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THU0259 RESPIRATORY SYMPTOMS IN PRIMARY SJÖGREN'S SYNDROME, A CROSS-SECTIONAL STUDY OF THE OASIS COHORT

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Background: In previous studies, 5 to 35% of patients with primary Sjögren's syndrome (pSS) are reported to have respiratory symptoms (RS). Pulmonary involvement varies from a dry cough due to airway dryness to life-threatening interstitial lung disease.
Objectives: To evaluate RS prevalence in patients with pSS and compare characteristics of pSS patients with and without RS to those in patients without pSS suffering from ocular or oral dryness.
Methods: Cross-sectional study of patients at the time of their inclusion in the OASIS cohort between 2014 and September 2016. This UK prospective research cohort includes patients with suspected pSS or known pSS and aims to collect long-term high quality data with regular clinical, dental and ophthalmological assessments. We asked systematically all the patients if they had any RS. In case of clinically significant RS, pulmonary function tests (PFTs) were requested, and if needed, a high-resolution chest tomography (HRCT) was performed. We included in the analysis only patients fulfilling the AECG (2002) criteria for pSS and excluded patients with secondary Sjögren's syndrome. Characteristics of pSS patients with and without RS and non-pSS patients with sicca symptoms were compared. For statistical analysis, we used unpaired t test, Mann-Whitney test, Fisher's exact test and Chi-square test when appropriate. $P \leq 0.05$ was considered statistically significant.
Results: Among the 157 patients included in the cohort, 70 fulfil the AECG criteria for pSS and 63 have sicca symptoms without pSS. In the pSS/sicca non-pSS groups, 25.7%/15.9% had RS (cough 10.0%/7.9% and breathlessness 15.7%/6.3%) and 5.7%/1.6% an abnormal chest clinical examination respectively. PSS patients with pre-existing lung disease (n=11) had significantly more RS than pSS patients without it (n=59): 54.5% versus 20.3% (p=0.03).
PSS patients with RS or abnormal chest clinical examination (n=21) had a higher ESSDAI index value (mean ±SD) than patients without them (n=49) (7.8±5.7 versus 5.0±4.9, p=0.04), essentially due to a higher constitutional domain score (1.7±2.1 versus 0.6±1.5, p=0.01) and a higher respiratory domain score (1.3±2.8 versus 0, $p<0.01$). They also had a higher ESSPRI index value (mean ±SD), which is a patient reported outcome: 7.4±1.7 versus 6.0±2.1 (p=0.05). There were no differences between pSS patients with and without RS in terms of demographic characteristics, objective measurements of tear and saliva production, histological focus scores and auto-immunity profiles.
In this same group of pSS patients, 10 PFTs and 9 HRCTs were requested and showed abnormal results in 60.0% and 55.6% respectively. A reduced gas transfer was the most common finding in PFTs (DLCO mM/min/kPa, % predicted value, mean ±SD: 66.7±11.7). Among these patients, 2 patients were diagnosed with interstitial lung disease. Both had abnormal PFTs and HRCT.
Conclusions: One third of pSS patients presented with respiratory symptoms or abnormal chest clinical examination at inclusion in our cohort. These patients had higher ESSDAI and ESSPRI index values but did not differ in terms of objective saliva and tear production measurements and auto-antibody profile. Reduced gas transfer was the most common abnormal finding in PFTs.
Disclosure of Interest: None declared
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THU0260 LOW PLASMA CONCENTRATIONS OF APOLIPOPROTEIN M CORRELATE TO DISEASE ACTIVITY AND ENDOTHELIAL DYSFUNCTION IN SLE

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Background: ApoM is an antiatherogenic and vasculoprotective 25kDa apolipoprotein suggested to play a role in keeping endothelial barrier integrity.
Objectives: The aims of the current study were to determine the impact of SLE disease activity on apoM levels and investigate if apoM levels reflect endothelial function in SLE.
Methods: Plasma concentrations of apoM were measured with ELISA in two SLE cohorts, all patients fulfilling ≥4 American College of Rheumatology (ACR) classification criteria for SLE, and 100 healthy controls (HC). Patients in cohort I had active disease as evaluated with SLEDAI scores. In cohort II endothelial function was measured by EndoPAT 2000 and correlated to apoM levels. A low Reactive Hyperemia Index (RHI) value indicated endothelial dysfunction (ED).
Results: In cohort I, the plasma levels of apoM were found to be significantly decreased in SLE ($p<0.0001$), and the apoM concentrations correlated inversely to disease activity (SLEDAI, r= -0.29, p=0.0063. ApoM was also significantly lower in patients with active nephritis, leukopenia, anti-DNA antibodies or rash compared to patients without these manifestations.
In cohort II, using linear regression analysis, there was a positive correlation between apoM levels and the RHI value, indicating endothelial dysfunction, in the younger SLE patients: β=0.94 CI 95% 0.22,1.65 r=0.32 p=0.011.
Conclusions: SLE related inflammation may have an impact on lower plasma apoM, which may affect the endothelium and the process towards cardiovascular disease.
Disclosure of Interest: None declared
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THU0261 PREGNANCY COURSE AND OUTCOME IN SLE PATIENTS COMPARED TO PATIENTS WITH OTHER CONNECTIVE TISSUE AND INFLAMMATORY RHEUMATIC DISEASES - DATA FROM A PROSPECTIVE COHORT STUDY

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Background: Patients with systemic lupus erythematosus (SLE) are at increased risk for pregnancy complications and adverse pregnancy outcomes. During the past decades, advances in drug treatment and management during pregnancy made successful pregnancy in patients with SLE possible. Less is known about pregnancy course in other connective tissue diseases (OCTD).
Objectives: To compare pregnancy courses and outcomes in SLE patients with those in OCTD patients and patients with other inflammatory rheumatic diseases.
Methods: The German Rhekiss register is designed as nationwide, web-based longitudinal observational cohort study. Pregnant patients with confirmed diagnose of inflammatory rheumatic disease are eligible to be enrolled until the 20th week of pregnancy regardless of drug treatment. At baseline, sociodemographic parameters, prior pregnancies, comorbidities and antibody status are reported. During pregnancy, rheumatologists and patients report drug treatments, course of the maternal disease, development of fetus and complications once per trimester. After delivery, the pregnancy outcome and child development during the first two years of life are collected.
Results: Until October 2016, data of 392 patients were available and grouped according to their disease in SLE patients, those with other connective tissue disease (OCTD) and patients with all other diagnoses (allO). 121 women had already completed their pregnancy with known outcome. Of them, most patients in the OCTD group were diagnosed with undifferentiated connective tissue disease

	SLE	Other connective tissue diseases	All other diagnoses
Patient characteristics at enrolment			
Pregnancies, n	**85**	**71**	**236**
Maternal age [years]	31.8 (4.4)	32.9 (3.9)	32.4 (4.3)
Disease duration [years]	7.3 (5.9)	5.8 (6.05)	8.3 (7.6)
BMI > 30, n (%)	4 (8.7)	1 (2.6)	10 (8)
Disease activity (physician global) [0-10] in the first trimester	1.5 (1.3)	1.7 (1.5)	2.6 (2.2)
Rheumatoid factor positive, n (%)	9 (14.8)	12 (25.5)	48 (34.5)
Lupus anticoagulant positive, n	6	1	1
Anticardiolipin antibody positive, n	13	3	1
Anti-β2-GP-1 positive, n	10	3	2
Antiphospholipidsyndrome, n	10	1	1
SLEDAI	1.7 (2.3)	-	-
RAID [0-10]	1.8 (1.6)	1.9 (2.0)	2.1 (2.0)
Outcomes of pregnancies			
Completed pregnancies, n	**32**	**25**	**64**
Miscarriages, n (wk of gestation)	2 (wk 9/12), 1 elective (wk21)	2 (wk 14 & 21)	2 (wk 5 & 10)
No. of patients with flares during pregnancy			
1 – 2 flares	2	5	37
3 – 4 flares	0	0	10
5 – 6 flares	0	0	4
Life births, n: **preterm** (< 37th wk)	5 + 2x twins	2 + 1x twins	7 + 1x twins
at term (≥ 37th wk)	19 + 3x twins	20	53 + 1x twins
Mean birth weight [gramm] of singletons born at term	3123	3234	3477
Serious complications during pregnancy (n patients)	HELLP Syndrome (1) severe preeclampsia (1) serious bleedings (2) preterm labour (1) serious infection (2) thrombotic embolism (1)	HELLP Syndrome (2) preeclampsia (2) preterm rupture of membranes (1) serious infection (1)	*none*
Non-serious complications (n patients)	gestational diabetes (2) infections (1)	gest. diabetes (1) infections (1)	gest. diabetes (3) infections (4)
Congenital malformation / complication	multiple anomalies → elective termination palatine cleft (suspected Pierre-Robin-Syndrome) hämangioma at leg congenital megaureter	sacral agenesis hexadactylus (both sides)	hip dysplasia sacral hämangioma
Postpartal maternal complications	cerebral insult serious pyelonephritis hypertensive crisis	*none*	*none*
Neonatal complications (n children)	serious infections (3) lethal sepsis (1) serious icterus (1)	serious infection (3) serious respiratory distress (3) hypoglycaemia (1)	non-serious infection (1) serious respiratory distress (1)

If not otherwise indicated values are mean (SD). wk= week of gestation.