of specific and high sensitive criteria of axSpA do not improve the situation because one of the main reasons of late axSpA diagnostics is the increased period when the patient with typical axSpA symptoms do not referred by general practitioner (GP) to the rheumatologists (so called “human factor”). The increasing role of internet online technologies can make way from GP to rheumatologist shorter and decrease the diagnostics delay in axSpA.

Objectives: To develop the online questionnaire that calculates probability of having axSpA and evaluate the advantages of the method of online based detection of axSpA under the traditional ways of axSpA search.

Methods: Based on positive and negative predictive values of symptoms from ASAS axSpA criteria (2009) the axSpA Early Diagnostics Questionnaire (aEDQ) was developed. The aEDQ was available on website of Russian Ankylosing Spondylitis Association from October 2018. Link to the aEDQ could be obtained directly on the site and additionally by using one of 1,500 related to axSpA keywords approved by 5 rheumatologists from Russian SpA Expert Group. Those of participants who had high risk of axSpA according aEDQ were recommended to visit the rheumatologist, related to axSpA diagnostics. Participants with low risk of axSpA were sent to their GP. Collected data of diagnostics delay and capacity of the aEDQ were compared with data from demographically matched populations from EMAS online survey from 13 European countries (n=2,846), and SPACE cohort results (n=461) [1, 2], and from Russian North-Western axSpA LADOGA register (n=1,544). This study used only anonymized data. Statistical analysis was performed with Statistics SPSS2017, GraphPadPrizm 2016.

Results: Since October 2018 until January 2019 in Saint-Petersburg 22,925 people visited the aEDQ, 21,939 (95.6%) people filled out the questionnaire. Out of 21,939 people filled out questionnaire 7,888 (35.95%) people has high risk of axSpA. Within one month after passed the questionnaire 424 people had high risk of axSpA (5% out of all who had the recommendations consulted by rheumatologist (mean age 42±6.6 years, male 725 (65%), symptoms duration 4.4 ± 3.0 years, HLA-B27 positive 292 (68.3%)). In 254 patients out of 424 (59.9%) presence of axSpA was confirmed as compared with 44.6% in SPACE cohort results (χ2 = 19.24, p<0.0001 for differences with SPACE cohort results [2]).

Mean diagnostics delay in aEDQ cohort was 4.4 ± 3.0 years (mean ± SD), n = 254, in axSpA patients with traditional way of axSpA search in LADOGA register was 8.8 ± 4.8 years, n=1,544 (LADOGA study results), and 7.4 ± 8.4 years in EMAS survey [1], p < 0.0001 for all the differences.

Conclusion: Online axSpA Early Diagnostics Questionnaire with function of calculation of axSpA probability can decrease diagnostics delay and increase percentage of confirmed by rheumatologist axSpA diagnosis as compared with another forms of axSpA search.

References:

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**AB0688**

**THE PROBABILITY OF SPONDYLOARTHRITIS IN PATIENTS WITH UVEITIS**

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**Background:** Uveitis is a heterogeneous group of inflammatory eye diseases, some of which may be associated with spondyloarthritis (SpA). The probability of SpA depends on the clinical features of uveitis.

**Objectives:** To evaluate the probability of SpA depending on the clinical features of uveitis.

**Methods:** 208 patients with uveitis referred from ophthalmologists were assessed at the Institute of Rheumatology. 139 of 208 pts had an acute recurrent course of uveitis, 69-chronic course; 149 of 208 had isolated anterior uveitis, 69 – panuveitis involving the posterior and/or intermediate part of the eye; 160 had unilateral uveitis, 48 – bilateral; 106 had HLA-B27, 102 - without HLA-B27. In addition to HLA-B27, a survey was performed to identify clinical and imaging signs of SpA, including radiography and MRI of sacroiliac joints.

In 60 cases (28.8%), various SpA were identified (20 – ankylosing spondylitis, 2 – Psoriatic arthritis, 38 – non-radiographic SpA). In 148 pts SpA was not confirmed (4 of them had Behcet’s disease, 2-sarcoidosis, 4-toxoplasmosis, 29 – viral uveitis, 1 - Fux syndrome, 2 – Vogt-Koyanagi- Harada syndrome, 2 - multiple sclerosis, 104 – unspecified uveitis).

**Results:** Pretest probability of SpA in the group was 28.8%, that corresponds to pretest odds of 0.4. Among 139 pts with acute recurrent uveitis SpA was identified in 45 (32.3%), among 69 with chronic uveitis – in 15 (21.7%), RR=1.49, 95% CI [0.896, 2.475], LR-1.17. Among 149 pts with isolated anterior uveitis SpA was diagnosed in 55 (36.9%), among 59 with panuveitis – in 5 (8.5%), RR=4.36, 95% CI [1.8, 10.3], LR-1.43. In a subgroup of 160 pts with unilateral uveitis SpA diagnosed in 51 (31.9%), in a subgroup of 48 with bilateral uveitis – in 9 (18.7%). RR = 1.7, 95% CI [0.9, 3.1], LR-1.14. Among 160 HLA-B27-positive pts SpA determined in 56 (35.2%), among 102 HLA-B27- negative – in 4 (3.9%), RR=13.4, 95% CI [5.1, 35.8], LR-2.7. Taking into account the pretest odds and likelihood ratio of all parameters, posttest odds was 2.7, that corresponds to posttest probability of 67%.

**Conclusion:** A combination of such signs of uveitis as isolated localization in the anterior part of the eye, acute recurrent course, unilateral inflammation, HLAB27 increases the probability of SpA more than 2 times.

References:

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**AB0689**

**GAIT PATTERN DIFFERENCES BETWEEN PATIENTS WITH RADIOPHAGIC AND NON-RADIOPHAGIC AXIAL Spondyloarthritis, THE MYOSPA STUDY**

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**Background:** Axial spondyloarthritids (axSpA) is a chronic inflammatory disease classified as radiographic (r-axSpA) or non-radiographic (nr-axSpA). Defining the gait patterns associated with these two groups can improve its detection and promote early intervention. In normal walking, body segments move around the joints as struts of an inverst pendulum. The resultant cyclic rotations contribute to the forward translation of the body, while minimizing muscle work and maintaining stability. Recent literature describes a decline in this pendulum-like mechanism associated with aging and some neurological diseases (Parkinson and multiple sclerosis).

**Objectives:** The aim was to compare the 3D gait kinematics of patients with r-axSpA and nr-axSpA.

**Methods:** A cross-sectional study was conducted on 54 participants (18-50 years old), 27 patients with axSpA (according to ASAS criteria, with less than 10 years since symptoms onset) and 27 healthy controls, matched by gender, age and level of physical activity. A sub-analysis was performed involving the whole group of patients classified as r-axSpA (n=14) and nr-axSpA (n=6).

Subjects movement was reconstructed using a 3D full-body kinematic model (Kinetikos, Coimbra, Portugal) fed by 15 inertial sensors placed in the head, arms, trunk, pelvis, thighs, shanks and feet. 3D gait kinematics was characterized based on variables that analyse the body movement as a whole (e.g. center of mass displacement, speed), conventional spatiotemporal parameters (e.g. stance/swing time, step length) and joints kinematics time-normalized to 101 points, comprising the gait cycle from 0 to 100%. Nonparametric statistical tests were used.

**Results:** In the r-axSpA group, 71.4% were male, with a mean age of 34.4±3.78 years and a BASDAI of 2.84±2.39, whereas in the nr-axSpA, 50%...