of NSAIDs in patients with OA in real clinical practice.

Methods: 611 patients with OA (knee or hip) were included in an open observational study. 64.5% were female, mean age 58.3±11.0years. All patients received aceclofenac at a dose of 200 mg / day. Pain at movement was determined on a 10-cm visual analog scale (VAS). The number of patients with severe pain (≥6 cm by VAS) and the number of patients with pain reduction ≥50% were evaluated. The assessment was carried out 2 weeks, 3, 6, 9 and 12 months after the start of therapy. Adverse events were noted at each visit.

Results: By 12 months of follow-up, 53.3% of patients had completed the study. The mean pain severity at baseline, after 2 weeks, 3, 6, 9 and 12 months was 6,5±1,2; 4,8±1,4; 3,2±1,4; 2,6±1,4; 2,2±1,1; 1,4±1,1 cm VAS (p<0.05). The number of patients with severe pain decreased from 77.8% to 24,9%, 2,9%, 2,3%, 0,9% and 0%. The number of patients with pain reduction ≥50% was 12,0%, 65,1%, 81,0%, 88,5% and 84.0%. Adverse events were observed in about 30% of patients, mainly mild or moderate dyspepsia (11.1%- 23.3%) and arterial hypertension (7.1% - 10.9%). No serious complications were recorded.

Conclusion: Taking into account the large number of drop-outs from the study (46.7%), approximately half of the patients can have long-term pain control with NSAIDs in real clinical practice. Aceclofenac is effective and well tolerated and can be used for long-term pain control in patients with OA.

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AB0997 NEW EPIGENETIC PREDICTORS OF THE VARIOUS LOCALIZATIONS OSTEOARTHRITIS DEVELOPMENT

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Background: Osteoarthritis (OA) is one of the most common joint diseases, often causing persistent pain and immobilization [1]. The genetic contribution to OA varies from 40% to 65%, depending on the presence of the pathology in the immediate family, the location of the affected joint, sex, and ethnicity of the patients [2]. The study of miRNA target sites is a new promising direction in molecular diagnostics [3].

Objectives: The aim of our work was to study the microRNA binding sites of COL1A1, COL11A1, ADAMTS5, MMP1, MMP13, SOX9, GDF5, FGF2, FGFR1, FGFRL1 genes in patients with OA of different localization.

Methods: A total of 417 women (mean age 51.67±11.5) from Ufa (Republic of Bashkortostan, Russia) participated in the study between January 2013 and August 2017. The patients were examined to diagnose for osteoarthritis according to the criteria of the American College of Rheumatologists (1995) with X-ray confirmation. Overall, 356 women with OA were recruited and divided into 3 groups as follows: subgroup 1 included 84 women affected by generalized OA, subgroup 2 included 197 women affected by knee OA, subgroup 3 included 75 women affected by hip OA. For genotyping, RT-PCR analysis using KASP@ technology was used. Selection of the miRNA target loci was carried out using the database of the National Center for Biotechnological Information (https://www.ncbi.nlm.nih.gov), Ensemble Ge-nome-Browser (www.ensembl.org), and the base of polymorphisms of microRNA target sites (http: // compbio. uthsc.edu/miRSNP). As a calculation tool, Statistica v.6.2 (StatSoft) software packages were used. Considering the type I error caused by multiple testing, p values were adjusted by calculating the FDR value using the Benjamini-Hochberg method (https://tools.carbocation.com/FDR).

Results: The T allele of the rs9659030 (COL11A1) was associated with the generalized OA (p = 0.019; OR = 2.0; 95% CI 1.11 to 3.62), the TT genotype was associated with total patients (p = 0.026; OR = 1.59; 95% CI 1.05 to 2.42), generalized OA (p = 0.003; OR = 2.75; 95% CI 1.39 to 5.46) and OA of the hip (p = 0.016; OR = 2.3; 95% CI 1.14 to 4.36). With respect to rs229069 (ADAMTS5), a significant association was found between the C allele and the incidence of total OA (p = 0.018; OR = 1.43; 95% CI 1.06 to 1.93), as well as with the knee OA (p = 0.042; OR = 1.43; 95% CI 1.01 to 2.03) and hip OA (p = 0.026; OR = 2.039; 95% CI 1.08 to 3.85). The CC genotype was also found to be associated with total OA (p = 0.037; OR = 1.53; 95% CI 1.02 to 2.28) and hip OA (p = 0.026; OR = 2.039; 95% CI 1.08 to 3.85). The T allele of rs13317 (FGFR1) was strongly associated with the total OA (p = 0.001; OR = 1.67; 95% CI 1.2 to 2.3), knee OA (p = 0.003; OR = 1.74; 95% CI 1.19 to 2.55) and generalized OA (p = 0.044; OR = 1.67; 95% CI 1.01 to 2.75) After Benjamini-Hochberg correction, rs13317 remained statistically significant in the following groups: the T allele in control vs total patients (adjusted p*= 0.01) and in control vs OA of the knee (adjusted p* = 0.03). Neither the genotype nor the allele frequencies of rs1061347 (COL1A1), rs229077, rs9978597 (ADAMTS5), rs5854, rs470215 (MMP1), rs1042840 (MMP13), rs1042673 (SOX9), rs4647940 (FGFRL1) were significantly different between the affected individuals and normal controls.

Conclusion: The current study demonstrated an association between the T allele of rs13317 in FGFR1 and incidence of the total OA and knee OA in women from Volga-Ural region of Russia.

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AB0998 DIET AND JOINT SYMPTOMS: A SURVEY OF MOROCCAN PATIENTS WITH OSTEOARTHRITIS

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Background: The question of diet is frequently asked by patients with osteoarthritis. Beyond the effect of weight on the aggravation of their symptoms, patients