determined by the European consensus criteria (complete/clinical remission ± immunosuppressive drugs). The increase in SLE damage index (SDI) in the preceding 5 years was compared between patients who were and were not in remission for ≥5 years. QOL of patients as assessed by the validated Chinese version of the SF36 and the LupusPRO.

Results 769 SLE patients were studied (92%women; age46.4 ±14.6 years, SLE duration 12.6±8.1 years). Clinical remission (serologically active) was present in 259 (33.7%) patients (median 43 months) and complete remission (clinically and serologically inactive) was present in 280 (36.4%) patients (median 51 months). Clinical and complete remission for ≥5 years was achieved in 64 (8.3%) and 129 (16.8%) of the patients, respectively. 53 (6.9%) patients in remission ≥5 years were taken off all medications including HCQ. Patients remitted for ≥5 years were older, and had significantly lower prevalence of renal and haematological disease. Moreover, these patients had significantly less SDI increment than those who did not remit (0.17±0.53 vs 0.67±1.10;p<0.001). Among 453 patients who had QOL assessment within 6 months of last visits, remission for ≥5 years was associated with significantly better SF36 and the health-related scores of the LupusPRO.

Conclusions Durable drug-free remission in SLE is uncommon. Patients with complete or clinical remission for ≥5 years have significantly less damage accrual and better QOL.

450 SERUM 25-HYDROXYVITAMIN D3 LEVELS AND FLARES OF SYSTEMIC LUPUS ERYTHEMATOSUS: A LONGITUDINAL COHORT ANALYSIS

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10.1136/lupus-2017-000215.450

Background and aims To study the relationship between serum 25-hydroxyvitamin D3 levels and flares of SLE in a longitudinal cohort of Chinese patients.

Methods Patients who fulfilled the ACR criteria for SLE were recruited and serum levels of 25-hydroxyvitamin D3 were assayed by liquid chromatography tandem mass spectrometry. Patients were stratified according to the 25-hydroxyvitamin D3 levels (group I:<15 ng/ml, deficiency; group II:15–30 ng/ml, insufficiency; and group III:>30 ng/ml, adequate) and were serially assessed for disease activity and flares. Baseline and summated SLEDAI over time, and the annual incidence of lupus flares was compared among these groups.

Results 276 SLE patients were studied (94% women; age41.0 ±13.8 years; SLE duration 8.7±6.6 years). 25-hydroxyvitamin D3 levels of <15,15–30 and >30 ng/ml occurred in 26%, 54% and 20% of the patients, respectively. Group I had significantly higher baseline SLEDAI.After a follow-up of 32.5 ±5.5 months, 153 mild/moderate and 91 severe flares developed. The mean summated SLEDAI was 3.2±2.0 in group I, 2.4±1.9 in group II and 2.7±2.1 in group III patients (p=0.02). The annual incidence of mild/moderate and severe flares was 0.26±0.39 and 0.20±0.45 (group I);0.20±0.33 and 0.09±0.22(group II); and 0.20±0.32 and 0.14±0.46 group III), respectively(p>0.05). In a subgroup of 73 patients who were clinically and serologically quiescent at baseline, a similar trend of more flares was again observed in group I. New damage or vascular events did not differ significantly among the three groups.

Conclusions Vitamin D deficiency was frequent in SLE patients and was associated with more active disease at baseline and over time, as well as a trend of more severe lupus flares.

451 PROLONGED REMISSION IN PATIENTS WITH LUPUS NEPHRITIS

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10.1136/lupus-2017-000215.451

Background and aims The aim of this study is to assess the prevalence of prolonged remission in patients with lupus nephritis (LN) and its relationship with damage accrual.

Methods 318 patients diagnosed with LN between 1990 and 2015 were included in the study. We defined remission as prolonged when lasting ≥5 consecutive years. (proteinuria ≤0,03 g/L and serum creatinine ≤133,6 µmol/L) Three levels of remission were defined using the SLE Disease Activity Index-2000 (SLEDAI-2K): complete remission: no disease activity in corticosteroid-free and immunosuppressant-free patients; clinical remission off corticosteroids: serologically active clinical quiescent (SACQ) disease in corticosteroid-free patients and clinical remission on corticosteroids: SACQ disease in patients taking prednisone 5–10 mg/24 hour. Damage was measured by the SLICC/American College of Rheumatology Damage Index (SDI).

Results 318 patients (293 women) fulfilled inclusion criteria. During the 10 year follow-up, 52 patients (16,35%) achieved prolonged complete remission, 107 (33,65%) prolonged clinical remission off corticosteroids and 114 (35,85%) prolonged clinical remission on corticosteroids. SDI increased more frequently in unremitted than in remitted patients (p<0,05); SDI median increase was higher in unremitted than in remitted patients. At multivariate analysis, unremitted disease and high-dose corticosteroid intake were risk factors for damage accrual.

Conclusions Patients with prolonged remission was associated with a better outcome in terms of damage accrual.

452 INCREASED CYSTATIN C/CREATININE RATIO REFLECTS HIGH DISEASE ACTIVITY IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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10.1136/lupus-2017-000215.452

Background and aims To investigate relationship between cystatin C (Cys)/creatinine ratio and disease activity of systemic lupus erythematosus (SLE).

Methods Clinical and laboratory data were collected from 52 patients with SLE who had been examined their Cys at least once. Female rate was 96.2% and the average age±standard deviation was 47.9±13.2 years old. Estimated GFR (eGFR) was calculated based on Cys (eGFRcys) and creatinine

(eGFRcre). Shrunken pore syndrome (SPS) was defined as eGFRcys/eGFRcre <60%.

Results Comparing 20 patients with Cys <1.2 mg/L and 32 patients with Cys <1.2 mg/L, SLE disease activity index (SLEDAI) was significantly higher in the former group than in the latter group (7.7±7.8 vs. 2.8±4.0, p<0.01), while the dose of corticosteroids did not differ significantly. The ratio of Cys (mg/L) to creatinine (mg/dl) was significantly higher in 25 patients with SLEDAI ≥3 than in 27 patients with SLEDAI <3 (1.99±0.45 vs. 1.68±0.35, p<0.01). SLEDAI was significantly higher in 8 patients with SPS than in 44 patients without SPS (10.6±10.9 vs. 3.6±4.3, p<0.01). Organ involvement was found in 87.5% of SPS (2 with retinopathy, 1with cerebral haemorrhage, 1 with myositis plus nephritis, 1 with hemolytic anaemia, 1 with pleuritis, and 1 with enteritis), while 33 patients (75.0%) without SPS were in stable state.

Conclusions SLE patients with increased ratio of Cys to creatinine had high disease activity, and organ involvements were found with high frequency in patients with SPS.

453 AN EVALUATION OF QUALITY OF LIFE IN AMBULATORY PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS ATTENDING RHEUMATOLOGY CLINIC IN KENYATTA NATIONAL HOSPITAL

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10.1136/lupus-2017-000215.453

Background and aims Systemic Lupus Erythematosus (SLE) is a chronic autoimmune disease that affects the quality of life of those affected by it. The aim of this study is to document the quality of life of patients with SLE in Kenyatta National Hospital using LUPUS QOL questionnaire.

Methods Patients who satisfy the ACR (America College of Rheumatology) criteria were consecutively recruited. All patients with SLE attending the clinic were included in the study. Patients were examined for the presence of malar rash, discoid rash, arthritis/athralgia, photosensitivity, CNS symptoms, serositis and oral ulcers. The patients then filled the LUPUS QOL questionnaire. The data was then analysed using SPSS version 17.0 using student t test and regression analysis.

Results Sixty two patients were analysed (60 females 2 males). Mean age of the population was 37.3 years (14–71 years). Mean age at diagnosis was 34.5 years with mean duration of illness 1.5 years. Majority (88.7%) had arthritis/athralgia, oral ulcers (62.9%), malar rash (59.7%), photosensitivity (58.1%), serositis (32.3%), CNS symptoms (27.4%) and discoid rash (17.7%). Patients scored globally low in all domains of LUPUS QOL. Highest domain was planning 63.7 (29.3), emotional health 61.3 (26.5), burden to others 58.9 (31.2), fatigue 57.5 (30.0), pain 56.6 (29.6), physical health 54.0 (23.3), body image 47.1 (24.2) intimate relations 41.1 (38.4).

Conclusions The HRQOL was low in all domains correlated with advance in age in the domains of physical health, burden to others, emotional health and fatigue.

454 DISCORDANCE OF PATIENT AND PHYSICIAN HEALTH STATUS CONCERNS IN SYSTEMIC LUPUS ERYTHEMATOSUS

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10.1136/lupus-2017-000215.454

Background and aims To investigate and compare the health status concerns of physicians and patients with systemic lupus erythematosus (SLE).

Methods Patients and their treating physicians completed a questionnaire asking their concern for specific disease manifestations and disease impact on quality of life. For each item, degree of concern was measured on a 5-point Likert scale. Sub-groups were compared by Kruskal-Wallis test for significance.

Results A total of 84 patients and 21 physicians participated. Patients were predominantly concerned with function and fatigue, whereas physicians focussed on organ complications of SLE. Seven out of the top 10 patient concerns showed statistically significant differences to physician ratings, including "reduced ability to perform activities of daily living (ADLs)" (p=0.02) and "reduced ability to perform physical activities" (p=0.04). All the top 10 physician concerns showed statistically significant differences to patient ratings, including "seizures" (p=0.003) and "stroke" (p=0.002). The top 3 patient concerns were routinely assessed by 47.6%, 42.9% and 9.5% of physicians, respectively.

Top 10 patient concerns:

Top 10 physician concerns:

Conclusions There was significant discordance between patient and physician health status concerns. Items which were ranked highly by patients were systematically underestimated by physicians, highlighting an urgent need to improve communication. Further studies could explore ways within the healthcare interaction that could improve patient satisfaction and disease control.

455 VITAMIN D DEFICIENCY IS ASSOCIATED WITH INCEASED SERUM CHOLESTEROL AMONG PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

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10.1136/lupus-2017-000215.455

Background and aims Vitamin D insufficiency/deficiency is common in SLE. In other populations, Vitamin D has been associated with cardiovascular risk factors such as blood pressure and serum cholesterol. We assessed whether there was an association between serum Vitamin D and total serum cholesterol in a large SLE cohort.

Methods Serum 25-hydroxy vitamin D [25(OH)D] was measured at quarterly clinic visits in a large SLE cohort. 1358 different patients were observed from 1 to 40 visits (the median was 11). The patients were 92% female, 50% Caucasian, 41%