Results: Demographics were 60.2±8.3 years of age, 65% female, BMI of 26.6±4.5 of kg/m²; 60% with Kellgren and Lawrence (KL) grade 2 and 40% with a KL grade 3. Semi-quantitative OMERACT ultrasound scores (Table 1) revealed good to excellent IRR (Kw=0.73–0.88) for osteophyte and moderate to good IRR (Kw=0.42–0.66) for synovitis. Conversely, quantitative measures of ultrasound pathologies had excellent IRR (ICC=0.84–0.95) except for synovial hypertrophy (ICC=0.67–0.72). A significant association was found between semi-quantitative ultrasound synovitis and MRI effusion-synovitis (r= 0.48, p=0.03). All three quantitative ultrasound measurements were significantly associated with quantitative scores of MRI (Table 2).

In Bland–Altman plots for quantitative measurements, there were systemic offsets of 0.6 mm, 1.9 mm and 9.8 mm for osteophyte and meniscal extrusion and synovitis respectively (Fig. 1).

Conclusion: There is moderate to good IRR between operators with varying experience using the OMERACT knee scoring image atlas for osteophyte and synovitis. While quantitative ultrasound measurements showed excellent IRR and significant association with MRI quantitative outcomes, the absolute feature-specific agreement is called into question.

REFERENCES

Disclosure of Interests: None declared

AB1169 SILEC1/C1D169 IS A SENSITIVE MARKER FOR MONOCYGENE INTERFERONOPATHIES
Banu Orak1,2, Marc Nikolaus1,2, Ellen Krierin1,2, Angela Kaindi1,2, Manuela Theoplhi1, Axel Parzer4, Barbara Zieba5, Frederic Ebstein5, Elke Krueger5, Nadine Unterwalder6, Christian Meisel6, Tilmann Kallinich1,2.

Background: Monogenic Interferonopathies are a rare group of inflammatory diseases that are difficult to diagnose in the onset phase given the lack of well-defined disease-markers. A correlation with interferon-stimulated genes (ISG) has been reported for SILEC1 (syn. CD169), in systemic lupus erythematosus (SLE). Furthermore, expression of SILEC1 on monocytes is the second highest ISG in SLE.

Objectives: To study the relevance of SILEC1 as a putative diagnostic marker for early detection of interferonopathies.

Methods: Clinical data, classical inflammatory markers, blood count values and genetic information were obtained from the medical files of eight patients with genetically confirmed monogenic interferonopathies. SILEC1 expression was measured by flow cytometry with a highly standardized quantitative assay with a reference range in healthy controls less than 2500 SILEC1 molecules/monocyte. Additionally, transcriptional level of SILEC1, IF44L, IF27, ISG15 and RSAD2 as type I Interferon stimulated genes were assessed by real-time PCR.

Results: All eight patients with interferonopathies carried mutations in the genes TREX1 (n=3), IFIH1 (n=2), SAMDH1 (n=2) and RNASE2H2 (n=1). Mean age of patients was 12 years (range 6 months to 49 years). Six of eight patients showed neurological symptoms consistent with Aicardi-Goutieres-Syndrome presenting developmental delay and microcephaly. Five patients showed abnormalities on cranial MRI including periventricular calcifications and corpus callosum thinning. Two patients were diagnosed with Singleton-Merten-Syndrome presenting abnormal ossification of extremities and dental anomalies. One patient with homozygous TREX1 mutation presented with postnatal glaucoma, microcephaly, sensorimotor polyneuropathia and recurrent fever with persistent chilblain lesions. All patients had elevated SILEC1 levels (mean molecules/monocyte +/- SD: 10272 +/- 3746) without high levels of standard inflammatory markers. In six patients, elevated SILEC1 expression showed dysregulation of the type 1 interferon pathway prior to genetic testing. The relative expression (ΔCT) of all ISG’s was significantly elevated in comparison to healthy controls (SILEC1 p = 0.0167, ISG15 p = 0.0015, RSAD2 p = 0.0067, IF44L p = 0.0001, IF27 p = 0.0056).

Conclusion: We report high expression of SILEC1 in monogenic interferonopathies like Aicardi-Goutieres-Syndrome. Therefore, SILEC1 qualifies as an easy accessible and cheap diagnostic marker to screen patients with suspected interferonopathy.

AB1169 ASSOCIATION OF ANXIETY, DEPRESSION WITH ULTRASONOGRAPHIC EVALUATION OF THE JOINTS, DISEASE ACTIVITY, FUNCTIONAL DISABILITY AND QUALITY OF LIFE IN PATIENTS WITH RHEUMATIC DISEASES:
Rita Osipyants1, Victoria Nadtocheeva2, Madina Bogdanova3, Marina Kanevskaya1, Temuri Mirlashvili1, 1Department of Internal Diseases, RUDN University; Erasmatshentsev City Clinical Hospital, Moscow, Russian Federation; 2Department of Internal Diseases, RUDN University, Moscow, Russian Federation; 3FSBI “Polyclinic N10” of the Administrative Department of the President of the Russian Federation, Moscow, Russian Federation; 4Sechenov Moscow Medical University, Moscow, Russian Federation; 5Erasmatshentsev City Clinical Hospital, Moscow, Russian Federation

Objectives: The aim of this study is to evaluate anxiety and depression disorders and to study their correlation with disease activity, ultrasonographic (US) finding of synovitis, functional status and quality of life in patients (pts) with rheumatic diseases.

Methods: 39 pts (F/M–29/10) with rheumatoid arthritis (RA, n=17), ankylosing spondylitis (AS, n=10), psoriatic arthritis (PsA, n=12) were included. All RA pts fulfilled the ACR/EULAR 2010, AS pts – the ASAS, PsA pts – the CASPAR criteria, 20 pts (8 RA, 6 AS, 6 PsA) were performed US examinations (Mindray DC-N6 (China), C5-2, L10-13 MHz probes) included bilateral of the hip and knee joints. Each joint was scored according to the OMERACT definitions of pathology, Functional status (BASFI), disease activity indices (DAS28-CRP, ASDAS-CRP, DAPSA), anxiety and depression levels (Hads-A, Hads-D) and quality of life (Rapid3, EQ-SD) were assessed. The Mann-Whitney U-test was applied for intergroup comparison and correlation was evaluated using a Spearman’s Rank two-tailed test (R value is shown).

Results: Median age of 39 pts – 52 (44;61) years and the body mass index – 29 (23;33) kg/m². Mean anxiety index was 9.3±4.7, depression index – 4.8±2.7. All pts had higher scores in anxiety and depression compared to healthy controls (p=0.0167, p=0.0015). Anxiety and depression were significantly associated with MRI quantitative measures of synovitis and the severity of functional disability. Activity of disease according to DAS28-SD and ASDAS-SD was positively related with anxiety and depression levels. Anxiety and depression were significantly lower in patients with active disease (BASFI), disease activity indices (DAS28-SD, ASDAS-SD, DAPSA). Anxiety and depression levels (HadsA, HadsD) and quality of life (Rapid3, EQ-SD) were assessed. The Mann-Whitney U-test was applied for intergroup comparison and correlation was evaluated using a Spearman’s Rank two-tailed test (R value is shown).

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