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Disclosure of Interests: Viktoria Fana: None declared, Uffe Møller Døhn Speakers bureau: Speakers fee from Eli Lilly, Novartis and Roche, Lene Terslev Speakers bureau: Speakers fee from : Roche, Novartis, Pfizer, MSD, BMS, Celgene

DOI: 10.1136/annrheumdis-2019-eular.7409

THU0283

PATIENT ACCEPTABLE SYMPTOMS STATE (PASS) QUESTIONNAIRE APPLICATION IN THE COHORT OF SLE PATIENTS FROM THE SPANISH SOCIETY OF RHEUMATOLOGY (RELESSER): ASSOCIATION WITH ACTIVITY INDEX

Tomas Vazquez Rodriguez¹, Iñigo Rua Figueroa², Victor Del Campo Pérez³, J. Narváez⁴, Francisco J López-Longo⁵, María Galindo-Izquierdo⁶, Jaime Calvo-Alen⁷, Antonio Fernandez-Nebro⁸, Juan Ovalles⁹, Pilar Rubio Muñoz¹⁰, Eva Tomero Muriel¹¹, Coral Mouriño Rodríguez², Esther Uriarte Isacelaya¹², Angela Pecondon-Español¹³, Mercedes Freire González¹⁴, Ricardo Blanco¹⁵, Marian Gantes Mora¹⁶, Mónica Ibañez Barceló¹⁷, Carlos A. Montilla-Morales¹⁸, Jose M Pego-Reigosa³, RELESSER (Spanish Society of Rheumatology Lupus Registry). ¹HOSPITAL LUCUS AUGUSTI, LUGO, Spain; ²HOSPITAL GRAN CANARIA DR NEGRIN, Gran Canaria, Spain; ³COMPLEJO HOSPITALARIO UNIVERSITARIO DE VIGO, Vigo, Spain; ⁴HOSPITAL DE BELLVITGE, Barcelona, Spain; ⁵HOSPITAL GENERAL UNIVERSITARIO GREGORIO MARAÑÓN, MADRID, Spain; ⁶HOSPITAL UNIVERSITARIO 12 DE OCTUBRE, Madrid, Spain; ⁷HOSPITAL UNIVERSITARIO ARABA, Alava, Spain; ⁸HOSPITAL REGIONAL UNIVERSITARIO DE MÁLAGA, Malaga, Spain; ⁹HOSPITAL GENERAL UNIVERSITARIO GREGORIO MARAÑÓN, Madrid, Spain; ¹⁰HOSPITAL GERMANS TRIAS I PUJOL, Badalona, Spain; ¹¹HOSPITAL DE LA PRINCESA, Madrid, Spain; ¹²HOSPITAL DE DONOSTIA, Donostia, Spain; ¹³HOSPITAL MIGUEL SERVET, Zaragoza, Spain; ¹⁴HOSPITAL JUAN CANALEJO A CORUÑA, A Coruña, Spain; ¹⁵HOSPITAL MARQUÉS DE VALDECILLA, Santander, Spain; ¹⁶HOSPITAL UNIVERSITARIO DE CANARIAS, Las Palmas de Gran Canaria, Spain; ¹⁷HOSPITAL SON LLÀTZER, Mallorca, Spain; ¹⁸HOSPITAL CLÍNICO UNIVERSITARIO SALAMANCA, Salamanca, Spain

Background: Little is known about the patient related outcomes and disease activity in systemic lupus erythematosus. Damage and impact are issues that have not been associated with activity in lupus previously.

Objectives: In a large cohort of systemic lupus erythematosus (SLE) patients, to evaluate the association between a Patient Acceptable Symptom State (PASS) and three different domains of the disease: activity, damage and impact of SLE on patients' lives

Methods: Cross-sectional study of 1,364 SLE (ACR 97 Criteria) patients from the Spanish Society of Rheumatology Lupus Registry (RELESSER). Patients were clinically assessed by the physicians, who collected data about demographics, clinical manifestations, laboratory features and therapies. SLE activity was assessed by using the SLEDAI (SLE Disease Activity Index). The Systemic Lupus International Collaborating Clinics/American College of Rheumatology Damage Index (SLICC/ACR DI) was used to measure damage accrual. The impact of SLE on patients' lives was evaluated by using the Lupus Impact Tracker (LIT). The PASS question "Considering all the different ways your disease is affecting you, if you would stay in this state for the next months, do you consider that your current state is satisfactory?" was answered in a dichotomized way: yes/no. Measures of central tendency and spread were used to describe responses and T-test was used to evaluate the independence between PASS and the other questionnaires and indices.

Results: Mean age (years) $\pm$ S.D. of the 1,364 patients included in the study was 49.9 ± 13.3 ; 90.3% were female and 94.9% were Caucasian. In the total of patients, 979 (71.8%) were in PASS. Patients in PASS had significantly lower activity (SLEDAI Score) than those not in PASS (2.4 ± 3.2 vs. 3.0 ± 3.9 , respectively; $p=0.007$). The SLICC/ACR DI was significantly lower in the group of patients in PASS compared to those without PASS (0.64 ± 1.1 vs. 0.81 ± 0.21 , respectively; $p=0.022$). SLE had a significantly lower impact on patients in PASS in comparison to those without PASS (LIT Score: 8.47 ± 7.5 vs. 19.8 ± 8.34 , respectively; $p=0.001$).

Conclusion: In the largest observational European Registry of SLE patients, PASS was associated with other domains of the disease: activity, damage and impact on patients' life. PASS is a simple and reliable patient-reported outcome that can be a useful tool to evaluate patients' well-being.

Disclosure of Interests: Tomas Vazquez Rodriguez: None declared, Iñigo Rua Figueroa: None declared, Victor Del Campo Pérez: None declared, J. Narváez Consultant for: Bristol-Myers Squibb, Francisco J López-Longo: None declared, María Galindo-Izquierdo: None declared, Jaime Calvo-Alen: None declared, Antonio Fernandez-Nebro: None declared, Juan Ovalles: None declared, Pilar Rubio Muñoz: None declared, Eva Tomero Muriel: None declared, Coral Mouriño Rodríguez: None declared, Esther Uriarte Isacelaya: None declared, Angela Pecondon-Español: None declared, Mercedes Freire González: None declared, Ricardo Blanco Grant/research support from: Abbvie, MSD, and Roche, Consultant for: Abbvie, Pfizer, Roche, Bristol-Myers, Janssen, Speakers bureau: Abbvie, Pfizer, Roche, Bristol-Myers, Janssen, Marian Gantes Mora: None declared, Mónica Ibañez Barceló: None declared, Carlos A. Montilla-Morales: None declared, Jose M Pego-Reigosa: None declared

DOI: 10.1136/annrheumdis-2019-eular.1945

THU0284

WHAT DO HEMATOLOGICAL ABNORMALITIES TELL US IN SLE? RESULTS FROM TWO INDEPENDENT MULTICENTER EUROPEAN SLE COHORTS

Sule Yavuz¹, Dondur Cansu², Dionisis Nikolopoulos³, Francesca Crisafulli⁴, Ana M Arantunes⁵, Christina Adamichou⁶, Sara Reid¹, Chiara Satgnaro⁷, Laura Andreoli⁸, Angela Tincani⁹, Maria Moraes-Fontes⁵, George Bertsias⁶, Marta Mosca⁹, Dag Leonard¹, Antonis Fanouriakis³, Lars Ronnblom¹, SwedishSLE Network¹⁰, The Authors would like to thank Dr. Koray Tascilar for his technical assistance. ¹Uppsala University, Uppsala, Sweden; ²Eskişehir Osmangazi University Hospital, Eskişehir, Turkey; ³"Attikon" University Hospital, Athens, Greece; ⁴Rheumatology and Clinical Immunology Unit, Spedali Civili and University of Brescia, Brescia, Italy; ⁵Centro Hospitalar de Lisboa Central, Lisboa, Portugal; ⁶University of Crete, Crete, Greece; ⁷University of Pisa, Pisa, Italy; ⁸Spedali Civili and University of Brescia, Brescia, Italy; ⁹Rheumatology Unit, Department of Clinical and Experimental Medicine, University of Pisa, Pisa, Italy; ¹⁰SwedishSLE Network, Stockholm, Sweden

Background: Detailed analysis of hematological manifestations are limited and their clinical impact on disease remain obscure.

Objectives: To scrutinize factors associated with different hematological abnormalities (HA) in SLE patients and their impact on infections, bleeding and damage accrual.

Methods: A dataset (GIPTSLE) originated from SLE patients in Europe was studied. The dataset consisted of six monthly visits of each patients for at least 2 years. Results were compared with another well-established SLE cohort from Sweden (Swedish SLE network). Patients in both cohorts fulfilled the ACR1982 SLE criteria. Variables collected at each visit included CBC, presence or absence of haemolytic anemia, all domains of SLEDAI-2K, medications, infection or bleeding episodes, Systemic Lupus International Collaborating Clinics/ACR damage index (SDI). HA occurred at the beginning or during follow-up were defined according to the ACR criteria. HA was only considered in patients with no prior use of immunosuppressives or biologic agents at least 3 months before the first HA events. The Swedish confirmation cohort included all the variables of interest. We excluded all haematological domains from SLEDAI-2K (aSLEDAI) for the analysis. Based on six monthly change in SDI, each visit was labelled either "damage transition" or "non-damage transition". Generalized estimating equations (GEE), multiple logistic regression, Chi-square test and independent samples t test were used where it was appropriate.

Results: Of the 1430 visits of 286 patients analysed from the first cohort (89.5% female, 95.8% Caucasian, 64.7% dsDNA positive) 60% had at least one HA. At the enrolment, the median (range) disease duration was 8 yrs (0-38), aSLEDAI-2K was 6 (0-25) and SDI was 0(0-6). Upon GEE analysis, lymphopenia was significant for SDI (OR=2.5, 1.0-5.9). Upon GEE analysis after further adjusting prednisolone exposure, HA found to be significant for SDI was thrombocytopenia (OR=3.6, 1.04-12.1) but no significant evidence for the dependence of this relationship on time. The effect of lymphopenia was attenuated. HR for bleeding was significant when platelets were below 50K (HR=2.6, 1.15-6.1) Of the 1395 patients analysed from the second set (86.8% female, 93.0% Caucasian, 61.6 dsDNA positive), 63.4% had HA. At the last visit, the median (range) disease duration was 14yrs (1-65) and SDI was 1(0-14). Upon multiple regression analysis after adjusting age, sex and prednisolone exposure both thrombocytopenia (OR=2.2, 1.3-3.6) and lymphopenia (OR=1.8, 1.2-

2.6) had significant effect on SDI. HA at the time of diagnosis or occurring at any time during disease course did not contribute to mortality.

Conclusion: Lymphopenia contributes independently damage accrual in European background. Lymphopenia and thrombocytopenia at early disease appear to be independent risk factors for subsequent damage.

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Disclosure of Interests: Sule Yavuz: None declared, Dondu Cansu: None declared, Dionisis Nikolopoulos: None declared, Francesca Crisafulli: None declared, Ana M Arantunes: None declared, Christina Adamichou: None declared, Sara Reid: None declared, Chiara Satgnaro: None declared, Laura Andreoli: None declared, Angela Tincani Consultant for: UCB, Pfizer, Abbvie, BMS, Sanofi, Roche, GSK, AlphaSigma, Lilly, Janssen, Cellgene, Novartis, Maria Moraes-Fontes: None declared, George Bertias: None declared, Marta Mosca Paid instructor for: GlaxoSmithKline, Lilly, UCB, Dag Leonard: None declared, Antonis Fanouriakis Paid instructor for: Amgen, GSK, Speakers bureau: Abbvie, Enorasis, Genesis Pharma, Lars Ronnblom: None declared, SWEDISHSLE NETWORK: None declared
DOI: 10.1136/annrheumdis-2019-eular.3936

THU0285

UMBILICAL ARTERIAL DOPPLER ULTRASONOGRAPHY PREDICTS LATE PREGNANCY OUTCOMES IN PATIENTS WITH LUPUS NEPHRITIS: A MULTICENTER STUDY FROM SOUTHERN CHINA

zhongping zhan¹, Dongying Chen¹, Shiweng Yuan², Xiaodong Wang³, Yanfeng Zhan⁴. ¹The First Affiliated Hospital of Sun Yat-sen University, Department of Rheumatology, Guangzhou, China; ²Guangzhou First People's Hospital, Department of Rheumatology, Guangzhou, China; ³The First Affiliated Hospital of Guangzhou University of Chinese Medicine, Department of Ultrasound, Guangzhou, China; ⁴The First Affiliated Hospital of Sun Yat-sen University, Department of Obstetrics and Gynecology, Guangzhou, China

Background: Compared with the general population, patients with lupus nephritis (LN) are still at high risk of adverse pregnancy outcomes (APOs). Umbilical artery is the last vessel upstream of the placenta and is particularly important for placental perfusion and foetal development. Increased umbilical artery resistance could be traced by Doppler velocimetry, which is frequently related to pre-eclampsia, intrauterine growth restriction (IUGR), and foetal distress. Umbilical artery Doppler is used as a screening tool for placenta-related diseases in the general population. However, the predictive value in complications of LN pregnancies has not been widely assessed.

Objectives: To investigate the fetal adverse pregnancy outcomes (APOs) and the predictive value of umbilical arterial Doppler ultrasonography in the third trimester in pregnant women with LN.

Methods: A retrospective cohort study enrolling 203 LN patients with pregnancies from 2007 to 2017 from three centers was performed. These patients received umbilical arterial Doppler ultrasound examination during 28-34 gestational weeks. Doppler velocity waveforms of the umbilical arteries were assessed with resistance index (RI), systolic/diastolic ratio (S/D) and pulsatility index (PI).

Results: Fetal APOs occurred in over half of the patients (103/203, 50.7%). Sixty-six pregnancies (66/203, 32.5%) ended with preterm births. The incidence rate of IUGR was 18.2% (37/203). Fetal distress was noted in 23 pregnancies (23/203, 11.3%). All the Doppler parameters were higher in patients with IUGR, fetal distress and composite APOs than in patients without any APOs. Patients with IUGR and fetal distress had significantly higher values of PI, RI, and S/D. It was noted that PI, RI and S/D was higher in patients with premature delivery than those with full-term delivery. However, only the difference of RI and S/D reached statistical significance. RI indicated the highest risk of IUGR and composite APOs. The cut-off values were 0.66 and 0.67, respectively. Sensitivities were 51.4% and 33.7%, and specificities were 87.4% and 92.1%. S/D was also a best predictor for IUGR, with the optimal cut-off value of 2.88. Sensitivity and specificity were comparable with RI. PI over 0.84 was an ideal indicator for fetal distress with an optimal combination of sensitivity (89.5%) and specificity (51.6%).

Conclusion: Fetal complications were frequent in patients with LN. Umbilical arterial Doppler ultrasonography was a useful measure to predict late IUGR, fetal distress, and the composite APOs.

Acknowledgement: No

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2019-eular.1670

17. Vasculitis

THU0286

MANAGEMENT OF TAKAYASU ARTERITIS: A SYSTEMATIC LITERATURE REVIEW INFORMING THE 2018 UPDATE OF THE EULAR RECOMMENDATIONS FOR THE MANAGEMENT OF LARGE VESSEL VASCULITIS

Ana Filipa Águeda¹, Sara Monti², Raashid Luqmani³, Frank Buttgereit⁴, Maria C. Cid⁵, Bhaskar Dasgupta⁶, Christian Dejaco⁷, Alfred Mahr⁸, Cristina Ponte⁹, Carlo Salvarani¹⁰, Wolfgang A. Schmidt¹¹, Bernhard Hellmich¹². ¹Department of Rheumatology, Centro Hospitalar do Baixo Vouga E.P.E., Aveiro, Portugal; ²Policlinico S. Matteo IRCCS Foundation, University of Pavia, Pavia, Italy; ³University of Oxford, Nuffield Department of Orthopaedics, Rheumatology and Musculoskeletal Sciences, Oxford, United Kingdom; ⁴Charité University Medicine Berlin, Berlin, Germany; ⁵Department of Autoimmune Diseases, Hospital Clinic, University of Barcelona, Barcelona, Spain; ⁶Southend University Hospital, NHS Foundation Trust, Westcliff-on-Sea, United Kingdom; ⁷Medical University of Graz, Graz, Austria; ⁸Hospital Saint-Louis, University Paris Diderot, Paris, France; ⁹Hospital de Santa Maria, Centro Hospitalar Lisboa Norte, Lisbon, Portugal; ¹⁰USL-IRCCS Company of Reggio Emilia, Reggio Emilia, Italy; ¹¹Immanuel Krankenhaus Berlin, Berlin, Germany; ¹²Department of Internal Medicine, Rheumatology and Immunology, Vasculitis-Center Tübingen-Kirchheim, Medius Klinik Kirchheim, University of Tübingen, Kirchheim-unter-Teck, Germany

Background: European League Against Rheumatism (EULAR) recommendations on large vessel vasculitis (LVV) management were published in 2009.¹ However, given recent advances, especially in therapeutics, an update was needed.

Objectives: To collect available evidence on management of LVV to inform the 2018 update of the EULAR management recommendations.

Methods: Two independent systematic literature reviews (SLRs) were performed, one focused on diagnosis and monitoring and the other on drugs and surgical treatments. Using a predefined PICO strategy, Medline, Embase and Cochrane databases were accessed, and eligible papers reviewed. This abstract reports the main results for Takayasu arteritis (TAK). Results on giant cell arteritis (GCA) are presented elsewhere.

Results: A total of 283 articles were selected from the SLRs. Relevant heterogeneity precluded a meta-analysis.

The clinical pattern of TAK disease may differ according to age and gender. Males appear to have more complications than females. The presence of major complications (e.g. aneurysm formation), a progressive disease course and a weaker inflammatory response appear to relate to a more unfavorable prognosis, with survival rates as low as 43% at 15 years after diagnosis. Thus, follow up is essential, but there is no good quality evidence regarding the best timing and methods for disease monitoring.

High-quality evidence to guide the treatment of TAK was not found. Glucocorticoids (GC) are widely accepted as first line treatment. However, many patients require doses above 10 mg prednisolone per day for disease control. Conventional immunosuppressive drugs and TNF-inhibitors appeared to be beneficial in case series and open-label studies, but high-quality evidence for their use is lacking. Tocilizumab showed modest signs of efficacy in a randomized controlled clinical trial, although the primary endpoint was not achieved. Revascularization procedures (aneurysm/stenosis) may be required and should be performed during stages of inactive disease.

Conclusion: Evidence to guide monitoring and treatment of TAK patients is predominantly derived from observational studies with low level of evidence. Therefore, higher-quality studies are needed in the future.

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Disclosure of Interests: Ana Filipa Águeda: None declared, Sara Monti: None declared, Raashid Luqmani Grant/research support from: Roche, Vifor and GSK, Frank Buttgereit: None declared, Maria C. Cid Grant/research support from: Kiniksa Pharmaceuticals, Consultant for: Roche, GSK, Janssen, Abbvie, Speakers bureau: Boehringer-Ingelheim, Vifor, Bhaskar Dasgupta Consultant for: Roche, GSK, Sanofi, BMS, Abbvie, Speakers bureau: Roche, Christian Dejaco Speakers bureau: MSD, Pfizer, UCB, Abbvie, Roche, Novartis, Lilly, Celgene, Merck, Sandoz, Alfred Mahr Consultant for: Chugai Pharma France, Speakers bureau: Roche SAS Chugai Pharma France, Cristina Ponte Speakers bureau: Roche, Carlo Salvarani Grant/research support from: Roche, Consultant for: Eli Lilly and Company, Roche, Abbvie, Wolfgang A. Schmidt: None declared,