SLE, Sjögren's and APS - clinical aspects (other than treatment)

AB0297

MORTALITY AND DISEASE RELATED COMORBIDITIES IN SYSTEMIC LUPUS ERYTHEMATOSUS: DATA FROM AN EGYPTIAN COHORT WITH SYSTEMIC LUPUS ERYTHEMATOSUS-PHASE I

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Background: Systemic lupus erythematosus (SLE) is a complex autoimmune disorder with considerably high mortality.

Objectives: To investigate the survival rates 5, 10, 15 and 20 years and the impact of disease related morbidity and mortality among Egyptians patients afflicted by SLE.

Methods: This is a single center observational study performed in one of the leading medical school governmental hospital for teaching and training in the north African region and middle east sectors Kasr Alainy School of Medicine- Cairo University. Medical records of adult SLE patients ≥ 16 years (classified according to ACR 1997 SLE classification criteria set forth by Hochberg, 1997) who received longitudinal clinical care during the time period from 1999 to 2019 were included. Data analysis: causes of mortality, damage score and survival were determined from the time of SLE diagnosis to the last contact or date of death.

Results: Records of two hundred and two SLE patients were included, 91.1% were females and 8.9% patients were males (ratio is 10:1). The mean age at diagnosis 26.71 ± 7.93 years with a mean follow up between mean: 6.6 ± 4.58 years, 34.15% had damage in at least one of the organ systems by SLICC/ACR-DI in the first 6 months. Considering an outcome label of dead or alive at the end of follow up period, results showed a total of 52 mortalities, 88.5% were females, the mean age at death onset was 30.9 ± 8.8 years. Results identified the following death causalities in the studied SLE patients in order of frequency: Septic shock and disseminated intravascular coagulation in 11.5 %, acute respiratory distress syndrome ARDS in 11.5 %, congestive heart failure in 9.6%, thrombotic microangiopathy 5.7%, cerebritis, acute renal failure 5.7%, intracranial hemorrhage 5.7%, hypertensive encephalopathy in 5.7%. Alveolar hemorrhage, infection, intraoperative deaths each contributed to deaths in 3.8%. Hypovolemic shock, acute liver failure, brain edema, thrombotic thrombocytopenic purpura, end stage kidney disease, pulmonary renal syndrome, suicide and acute hydrocephalus contributed to fatalities in 1.9%. The cause of death was unclearly identified in 26.9%. Results of the Kaplan Meier survival curve in the studied SLE cohort showed an overall cumulative probability of survival at 5, 10, 15 and 20 years after SLE diagnosis was 82.9%, 68.8%, 51.4% and 20.4%, respectively. Multivariate regression analysis revealed psychosis, chronic kidney disease and heart failure were independent predictors of survival (HR= 4.3 times, 3.58 times and 3 times respectively, $p < 0.001$), while the use of hydroxychloroquine and AZA showed a protective effect.

Figure 1. Kaplan-Meier estimated survival function, starting at date of SLE diagnosis.

Conclusion: The cumulative probability of survival at 5, 10, 15 and 20 years after SLE diagnosis was 82.9%, 68.8%, 51.4% and 20.4%, respectively. The presence of renal manifestations, neuropsychiatric lupus and heart failure were

independent predictors of poor survival in our cohort. The use of hydroxychloroquine and AZA were protective.

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AB0298

PREGNANCY IN RHEUMATIC DISEASE: A REGION WIDE SURVEY OF CURRENT PRACTICE AMONGST CLINICIANS IN THE WESSEX MULTI-DISCIPLINARY CONNECTIVE TISSUE DISEASE NETWORK

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Background: Rheumatic diseases frequently affect females of child-bearing age, with implications for foetal and maternal outcomes.

Two-thirds (66%) of the women who died in the 2016-18 MBRRACE report were known to have pre-existing medical problems¹. The NHS long-term plan supports creation of Maternal Medicine Networks to facilitate access to specialist care and advice in pregnancy.

Guidelines exist for use of disease modifying anti-rheumatic drugs (DMARDs) during pregnancy but other aspects of pregnancy related care in rheumatic disease remain less well defined. The Wessex wide connective tissue disease (CTD) network provides a multi-disciplinary forum to discuss cases, to obtain approval for high cost drugs, to compare practice in multiple hospitals but does not specifically discuss pregnancy related uncertainties.

Objectives: To survey variations in clinical practice relating to rheumatic disease in pregnancy

Methods: Following careful project planning with the tertiary referral centre obstetric lead consultant for maternal medicine, several areas of care were identified which were prone to local and individual variation. An anonymous online survey relating to these specific areas of pregnancy related care was circulated amongst members of the CTD network, including rheumatology consultants, rheumatology practitioners and specialist trainees.

Results: 16 responses were obtained across 7 hospital sites; 56% were from rheumatology consultants. 12/16 (75%) reported routinely offering contraceptive advice when prescribing DMARDs. Only 4/16 (25%) were aware of a specific pre-natal obstetric clinic available in their hospital. There was major variation in planned frequency of clinical review. 10/16 would increase frequency of review during pregnancy if a patient's disease became active or unstable; 6/16 would aim to review patients approximately 3 monthly; 3/16 would not routinely increase frequency of review during pregnancy. Planned post-natal care was equally varied. 3/16 would routinely prescribe aspirin to all lupus women during pregnancy despite this being recommended for all women with SLE for prevention of pre-eclampsia². Prescription of low molecular weight heparin was variable, and several responses were at odds with the current RCOG guidance on the subject³. 8/16 (50%) would prescribe corticosteroids judiciously in case of an acute disease flare.

Conclusion: This survey has revealed significant variation in practice relating to rheumatic disease in pregnancy. Integrated care with colleagues from the regional referral centre for maternal medicine is required, in keeping with the recently published NICE guidance on the subject⁴. Adopting a hub and spoke model, with local centres working closely alongside a tertiary centre, will help optimise peri-partum care and outcome for patients with long-term rheumatic conditions.

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AB0299

QUANTITATIVE EVALUATION OF PROTEINURIA WITH URINALYSIS TEST AND COMPARING ITS CORRELATION WITH RANDOM SPOT URINE PROTEIN-CREATININE RATIO AND 24 HOUR URINE PROTEIN IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS –A SINGLE CENTRE EXPERIENCE IN MALAYSIA

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Background: Lupus nephritis is an important concern among Systemic Lupus Erythematosus (SLE) patients in Asia and its mortality rate was reported to be 6 times higher compared to the general population [1]. Without prompt treatment it can lead to end stage renal failure and affect quality of life. 24 hour urine protein collection has long been used as the gold standard test to assess proteinuria. However due to its cumbersome process random spot urine protein-creatinine ratio is used as an alternative to replace the former in some centres before subjecting patients to renal biopsy. In a study done by Matar HE et al in 2012, he showed that there was a significant correlation between 24 hour urine protein and urine protein creatinine ratio in his 95 subjects [2].

Urinalysis is a semi-quantitative screening tool for early detection of potential kidney disorders. A survey done by Siedner MJ et al on practice preferences among American Rheumatologists in 2005 reported that 64.6% of them preferred to use urinalysis as the primary tool to screen for proteinuria [3].

Objectives: To assess the correlation of urinalysis test with random spot urine protein-creatinine ratio (PCR) compared with 24 hour urine protein.

Methods: This was a retrospective study. The electronic medical records of all SLE patients seen in the rheumatology clinic of Hospital Sultan Ismail from 1/1/2017 to 31/12/2020 were reviewed. Patients who had urinalysis, urine protein creatinine ratio and 24 hour urine protein tests done were identified. Data on demography, urinalysis, random spot urine protein creatinine ratio and 24 hour urine protein were obtained and analysed.

Results: There were a total of 131 patients and 124 were females. The majority were Malays (75/131) followed by the Chinese (45/131), Indians (9/141) and others (2/131). The mean age group for the studied subjects was 34 (13-67). The urinalysis test showed that 34 of them had negative results, 37 of them had urine protein of 1+, 18 of them had urine protein of 2+ followed by 23 patients with urine protein of 3+ and the rest had urine protein of 4+. The correlation between urinalysis and 24 hour urine protein was strong ($r = 0.702$), whereas the correlation between urinalysis and urine PCR ratio was stronger ($r = 0.797$).

Conclusion: We conclude that urinalysis correlates well with both random spot urine protein creatinine ratio and 24 hour urine protein and the correlation is stronger with urine PCR.

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AB0300

LUPUS DISEASE ACTIVITY CORRELATES WITH QUALITY OF LIFE BUT NOT WITH HEALTH LITERACY STATUS

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Background: Systemic lupus erythematosus (SLE) is a chronic autoimmune disease of unknown etiology that can affect any organ of the body. SLE is associated with adverse effects on both health and non-health-related quality of life (HRQOL and non-HRQOL). Lupus PRO is a patient reported outcome measure that has been validated in many languages. It has 44 items that cover both HRQOL and non-HRQOL (1). Health literacy is defined as the degree to which individuals have the capacity to obtain, process and understand basic health information and services needed to make appropriate health decisions. Multiple studies indicate that people with limited health literacy have worse health status and higher rates of hospitalization (2).

Objectives: We aimed to evaluate the relationship between the LLDAS (Lupus Low Disease Activity State) criteria and the Lupus PRO test, as well as the health literacy status of lupus patients.

Methods: 83 SLE patients (94% women) were included in the study. We performed Lupus PRO and the European Health Literacy Survey tests during the routine follow-up visits of lupus patients to our rheumatology outpatient clinic and admissions to rheumatology inpatient clinic. Available clinical data on medical records were obtained, physician global assessments (PGA) were recorded by the attending physician.

Results: LLDAS criteria strongly and inversely correlated with the total score, as well as the mood subunit of the Lupus PRO. Similarly, it also significantly inversely correlated with the body appearance and goals subunits. Health literacy status of the patients did not correlate with their LLDAS scores, ie their disease activities.

Conclusion: Our results suggest that lupus disease activity, assessed by LLDAS criteria, significantly correlates with measures of quality of life, specifically Lupus PRO test, but not with health literacy status. Further studies are needed to evaluate if health literacy is related with damage, hospitalization or mortality associated with lupus.

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