blood sugar than normal range and 5 (29.4%) patients were found to have osteoporosis.

Conclusions: Glucocorticoids have substantial side effects in hyperglycemia and osteoporosis in the patient receiving glucocorticoid treatment. More years of taking glucocorticoids could lead to more hyperglycemia and osteoporosis. We should evaluate side effects of glucocorticoids in the patients with AIDs.

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AB0643

FT3 STRONGLY CORRELATES WITH LIPID PROFILES AND DISEASE ACTIVITY IN SLE PATIENTS

Z. Chen¹, X. Zhang¹, L. Liu^{1,2}, S. Huang¹, H. Wang¹, L. Sun¹. ¹Department of Rheumatology And Immunology, The Affiliated Drum Tower Hospital, Nanjing University Medical School, Nanjing, China, Nanjing; ²Department of Rheumatology And Immunology, Changshu People's hospital, Changshu, China

Background: Dyslipidemia is prevalent in Systemic Lupus Erythematosus (SLE) patients and associated with lupus nephritis. Non-thyroidal illness syndrome (NTIS) frequently occurs in some autoimmune diseases. The incidence of dyslipidemia and NTIS in SLE patients vary in different studies and the association of NTIS and dyslipidemia in SLE patients has not yet elucidated.

Objectives: To investigate the frequency of dyslipidemia and NTIS in SLE patients and their association with laboratory parameters and SLE disease activity index (SLEDAI). To further explore the association between FT3 and blood lipid profiles in SLE patients.

Methods: This cross-sectional and prospective study included 271 patients fulfilled the ACR criteria for SLE. Forty-one patients who had a history of thyroid disease and/or familial hyperlipidemia and/or other rheumatologic diseases, and those took lipid-lowering agents or thyroid medications are excluded. Detailed laboratory parameters were collected and SLEDAI were assessed by qualified specialists of Rheumatology.

Results: Frequencies of dyslipidemia and NTIS in SLE patients are 61.8% and 57.2%, respectively. Laboratory indexes such as BUN ($p<0.05$), urine acid ($p<0.01$), CRP ($p<0.001$), ESR ($p<0.001$) and SLEDAI ($p<0.05$) are significantly increased in SLE patients with dyslipidemia than non-dyslipidemia. Compared to euthyroid SLE patients, SLE patients with NTIS showed substantially elevated 24 hour urine protein ($p<0.001$), fasting blood glucose ($p<0.001$), BUN ($p<0.001$), serum creatinine ($p<0.01$), uric acid ($p<0.05$), CRP ($p<0.05$), ESR ($p<0.001$) and SLEDAI ($p<0.01$). Moreover, triglyceride ($p<0.01$), total cholesterol ($p<0.01$), LDL ($p<0.01$) and ApoB ($p<0.001$) levels are markedly higher in SLE patients with NTIS than euthyroid ones, while HDL levels obviously decreased in the former group ($p<0.01$). More notably, the lower FT3 patients showed more severe lipid profiles and significantly higher 24 hour urine protein ($p<0.001$), BUN ($p<0.001$), serum creatinine ($p<0.001$), uric acid ($p<0.05$), and SLEDAI ($p<0.05$) than patients with normal FT3. FT3 levels are negatively correlated with triglyceride ($r=-0.263$, $p<0.0001$), total cholesterol ($r=-0.295$, $p<0.0001$), LDL ($r=-0.273$, $p<0.0001$) and positively correlated with HDL ($r=0.180$, $p<0.01$).

Conclusions: Dyslipidemia and NTIS are prevalent in SLE patients and strongly correlates with disease activity. SLE patients with NTIS are more likely to combine with dyslipidemia, FT3 levels significantly correlates with lipid profiles and FT3 may plays a protective role in dyslipidemia.

REFERENCES:

- [1] Tisseverasinghe A, Lim S, Greenwood C, Urowitz M, Gladman D, Fortin PR. 2006. Association between serum total cholesterol level and renal outcome in systemic lupus erythematosus. *Arthritis And Rheumatism* 54: 2211–9
- [2] Amaya-Amaya J, Sarmiento-Monroy JC, Caro-Moreno J, Molano-Gonzalez N, Mantilla RD, Rojas-Villarraga A, Anaya JM. 2013. Cardiovascular disease in latin american patients with systemic lupus erythematosus: a cross-sectional study and a systematic review. *Autoimmune Dis* 2013: 794383
- [3] Neto AM, Zantut-Wittmann DE. 2016. Abnormalities of Thyroid Hormone Metabolism during Systemic Illness: The Low T3 Syndrome in Different Clinical Settings. *International Journal Of Endocrinology*
- [4] Watad A, Mahroum N, Whitby A, Gertel S, Comaneshter D, Cohen AD, Amital H. 2016. Hypothyroidism among SLE patients: Case-control study. *Autoimmune Reviews* 15: 484–6

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AB0644

PREGNANCY OUTCOMES OF PLANNED PREGNANCY IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS: A RETROSPECTIVE MULTICENTER STUDY

Z. Zhan¹, D. Chen¹, M. Lao², X. Cai³, J. Zhang⁴. ¹Department of Rheumatology; ²Department of Rheumatology and Department of Geriatrics, The First Affiliated Hospital of Sun Yat-sen University; ³Department of Rheumatology, Guangzhou First People's Hospital, The Second Affiliated Hospital of South China University of Technology; ⁴Department of Rheumatology, The Third Affiliated Hospital of Guangzhou Medical University, Guangzhou, China

Background: Compared with the general population, patients with SLE are still at high risk of adverse pregnancy outcomes (APOs). A number of studies have shown that patients with SLE are more likely to develop fetal complications, including fetal loss, preterm birth and IUGR, compared to healthy women.

Objectives: To investigate the fetal and maternal outcomes, as well as predictors for APOs in women with SLE who conceived when disease was stable, the so called "planned pregnancy".

Methods: A retrospective multicenter study of 243 patients with SLE who underwent planned pregnancy was performed. APOs in fetus and mothers were recorded.

Results: The average age at conception was 28.9 ± 3.9 years. Duration of SLE prior to pregnancy was 4.4 ± 4.3 years. Fetal APOs occurred in 86 (86/243, 35.4%) patients. Preterm births, intrauterine growth retardation (IUGR), fetal distress, and fetal loss accounted for 22.2%, 14.8%, 11.1%, and 4.9%, respectively. Forty-two preterm infants (42/54, 77.8%) were delivered after the 34th week of gestation. All the preterm infants were viable. Fifty-two patients (52/243, 21.4%) had disease flares, among which 45 (45/52, 86.5%) cases were mild, 6 (6/52, 11.5%) were moderate and 1 (1/52, 1.9%) was severe. Fifty-two disease flares (21.4%) occurred, among which 8 disease flares occurred during the first-trimester, 15 during the second-trimester, and 29 during the third-trimester. Disease activity was mild in 45 (45/52, 86.5%) patients, moderate in 6 (6/52, 11.5%), and high in 1 (1/52, 1.9%). Disease flares were mainly presented as active lupus nephritis (41/52, 78.8%), thrombocytopenia (10/52, 19.2%), and skin/mucosa lesions (9/52, 17.3%). Pregnancy-induced hypertension (PIH) occurred in 29 patients, among which 3 were gestational hypertension and 26 were preeclampsia. Multiple analysis showed that disease flares (OR 8.1, 95% CI 3.8–17.2, $p<0.001$) and anticardiolipin antibodies positivity (OR 7.4, 95% CI 2.5–21.8, $p<0.001$) were associated with composite fetal APOs.

Conclusions: Planned pregnancy improved fetal and maternal outcomes, presenting as lower rate of fetal loss, more favourable outcomes for preterm infants as well as less severe disease flares during pregnancy. Our research reinforced the importance of planned pregnancy, which allowed women with SLE to conceive in a proper time monitored by multidisciplinary experts.

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Vasculitis

AB0645

ANCA VASCULITIS: THE EXPERIENCE AND TRENDS IN PATIENT CARE FROM A SINGLE CENTRE

A. Bankole¹, K. McCoy¹, B. Yeary¹, G. Verma, Gita². ¹Medicine, Virginia Tech Carilion School of Medicine, Roanoke; ²Medicine, Centra Medical Group Bedford LI, Bedford, USA

Background: ANCA-associated vasculitis [AAV] is a small-medium vessel vasculitis that presents in a multi-systemic fashion, and is associated with significant mortality. Outcomes have improved with the introduction of immunosuppressive medications [ISM], the evidence supporting the initial choice ISM is limited, and may be influenced by health disparities related to social factors.

Objectives: The objective of this study was to compare various factors known to influence management and outcomes in AAV. Factors including, patient demographics, socioeconomic, clinical presentations, and medication choices were reviewed in relation to outcomes within the cohort.

Methods: This was a retrospective, single centre, hospital-affiliated cohort study. A list of all patients seen by the Rheumatology service between 2011 and 2016 with a diagnosis of AAV was generated. A review of the 3000 charts confirmed 77 patients that met the 1990 American College of Rheumatology criteria for AAV. General demographic data including age, gender, zip code, and median household income as well as disease related data including serology, disease manifestation, and treatment were obtained through a chart review and recorded in the database. Supplemental socioeconomic information for each patient zip code was obtained from the United States Government Census website.

Results: In our cohort the anti-proteinase 3 [PR3] antibody was the most common positive antibody. There was a relationship between PR3 antibody positivity rate