activity in prefrontal cortex, anterior cingulate, and caudate nucleus than that of other two groups.

Conclusions: Anxiety disorder commonly exists in patients with pSS. The pathology of this psychological symptom is poorly understood, which may be one of manifestation of nervous system involvement. fMRI may provide a novel insight into the pathological process accompanying subtle psychiatric disorders commonly experienced by patients with pSS.

References:

[1] Massara A, Bonazza S, Castellino G, et al. Central nervous system involvement in Sjögren's syndrome: unusual, but not unremarkable–clinical, serological characteristics and outcomes in a large cohort of Italian patients. Rheumatology (Oxford). 2010;49:1540–9.

[2] Martinez S, Cáceres C, Mataro M, et al. Is there progressive cognitive dysfunction in Sjögren Syndrome? A preliminary study. Acta Neurol Scand. 2010;122:182–8.

[3] Barbara M. Segal, Bryon A. Mueller,et al. Disruption of brain white matter microstructure in primary Sjogren's syndrome: evidence from diffusion tensor imaging. Rheumatology 2010;49:1530–1539.

[4] Liu LJ, Zhang XY, He N1, et al. Genetic variation in WDR1 is associated with gout risk and gout-related metabolic indices in the Han Chinese population. Genet Mol Res. 2016 Apr 28;15(2). doi: 10.4238/gmr.15027381.

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AB0481 SUBCLINICAL NEUROPSYCHIATRIC DYSFUNCTIONS IN SYSTEMIC LUPUS ERYTHEMATOSUS PATIENTS -A HOSPITAL BASED STUDY

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Background: Up to 50% of systemic lupus erythematosus (SLE) patients experience neuropsychiatric manifestations (NP) during the disease course but many might have subclinical neuropsychiatric lupus (NPL), causing significant increase in morbidity and mortality. The pathogenesis of NPL is multifactorial and involves various inflammatory cytokines, autoantibodies and immune complexes[1].

Objectives: To examine for the presence of subclinical NPL, cerebral atherosclerosis and their correlation - if any to brain magnetic resonance imaging (MRI/MRA) findings and SLE disease activity.

Methods: This is a cross sectional observational study that included thirty adult female SLE patients fulfilling the updated ACR classification criteria for SLE[2]. All were subjected to: detailed history taking, thorough clinical examination, assessment of SLE disease activity using Systemic Lupus Erythematosus Disease Activity Index (SLEDAI) score, psychometric evaluations using the Modified Mini-Mental State Examination (MMSE) to assess for cognitive dysfunction, Hamilton Depression Rating Scale (HAM-D) and Hamilton Anxiety Scale (HAM-A) to assess for the presence of depression and anxiety respectively. CBC, ESR, full blood chemistry, urine analysis, protein/creatinine ratio, brain MRI/MRA.

Results: The mean age was 31.7 years (22 to 40 years). 12 patients (40%) had positive antiphospholipid (APL) antibodies with or without clinically evident antiphospholipid syndrome (APS). 22/30 (73.33%) had different NP manifestations, 13 had depression (43.3%), 15 had anxiety (50%) and 16 had cognitive impairment (53.3%). All patients with depression and anxiety, 87.5% of patients with dementia had MRI abnormalities. All SLE patients with positive aPL were found to have MRI abnormalities, while MRI abnormalities were found in only 8 SLE patients with negative aPL (100% vs. 44.4%) ($p<0.001$). There was a statistically significant correlation between SLE disease activity and both NP manifestations and MRI/MRA abnormalities. aPL antibodies also had a significant correlation with NP manifestations. MRI abnormalities included discrete white matter lesions (60%), cortical atrophy (25%) and gross infarctions (15%). MRA revealed atherosclerotic changes of one or more of the large intracranial vessels in (27.27%) of NPSL patients.

Conclusions: Significant number of SLE patients without overt neuropsychiatric manifestations were found to have subclinical cerebrovascular and cognitive dysfunctions, depression and anxiety by simple bedside questionnaires. SLE disease activity positively correlates with neuropsychiatric manifestations. The presence of APL antibodies is a strong risk factor for developing NPSL. Several distinct brain MRI patterns were observed in patients with active NPSL, suggestive of different pathogenetic mechanisms.

References:

[1] Popescu A and Kao A. Neuropsychiatric systemic lupus erythematosus. Current neuropharmacology, 2011, 9(3):449.

[2] Petri M, Orbai A, Alarcón G, Gordon C, Merrill J, Fortin P, Weisman M. Derivation and validation of the Systemic Lupus International Collaborating Clinics classification criteria for systemic lupus erythematosus. Arthritis & Rheumatism, 2012, 64(8):2677–86.

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AB0482 ELEVATION OF SERUM PROPROTEIN CONVERTASE SUBTILISIN/KEXIN TYPE 9 (PCSK9) CONCENTRATIONS AND ITS CORRELATION WITH C-REACTIVE PROTEIN, BUT NOT ATHEROGENIC LIPIDS IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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Background: Patients with systemic lupus erythematosus (SLE) have a tendency of accelerated atherosclerosis with controversial benefits from statin. This phenomenon can only partly be explained by traditional risk factors for cardiovascular disease. Proprotein convertase subtilisin/kexin type 9 (PCSK9) is a serine protease associated with cardiovascular risk that not only regulates cholesterol metabolism, but acts as a critical regulator of inflammatory reaction. PCSK9 inhibitors were also highly promising drugs bringing added cardiovascular benefit when administered with statin [1] [2].

Objectives: The present study firstly aimed to compare serum PCSK9 levels in SLE patients and healthy controls. The association between PCSK9 concentrations with atherogenic lipids and C-reactive protein (CRP) in SLE patients was also analyzed.

Methods: 77 individuals encompassed; 47 patients with SLE and 30 age- and sex-matched controls. Serum PCSK9, lipoproteins concentrations and CRP levels were assessed in patients and controls. Individuals with history of smoking, diabetes, infection, tumor and statin use were excluded.

Results: Serum PCSK9 levels were significantly elevated in patients with SLE, compared with healthy controls ($p=0.034$). PCSK9 positively correlated with serum levels of CRP ($r_s=0.351$, $p=0.016$); The tendency seemed more significant in female patients ($r_s=0.487$, $p=0.001$); No correlation with statistical significance between PCSK9 levels with disease activity (SLEDAI) or serum lipids parameter was found ($p>0.05$, all) (Table 1).

Table 1. Characteristics of patients and controls and correlational analysis of PCSK9 levels and disease parameters in SLE patients. Data are shown as number or median (interquartile range), respectively

Variables	Healthy controls	SLE	r_s, p-value
Number	30	47	NA
Female/Male	24/6	42/5	NA
Age (years)	30.5 (26–39.5)	33 (28–42)	-0.014, 0.927
PCSK9 (ng/ml)	292.44 (199.87–499.93)	390.53 (305.37–525.92)	NA
SLEDAI	NA	6 (4–8)	0.092, 0.539
Cholesterol (mmol/l)	NA	4.50 (3.90–5.40)	-0.012, 0.935
LDL cholesterol (mmol/l)	NA	2.38 (1.74–3.19)	0.002, 0.989
ApoA1 (g/l)	NA	1.30 (0.97–1.59)	0.011, 0.943
ApoB (g/l)	NA	0.79 (0.63–0.94)	0.181, 0.223
Triglycerides (mmol/l)	NA	1.26 (0.79–1.64)	-0.020, 0.896
HDL cholesterol (mmol/l)	NA	1.49 (1.22–1.86)	-0.112, 0.453
CRP (mg/l)	NA	1.31 (0.50–3.60)	0.351, 0.016
CRP (mg/l) in female patients	NA	1.195 (0.500–3.568)	0.487, 0.001

Conclusions: Elevation of PCSK9 was observed in patients with SLE and correlated with CRP but not atherogenic lipids, particularly in female patients. The result was indicative of pathogenic role of PCSK9 in the low-grade inflammation which promotes the atherogenic process in SLE patients.

References:

[1] Giugliano RP, Sabatine MS. Are PCSK9 Inhibitors the Next Breakthrough in the Cardiovascular Field?. J Am Coll Cardiol. 2015 Jun 23;65(24):2638–51.

[2] Walley KR, Thain KR, Russell JA, et al. PCSK9 is a critical regulator of the innate immune response and septic shock outcome.Sci Transl Med. 2014 Oct 15;6(258):258ra143.

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AB0483 RESPONSIVENESS OF LUPUS IMPACT TRACKER AMONG CHINESE PATIENTS WITH LUPUS

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Background: Lupus Impact Tracker (LIT), a 10 item, patient reported outcome tool for patients with systemic lupus erythematosus (SLE) has undergone psychometric validation and responsiveness studies in the US and Europe.

Objectives: To report results on responsiveness of Lupus Impact Tracker among Chinese patients with SLE.

Methods: 430 patients with SLE meeting the ACR classification criteria were recruited in Hong Kong, China at a single center. LIT scores from two visits one year apart were analyzed for responsiveness and Minimal Clinically Important

Difference (MCID) against patient report and physician assessed anchors of changes in health. Two patient reported anchors were used (Global change in health and item 2 of Short Form 36 form). Physician assessed anchors of change in health were disease activity (Physician global assessment-PGA, SELENA-SLEDAI) and damage (SLICC-SDI/ACR). Change in PGA of ≥0.3 and SELENA-SLEDAI of ≥4 in either direction was used to define worsening in disease activity. Analysis of variance was used to compare changes in LIT score against the anchors.

Results: Mean (SD) age of participants was 42 (14) years. Ninety five percent were women. Mean (SD) PGA, SELENA-SLEDAI and SDI at baseline were 0.5 (0.5), 2.9 (3.0) and 0.7 (1.2) respectively. Mean (SD) LIT score at baseline was 27.8 (18.2). Mean changes in LIT scores in response to worsening, no change or improvement based on patient report and physician assessments are shown in Table 1. MCID for "some worsening" were -4.0 and -3.9 on patient reported health question and SF36 question 2 respectively.

Table 1: Responsiveness of LIT to patient and physician based anchors in SLE.

Anchor	Change	N	Mean Change In LIT	p-value
Patient Reported Change				
SF36-Q2	Worse	118	-4.7	<0.001
	No Change	155	0.3	
	Much Better	157	2.5	
Global Change In Health Status	Worse	118	-4.7	<0.001
	No Change	155	0.3	
	Better	157	2.5	
Patient Assessed Change				
PGA	Increase of ≥0.3	72	-2.8	0.02
	Stable	251	-1.0	
	Decrease of ≥0.3	104	2.7	
SELENA- SLEDAI	Increase of ≥4	49	-3.5	0.005
	Stable	340	-0.6	
	Decrease of ≥4	41	6.0	
SDI	Unchanged	405	0.1	0.005
	Increase of ≥ 1.0	21	-8.7	

Conclusions: LIT shows responsiveness to changes in both patient-reported and physician assessed changes in health status among Chinese SLE patients.

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AB0484 LUPUS NEHRITIS AND PREGNANCY: MATERNAL AND FETAL OUTCOME

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Background: Systemic lupus erythematosus (SLE) is a multisystem autoimmune disease that primarily affects women during their reproductive years. The presence of Lupus nephritis (LN) may result in an increased risk of disease flare and adverse maternal and fetal outcomes, such as preeclampsia, fetal loss, and preterm delivery

Objectives: The purpose of this work is to evaluate pregnancy outcome in SLE patients with previous diagnosis of LN.

Methods: We retrospectively studied SLE patients according 1997 ACR criteria with previous diagnosis of LN by renal biopsy who attended to Materno Neonatal Hospital during the last 5 years. We evaluated demographic, clinical, laboratory and obstetric data. Renal biopsies were classified according ISN/RNP 2004. Lupus activity was evaluated by modified pregnancy SELENA SLEDAI score at the conception and during pregnancy. Maternal complications were evaluated: Preeclampsia, HELLP, Gestational Diabetes, Premature Rupture of the membranes, arterial and venous thrombosis, and others. Fetal outcome was evaluated as live birth, gestational age and weight at birth.

Results: 44 pregnancies in 32 patients were included. Maternal mean age was 22,68 years old, mean duration SLE was 7.8 years and 22% had antiphospholipid syndrome (APS), 62.5% were from Córdoba city, 84.3% did not have health insurance, and they have mean previous pregnancies of 2 with 1 live birth. Maternal complications were: Pre eclampsia in 22.7% of patients, Preterm delivery in 20.45% of patients, Premature rupture of the membranes in 6.8%, Gestational Diabetes in 2.27% of patients. 14 patients had normal labour, 29 cesarean section and 1 abortion. 97% (n=42) of patiens have live birth with mean gestational age of 36 weeks with mean weight at birth of 2.399 g. and there was no maternal mortality.

Table 1. Maternal Complications

Preeclampsia	10 (22,7%)
Pre term delivery	9 (20,4%)
Premature rupture of the membranes	3 (6,8%)
Gestacional diabetes	1 (2,3%)
Mortality	0
Renal relapse	8 (18,1)
Renal Insufficiency	2 (4,5%)

Conclusions: SLE patients with previous LN had a good maternal and fetal outcome in this study.

References:

[1] Moroni G, Doria A, Giglio E, Tani C, Zen M, Strigini F, Zaina B, Tincani A, de Liso F, Matinato C, Grossi C, Gatto M, Castellana P, Limardo M, Meroni PL, Messa P, Ravani P, Mosca M. Fetal outcome and recommendations of pregnancies in lupus nephritis in the 21st century. A prospective multicenter study. J Autoimmun. 2016 Nov;74:6–12. doi: 10.1016/j.jaut.2016.07.010. Epub 2016 Aug 2.

[2] Lazzaroni MG, Dall'Ara F, Fredi M, Nalli C, Reggia R, Lojacono A, Ramazzotto F, Zatti S, Andreoli L, Tincani A. A comprehensive review of the clinical approach to pregnancy and systemic lupus erythematosus. J Autoimmun. 2016 Nov;74:106–117. doi: 10.1016/j.jaut.2016.06.016. Epub 2016 Jul 2.

[3] Moroni G, Doria A, Giglio E, Imbasciati E, Tani C, Zen M, Strigini F, Zaina B, Tincani A, Gatto M, de Liso F, Grossi C, Meroni PL, Cabiddu G, Messa P, Ravani P, Mosca M. Maternal outcome in pregnant women with lupus nephritis. A prospective multicenter study. J Autoimmun. 2016 Nov;74:194–200. doi: 10.1016/j.jaut.2016.06.012. Epub 2016 Jun 30.

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AB0485 PRIMARY ANTIPHOSPHOLIPID SYNDROME: MATERNAL AND FETAL OUTCOME

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Background: Antiphospholipid antibodies (APLAs) have been associated with pregnancy loss and other obstetric complications, such as pre-eclampsia, fetal growth restriction and preterm delivery.

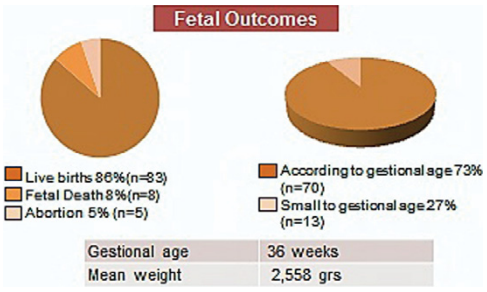
Objectives: The purpose of this work is to evaluate maternal and fetal pregnancy outcome in Primary Antiphospholipid Syndrome (PAPS).

Methods: We retrospectively studied PAPS patients according to Sydney Criteria who are attended to Materno Neonatal Hospital during the last 8 years. We evaluated demographic, obstetric and thrombotic clinical data. Maternal complications were evaluated: Preeclampsia, HELLP, Gestational Diabetes, Premature rupture of fetal membranes, arterial and venous thrombosis, mortality, the way of end of pregnancy, and others. Fetal outcome was evaluated as live birth, gestational age and weight at birth.

Results: 96 pregnancies in 68 patients were included. Maternal mean age was 30,75 years old, 84% were from Córdoba city, 70.5% did not have health insurance, and they have mean previous pregnancies of 4 with 1 live birth. Maternal complications were: Pre eclampsia in 12 patients (12.5%), Preterm delivery in 6 patients (6.25%), Premature rupture of fetal membranes in 8 (8.33%), Gestational Diabetes in 7 (7.29%), Arterial Thrombosis in 2 (2.08%), Venous thrombosis in 3 (3.12%). 33,69% have normal labour and 66,33% cesarean section. 86% of patients have live birth with mean gestational age of 36 weeks with mean weight at birth of 2.558 g and 73% of patients according to gestational age.

Table 1. Maternal Complications

Pre Eclampsia	12 (12,5%)
Pre term delivery	6 (6,2%)
Premature rupture of fetal membranes	8 (8,2%)
Gestacional Diabetes	7 (7,3%)
Arterial Thrombosis	2 (2%)
Venous Thrombosis	3 (3,1%)
Notch	10 (10%)
Mortality	0



Conclusions: PAPS pregnancies patients had a good maternal and fetal outcome in this study.

References:

[1] Bertolaccini ML, Sanna G2 Recent advances in understanding antiphospholipid syndrome. F1000Res. 2016 Dec 22;5:2908. doi: 10.12688/f1000research.9717.1. eCollection 2016.

[2] Pelusa HF, Pezzarini E, Basiglio CL, Musuruana J, Bearzotti M, Svetaz MJ, Daniele SM, Bottai H, Arriaga SM. Antiphospholipid and antioangiogenic activity in females with recurrent miscarriage and antiphospholipid syndrome.Ann Clin Biochem. 2016 Sep 16. pii: 0004563216672248. [Epub ahead of print.

[3] Moroni G, Doria A, Giglio E, Tani C, Zen M, Strigini F, Zaina B, Tincani A, de Liso F, Matinato C, Grossi C, Gatto M, Castellana P, Limardo M, Meroni