

Abstract THU0275 – Figure 1. Distribution of neurocognitive impairment expressed in Mean Domain Z score.

Conclusion: We evaluated for the first time PL in a single center SLE cohort finding a dysfunction in almost half of patients enrolled, significantly more frequent than the other assessed domains.

REFERENCE:

- [1] Rinaldi C, Marangolo P, Lauriola M. "BLED Santa Lucia: Batteria sul Linguaggio dell'Emisfero Destro Santa Lucia" Giunti O.S., 2006.

Disclosure of Interests: Carmelo Pirone: None declared, Fulvia Ceccarelli: None declared, Concetta Mina: None declared, Alfredo Mascolo: None declared, Carlo Perricone Speakers bureau: BMS; Lilly, Celgene, Sanofi, Barbara Mazzotta: None declared, Laura Massaro: None declared, francesca spinelli: None declared, cristiano alessandri: None declared, Guido Valesini: None declared, fabrizio conti: None declared

DOI: 10.1136/annrheumdis-2019-eular.5008

THU0276 CHARACTERISTICS OF NEUROLOGIC INVOLVEMENT AND ITS RELATED FACTORS IN PRIMARY SJÖGREN SYNDROME

[minli qiu](#), Yutong Jiang, Wen Yang, Jieruo Gu. *The third affiliated Hospital of Sun Yat-sen University, rheumatology, guangzhou, China*

Background: Neurological manifestations seem common in primary Sjögren's syndrome (pSS) but their reported prevalences vary in Chinese. And few studies reveal if the disease activity is associated with neurological involvement.

Objectives: To analyze the clinical neurological manifestations of primary Sjögren syndrome (pSS), and to evaluate the relationship with disease activity.

Methods: 112 patients (7 male, 105 female) who fulfilled the 2002 American-European Consensus Group criteria for pSS were enrolled in the study. For each patient, the clinical features were evaluated by medical data including clinical, laboratory and immunologic data, and neurological examinations including electromyography, magnetic resonance imaging, cerebrospinal fluid, and electroencephalogram. Statistical methods used were t-test, chi-square test and Logistic regression.

Results: Data at inclusion were available for 112 patients, whose mean age was 55±10 years. Neurological involvement was noted in 19.6(22/112) patients, including 17(15.2%) with peripheral nervous system (PNS) manifestations, 3(2.8%) with central nervous system (CNS) manifestations and 2(1.8%) with both PNS and CNS involvements. Optic neuritis and trigeminal neuralgia were revealed frequently in cranial neuropathy. Anti-aquaporin 4 antibody was detected in two patients with optic neuritis. The clinical spectrum of peripheral neuropathies encountered in Sjögren's syndrome patients was wide with sensory neuropathies being the most common. Tibial nerve, peroneal nerve and sural nerve were the most likely involved and lower limb involvement accounted for 68.4%(13/19). The frequency of Raynaud's phenomenon was significantly higher [31.8%(7/22) vs 4.4%(4/90), P<0.01] as well as acroanesthesia [72.7% vs 8.9%, P<0.01] in pSS with neurological involvement than in pSS without neuropathy. The median values of EULAR Sjögren's syndrome disease activity index (ESSDAI) were 5.6 (range 2.6-7.6) and 3.2 (range 1.4-5.2) in the NS and non-NS groups respectively (P<0.01). We found a significant rise of neuropathy risk associated with Raynaud's phenomenon (relative risk 9.365, 95%CI 3.191-40.093, P=0.003) and ESSDAI (relative risk 1.628, 95%CI 1.169-1.969, P=0.001). Elevated titers of rheumatoid factor (P<0.05) and ANA (P<0.01) were common in patients with neuropathy.

Conclusion: Neuropathy is not a rare manifestation of pSS. Prevalence of neurological involvement in pSS is 19.6%. Raynaud's phenomenon and high disease activity may be the risk factors for neuropathy. Autoantibodies might contribute to the injury of the nervous system.

REFERENCES:

- [1] Jamilloux Y, Magy L, Hurtevent JF, et al. Immunological profiles determine neurological involvement in Sjögren's syndrome. *Eur J Intern Med* 2014;25:177-81.
- [2] Ramos-Casals M, Brito-Zeron P, Solans R, et al. Systemic involvement in primary Sjögren's syndrome evaluated by the EULAR-SS disease activity index. *Rheumatology (Oxford)* 2014;53:321-31.
- [3] Teixeira F, Moreira I, Silva AM, et al. Neurological involvement in Primary Sjögren Syndrome. *Acta Reumatol Port.* 2013 Jan-Mar;38(1):29-36.

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.5871

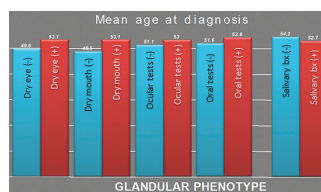
THU0277 HOW THE AGE AT DIAGNOSIS MODIFIES THE PHENOTYPE OF PRIMARY SJÖGREN SYNDROME: ANALYSIS IN 11,420 PATIENTS (BIG DATA SJÖGREN PROJECT)

Soledad Retamozo¹, Nihan Acar-Denizli², Wan Fai Ng³, Ildiko Fanny Horváth⁴, Astrid Rasmussen⁵, Raphaële Seror⁶, Li Xiaomei⁷, Chiara Baldini⁸, Jacques-Eric Gottenberg⁹, Pulukool Sandhya¹⁰, Luca Quartuccio¹¹, Roberta Priori¹², Gabriela Hernandez-Molina¹³, Berkan Armagan¹⁴, Aike A. Kruize¹⁵, Seung-Ki Kwok¹⁶, Marika Kvarnstrom¹⁷, Sonja Praprotnik¹⁸, Damien Sene¹⁹, Elena Bartoloni Bocca²⁰, Roser Solans-Laqué²¹, Maureen Rischmueller²², Thomas Mandl²³, Yasunori Suzuki²⁴, David Isenberg²⁵, Valeria Valim²⁶, Roberto Giacomelli²⁷, Valerie Devauchelle-Pensec²⁸, Benedikt Hofauer²⁹, Michele Bombardieri³⁰, Virginia Fernandes Moça Trevisani³¹, Daniel Hammenfors³², Sandra Pasoto³³, Tamer A Gheita³⁴, Fabiola Atzeni³⁵, Jacques Morel³⁶, Cristina Vollenveider³⁷, Sandra Consani-Fernández^{38,39}, Xavier Mariette⁴⁰, Manuel Ramos-Casals⁴¹, Pilar Brito-Zerón^{42,43}. ¹INICSA-UNC-CONICET, IUCBC, Cordoba, Argentina; ²Mimar Sinan Univ, Istanbul, Turkey; ³Newcastle Univ, Newcastle, United Kingdom; ⁴Debrecen Univ, Debrecen, Hungary; ⁵OMRF, Oklahoma City, United States of America; ⁶Univ Paris Sud, INSERM, Paris, France; ⁷Anhui Provincial Hosp, Hefei, China; ⁸Pisa Univ, Pisa, Italy; ⁹Strasbourg Univ, CNRS, Strasbourg, France; ¹⁰Christian Med Coll and Hosp, Vellore, India; ¹¹Hosp "Santa Maria della Misericordia", Udine, Italy; ¹²Sapienza Univ, Rome, Italy; ¹³INCMSZ, Mexico, Mexico; ¹⁴Hacettepe Univ, Ankara, Turkey; ¹⁵Univ Medical Center, Utrecht, Netherlands; ¹⁶Catholic Univ of Korea, Seoul, Korea, Rep. of (South Korea); ¹⁷Karolinska Institute, Stockholm, Sweden; ¹⁸Univ Medical Centre, Ljubljana, Slovenia; ¹⁹Univ Paris VII Publique, Paris, France; ²⁰Perugia Univ, Perugia, Italy; ²¹Vall Hebron, Barcelona, Spain; ²²Western Australia Univ, Crawley, Australia; ²³Malmö Hosp, Lund Univ, Lund, Sweden; ²⁴Kanazawa Univ Hosp, Ishikawa, Japan; ²⁵University College, London, United Kingdom; ²⁶Federal Univ Espirito Santo, Vitória, Brazil; ²⁷Wroclaw Medical Hosp, Wroclaw, Poland; ²⁸Uppsala Univ, Uppsala, Sweden; ²⁹Univ Medical Center, Groningen, Netherlands; ³⁰Nagasaki University, Nagasaki, Japan; ³¹L'Aquila Univ, L'Aquila, Italy; ³²Brest Univ Hosp, CERAINO, Brest, France; ³³Technische Univ, München, Germany; ³⁴Queen Mary Univ, London, United Kingdom; ³⁵Federal Univ of São Paulo, São Paulo, Brazil; ³⁶Haukeland Univ Hosp, Bergen, Norway; ³⁷Hosp das Clínicas, USP, São Paulo, Brazil; ³⁸Cairo University, Cairo, Egypt; ³⁹Messina and Milan Univ, Milan, Italy; ⁴⁰Montpellier Univ Hosp, Montpellier, France; ⁴¹German Hosp, Buenos Aires, Argentina; ⁴²UdelaR, Montevideo, Uruguay; ⁴³Hosp Maciel, Montevideo, Uruguay; ⁴⁴H. Clinic, IDIBAPS, Barcelona, Spain; ⁴⁵H. CIMA- Sanitas, Barcelona, Spain

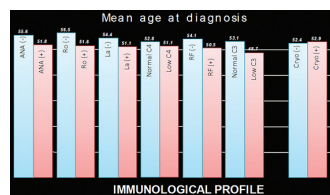
Objectives: To analyse how the age at diagnosis modifies the phenotype of primary Sjögren syndrome (SS)

Methods: The Big Data Sjögren Project was formed in 2014 to take a "high-definition" picture of the main features of primary SS at diagnosis by merging international SS databases. By January 2019, the database included 11,420 patients from 24 countries of the 5 continents.

Results: Women (52.7 vs 54.6 yrs in men, p<0.001) and non-White patients (49.6 vs 53.5 yrs in Whites, p<0.001) were diagnosed at a younger age. Patients without sicca symptoms, with normal oral/ocular diagnostic tests and with positive biopsy were also diagnosed at younger ages (p<0.001 all comparisons).



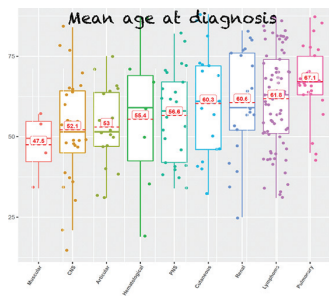
Abstract THU0277 – Figure 1



Abstract THU0277 – Figure 2

Patients with positive immunological markers had a younger diagnostic age, except for cryoglobulins ($p < 0.001$ all comparisons). Patients without systemic activity (ESSDAI score = 0) were diagnosed at an older age (55.5 vs 52.1 yrs in those with systemic activity, $p < 0.001$). There was a wide variation in the age at diagnosis of patients presenting with systemic activity according to the organ involved.

Conclusion: Age at diagnosis plays a key role in the glandular and systemic phenotype expressed by primary SjS patients at the time of diagnosis.



Abstract THU0277 – Figure 3

Disclosure of Interests: Soledad Retamozo: None declared, Nihan Acar-Denizli: None declared, Wan Fai Ng: None declared, Ildiko Fanny Horváth: None declared, Astrid Rasmussen: None declared, Raphaële Seror Grant/research support from: Pfizer, Consultant for: Bristol-Myers Squibb, Pfizer, Amgen, Eli Lilly, Roche, Celgene, GlaxoSmithKline, MedImmune, Xiaomei Li: None declared, Chiara Baldini: None declared, Jacques-Eric Gottenberg Grant/research support from: Bristol-Myers Squibb, Grant/research support from: Bristol-Myers Squibb, Consultant for: Bristol-Myers Squibb, Lilly, Pfizer, Sanofi-Genzyme, UCB Pharma, Consultant for: Bristol-Myers Squibb, Eli Lilly, UCB, Sanofi-Genzyme, Pfizer, Pulukool Sandhya: None declared, Luca Quartuccio: None declared, Roberta Priori: None declared, Gabriela Hernandez-Molina: None declared, Berkan Arman: None declared, Aike A. Kruije: None declared, Seung-Ki Kwok: None declared, Marika Kvarnstrom: None declared, Sonja Praprotnik: None declared, Damien Sene: None declared, Elena Bartoloni Bocci: None declared, Roser Solans-Laqué: None declared, Maureen Rischmueler Consultant for: Abbvie, Bristol-Meyer-Squibb, Celgene, Glaxo Smith Kline, Hospira, Janssen Cilag, MSD, Novartis, Pfizer, Roche, Sanofi, UCB, Thomas Mandl: None declared, Yasunori Suzuki: None declared, David Isenberg: None declared, Valeria Valim: None declared, Agata Sebastian: None declared, Gunnell Nordmark: None declared, Hendrika Bootsma: None declared, Hideki Nakamura: None declared, Roberto Giacomelli Grant/research support from: Pfizer, Actelion, Speakers bureau: Actelion, Bristol-Myers Squibb, Merck Sharp & Dohme, Abbvie, Pfizer, Sobi, Roche, Valerie Devauchelle-Pensec Grant/research support from: Roche-Chugai, Speakers bureau: MSD, BMS, UCB, Roche, Benedikt Hofauer Consultant for: Consultant for Galvani Bioelectronics for the area of sleep disorders., Michele Bombardieri Grant/research support from: Celgene, Consultant for: Medimmune, Virginia Fernandes Moça Trevisani: None declared, Daniel Hammenfors: None declared, Sandra Pasoto: None declared, Tamer A Gheita: None declared, Fabiola Atzeni: None declared, Jacques Morel: None declared, Cristina Vollenveider: None declared, Sandra Consani-Fernández: None declared, Xavier Mariette Grant/research support from: Servier, Consultant for: AstraZeneca, Bristol-Myers Squibb, GlaxoSmithKline, Janssen, Pfizer, UCB Pharma, Manuel Ramos-Casals: None declared, Pilar Brito-Zerón: None declared

DOI: 10.1136/annrheumdis-2019-eular.2428

THU0278

ADVERSE PREGNANCY OUTCOMES (APOS) AFTER MULTI-PROFESSIONAL FOLLOW-UP IN WOMEN AFFECTED BY SYSTEMIC LUPUS ERYTHEMATOSUS (SLE). REPORT FROM A SINGLE CENTER IN SOUTHERN SWEDEN.

Muna Saleh¹, Andreas Jonsen², Anders Bengtsson², Michele Compagno².

¹Rheumatology, Helsingborg, Department of Clinical Sciences, Helsingborg, Sweden; ²Lund, Department of Clinical Sciences Lund, Rheumatology, Lund, Sweden

Background: Systemic lupus erythematosus (SLE) often affects women in childbearing age. Modern management of SLE patients has improved the pregnancy outcomes over the last years. However, there is still an increased risk of maternal, fetal and neonatal complications (1).

Objectives: We report our experience in the multi-professional follow-up of pregnant women affected by SLE. Our aim was to investigate the association of potential risk factors with the occurrence of adverse pregnancy outcomes (APOs).

Methods: We selected the patients who have had one or more pregnancies, between January 2002 and January 2018, among all the SLE patients at the Department of Rheumatology, University Hospital in Lund, Sweden. Longitudinal clinical and laboratory data from rheumatology and obstetrics units, as well as from neonatal units, were collected and analyzed. We assessed the association between APOs and putative SLE-related risk factors as well as known risk factors in the selected population.

Results: We investigated the outcome of 59 pregnancies in 28 SLE patients. Eighteen (64.3%) patients had one or more APOs. Forty-four (74.6%) pregnancies terminated with a delivery, whereof 36 (61%) term pregnancies and 8 (13.6%) before 36 gestational weeks. Caesarean section terminated 13 (29.5%) pregnancies. Thirteen (22%) miscarriages and two (3.4%) intentional abortions were recorded. HELLP syndrome occurred in 1 (1.7%) and pre-eclampsia in 11 (18.6%) gestations. Among 16 cases of fetal growth restriction, 5 (8.5%) gestations resulted in intrauterine growth restriction, 1 (1.7%) in a small for gestational age baby and 10 (24.4%) in low birth weight. No cases of eclampsia, stillbirths or congenital heart disease were recorded. Neonatal lupus erythematosus occurred in 1 (1.7%) baby. APOs were associated with anti-phospholipid syndrome and/or presence of anti-phospholipid antibodies (OR 4.5 - $p = 0.009$). Previous renal involvement was associated with APOs (OR 5.9 - $p = 0.005$) and with fetal growth restriction (OR 11 - $p = 0.03$). Active disease (SLEDAI > 3) six months before or during pregnancies was associated with miscarriage (OR 13 - $p = 0.02$). Pre-eclampsia and pre-term deliveries were not significantly associated with any of the investigated risk factors.

Conclusion: One or more APOs occurred in the majority of patients in our study and a few severe outcomes were recorded. Our experience suggests that the presumptive risk factors for APOs in SLE patients are disease related, such as high disease activity six months before or during pregnancies, previous renal involvement and anti-phospholipid syndrome/antibodies.

REFERENCE:

- IM Jakobsen, RB Helmig & K Stengaard-Pedersen (2015) Maternal and foetal outcomes in pregnant systemic lupus erythematosus patients: an incident cohort from a stable referral population followed during 1990-2010, Scandinavian Journal of Rheumatology, 44:5, 377-384, DOI: 10.3109/03009742.2015.1013982

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.7977

THU0279

POLYUNSATURATED FATTY ACIDS (PUFAS) AND SPECIALIZED PRO-RESOLVING MEDIATORS (SPMS) ARE DECREASED IN PLASMA AND SERUM FROM SLE PATIENTS COMPARED TO HEALTHY CONTROLS

Julia Davis-Porada¹, Charles Serhan², Paul Norris², Peter Lipsky³, Jane E. Salmon¹. ¹Hospital for Special Surgery, New York, United States of America; ²Center for Experimental Therapeutics and Reperfusion Injury; Department of Anesthesia, Perioperative and Pain Medicine; Brigham and Women's Hospital and Harvard Medical School, Boston, United States of America; ³AMPEL BioSolutions, Charlottesville, United States of America

Background: Systemic lupus erythematosus (SLE) is an autoimmune disease with persistent, inflammatory mediated organ damage. It has been suggested that omega-3-polyunsaturated fatty acids (PUFAs) are low in SLE patients and that