at baseline in responders to Droglican according to the OMERACT-OARSI criteria compared to non-responders (76,11±53,25 vs 104,25±84,93; n=171 *vs* 46; *p*=0,047), meanwhile the values for APOA2 appeared statistically increased in responders with a 50% reduction in WOMAC pain score compared to non-responders (79,95±58,53 vs 66,05±46,49; n=129 *vs* 112; *p*=0,028). Patients with lower levels of ORM2 (median concentration=69,8 ug/mL) and/or higher level of APOA2 (median concentration=63,8 ug/mL) showed a markedly better response to pharmacotherapy. Statistical interactions between ORM2 and APOA2 levels and radiologic K/L grade were also detected (*p*=0,048 and *p*=0,002 respectively). No statistically significant differences were found for the other four proteins.
Conclusions: Our results show that ORM2 and APOA2 levels significantly correlates with patients response to Droglican suggesting the possibility of their use in predictive assays in order to optimize therapeutic outcomes in OA. Validation studies in different cohorts are needed to identify and validate a cut-off point for these biomarkers.
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AB1175 DECREASED AUTOPHAGIC ACTIVITY IN T LYMPHOCYTES FROM PATIENTS WITH NEWLY DIAGNOSED SYSTEMIC LUPUS ERYTHEMATOSUS

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Background: Alterations in T-lymphocyte homeostasis have been suggested to play a key role in the pathogenesis of SLE. Autophagy is now emerging as a core player in the development and the functioning of the immune system.
Objectives: we investigated the autophagic behavior of T cells from patients with SLE.
Methods: Thirty patients with SLE and twenty-five healthy subjects matched for gender and age were recruited. The levels of mRNA encoding ATG5, ATG7, Beclin-1 and LC3 was determined by quantitative real-time polymerase chain reaction (qPCR), and evaluate autophagy activity in T cells by flow cytometry. The number of autophagic structures was examined by TEM in T cells from SLE patients and healthy controls.
Results: We documented a decreased of mRNA expression of LC3 and Atg7 in T cells from patients with SLE (t=2.282, P=0.027; t=3.573, P=0.001).A decreased percentage of autophagic cells was comfirmed in T cells from patients with SLE, as compared to healthy donors by flow cytometry (t=2.034, P=0.047).no significant correlations between autophagy levels in T cells and the disease activity of patients were observed ($p>0.05$).
Conclusions: Our results indicate that autophagy activity in T cells from SLE patients is decreased, which may contribute to the development of SLE, and thus that resetting autophagic activity may be an important therapeutic goal in this autoimmune disease.
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AB1176 ANTI-MX1 ANTIBODY: A NEW POTENTIAL BIOMARKER EXPANDING THE CONCEPT OF INTERSTITIAL PNEUMONIA WITH AUTOIMMUNE FEATURES (IPAF)

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Background: "Interstitial pneumonia with autoimmune features (IPAF)" is the updated concept instead of UCTD-ILD or lung-dominant CTD, classifying idiopathic interstitial pneumonias (IIPs) with underlying autoimmune processes by the presence of a combination of features from three domains; clinical, serologic, and morphologic domains. In IIPs, idiopathic non-specific interstitial pneumonia (INSIP) and idiopathic pulmonary fibrosis are often difficult to distinguish without surgical lung biopsy. We discovered autoantibody against myxovirus resistance protein-1 (MX1), type I interferon-inducible protein, as the biomarker specific for INSIP and associated with favorable prognosis [1]. We also reported that some of patients with collagen vascular diseases (CVDs) possess anti-MX1 antibody only when complicated with interstitial lung disease [2].
Objectives: This study was aimed to investigate the association of anti-MX1 antibody positivity with IPAF category in patients with IIPs and their clinical characteristics through a cross-sectional study. We also assessed the potential of anti-MX1 antibody to expand the concept of autoimmunity in IIPs.
Methods: Anti-MX1 antibodies in sera of consecutive Japanese patients with chronic fibrosing IIPs (n=114), who visited the outpatient office of Osaka University Hospital from February to October 2014, were measured using ELISA. IPAF patients were classified according to the IPAF criteria in 2015 ERS/ATS statement. Comparison of the patients' clinical characteristics and high-resolution computed tomography (HRCT) findings evaluated by three thoracic radiologists blinded to the clinical information were statistically analyzed. Serum IFNα was measured using ELISA.
Results: Among 114 patients with IIPs, 20 patients (17.5%) were positive for anti-MX1 antibody and 33 patients (28.9%) were classified as IPAF. When IPAF patients (n=33) were compared with non-IPAF patients (n=81), IPAF was associated with female, higher level of C-reactive protein (CRP), the presence of HRCT findings of "predominantly peribronchovascular distribution" and the absence of two HRCT findings of "honeycombing' and 'traction bronchiectasis". Of 81 non-IPAF patients, 13 patients (16.0%) were anti-MX1 antibody positive. Among them, if anti-MX1 autoantibody were included into the existent serological domain in the IPAF criteria, 8 patients (9.9%) would be classified as IPAF. Anti-MX1 antibody positivity did not correlate with IPAF category. In non-IPAF patients, anti-MX1 antibody-positive patients were associated with female and predominantly smaller 'spared area' when compared to anti-MX1 antibody-negative patients. Serum IFNα concentration was not associated with either anti-MX1 antibody positivity or IPAF category.
Conclusions: A substantial number of patients classified as non-IPAF were positive for anti-MX1 antibody, suggesting that this new autoantibody could have the potential expanding the definition of IPAF. The further studies for the clinical course and drug efficacy of anti-MX1 antibody-positive non-IPAF patients must be explored.
References:
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Rehabilitation

AB1177 THE COMBINATION OF PHYSIOTHERAPY AND BIOLOGICAL THERAPY FOR THE MANAGEMENT OF ANKYLOSING SPONDYLITIS

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Background: The management of the ankylosing spondylitis (AS) aims at relieving patients'pain, restoring their joint mobility and preventing structural damage which results in progressive deformity, in order to improve the functional status and quality of life of these patients, using various pharmacological and non-pharmacological means. The importance of the physiotherapy in patients with AS under biological treatment was reported in some studies, but the literature on this topic is still scarce.
Objectives: Report the experience, of our department of Physical and Rehabilitation Medicine, in the management of the AS, especially the effect of the combination of physiotherapy and biological therapy on pain, disease activity, spinal mobility, functional capacity and quality of life.
Methods: Prospective study on 20 patients diagnosed with AS, treated with tumor necrosis factor alpha inhibitors (TNFa inhibitors) and placed under physiotherapy for 3 months. At baseline and at the end of 3 months, we evaluated Bath AS Disease Activity Index (BASDAI), occiput-wall distance, Hirtz index, Schober index, Bath AS Functional Index (BASFI) and Visual Analog Scale (VAS) of patient's quality of life.
Results: The 20 patients (9 females), aged 38.4 years±10.24 [range 19–55], treated with TNFa inhibitors (Etanercept in 35% and Adalimumab in 65%) and included in a physiotherapy program of 3 months (3 sessions/week), comprising muscle relaxation, flexibility exercises for cervical, thoracic and lumbar spine, range of motion exercises of coxofemoral joints, muscular strengthening, straight posture and respiratory exercises.
After 3 months, all outcome parameters showed statistically significant improvements ($P<0,05$), as shown in the folliwing table.

		Paired Diffrences	
		Mean	*P* value
Pair 1	BASDAIbaseline – BASDAImonth3	3,44615	0,000
Pair 2	BASFIbaseline – BASFImonth3	2,9654	0,000
Pair 3	OWIbaseline – OWImonth3	1,7125	0,023
Pair 4	SCHOBERbaseline – SCHOBERmonth3	-1,5667	0,000
Pair 5	HIRTZbaseline – HIRTZmonth3	-0,7273	0,001
Pair 6	VASpatient_baseline - VASpatient_month3	4,0833	0,000

Conclusions: According to our results, the combination of physiotherapy and