SAT0291 NON-REPORTING OF SYSTEMIC LUPUS ERYTHEMATOSUS IN DEATH CERTIFICATES OF LUPUS PATIENTS: ITS EXTENT AND PREDICTORS

I. Padjen[1,2], M. Erceg[3], M. Cerovec[1,2], M. Mayer[1,2], R. Stevanović[3], B. Anić[1,2]. *[1]Department of Internal Medicine, Division of Clinical Immunology and Rheumatology, University Hospital Centre Zagreb; [2]University of Zagreb, School of Medicine; [3]Croatian Institute of Public Health, Zagreb, Croatia*

Background: Systemic lupus erythematosus (SLE) is frequently not reported in death certificates of lupus patients, despite its known role as an underlying and/or immediate cause of death. Possible reasons may be insufficient access to patients' medical records at time of death (including details on their medical history) and/or physicians' unawareness of the contribution of SLE to death.
Objectives: We aimed to analyze the extent and predictors of non-reporting of SLE in death certificates of 90 deceased SLE patients regularly followed-up in a routine academic setting at our Department.
Methods: We retrospectively observed 90 SLE patients (68 females) deceased within the 2002–2011 period. All patients were ≥18 years of age and Croatian residents at the time of death, fulfilling ≥4 classification criteria of the American College of Rheumatology (ACR). We identified patients with SLE listed as a cause of death in the death certificate. An extensive set of variables was compared between patients with and without SLE reported in the certificate: demographics, ACR criteria at time of death and damage according to the Systemic Lupus Erythematosus International Collaborating Clinics (SLICC)/ACR index and its components at the time of death. We also compared the proportion of in-hospital deaths and autopsies performed. Frequencies were compared using the χ^2 and Fisher's exact test, and continuous variables using the t-test and Mann-Whitney U test. Variables associated with reporting of SLE in the death certificate in the univariate analysis were included in a multivariate logistic regression model.
Results: SLE was reported in death certificates of 41/90 (46%) patients. Patients with SLE not reported in their death certificates were older at death (62±14 vs. 53±15 years) and diagnosis (53±14 vs 42±18 years) and had a longer time from their last visit at our Department to death (0.80±1.00 vs. 0.34±0.66 years), compared to patients with SLE listed in the death certificate ($p<0.05$). They also had a lower proportion of renal disorder (20/49 vs. 29/41), cardiovascular and pulmonary damage (18/49 vs. 28/41 and 7/49 vs. 13/41, respectively), and died less frequently in hospital (28/49 vs. 35/41) and due to infections (4/49 vs. 26/41) ($p<0.05$). Conversely, these patients had a higher frequency of malignancy as a feature of damage (17/49 vs. 6/41) and a cause of death (14/49 vs. 1/41) ($p<0.05$). Only patients without SLE listed in their death certificate accrued gastrointestinal damage (7/49 vs. 0/41, p=0.015), hence this type of damage could not be included in the multivariate logistic model. In the multivariate model, the presence of infection as a cause of death was the single variable related to (non-)reporting of SLE (OR 0.053; 95% CI 0.012–0.237) (Table 1).

Table 1. Predictors of non-reporting of SLE in death certificates (OR: odds ratio; CI: confidence interval)

Variable	OR	95% CI	p
Age at diagnosis (years)	1.050	0.961-1.148	0.280
Age at death (years)	0.996	0.906-1.096	0.938
Time from last visit to death (years)	1.122	0.496-2.542	0.782
Renal disorder (yes/no)	0.434	0.126-1.499	0.187
Pulmonary damage (yes/no)	0.536	0.119-2.406	0.416
Cardiovascular damage (yes/no)	0.412	0.102-1.666	0.214
Malignancy (feature of damage) (yes/no)	2.934	0.597-14.423	0.185
Infection as cause of death (yes/no)	0.053	0.012-0.237	<0.001
In-hospital death (yes/no)	1.012	0.223-4.592	0.987

Conclusions: Non-reporting of SLE in death certificates of lupus patients may be an obstacle towards assessing the true extent of SLE-related mortality, calling into question the reliability of vital statistics data extracted only from death certificates. Infections as causes of death and gastrointestinal damage may influence reporting of SLE in death certificates.
References:
[1] Calvo-Alen J et al. Rheumatology 2005;44:1186–9.
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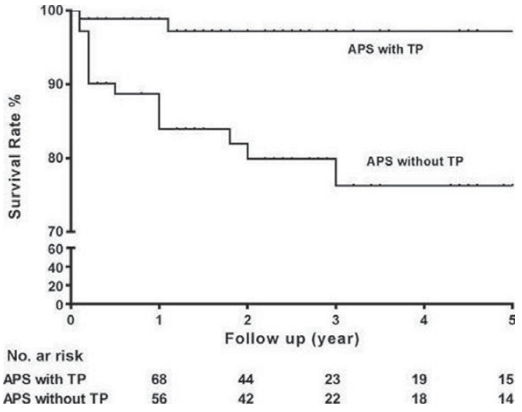
SAT0292 LONG-TERM PROGNOSIS AND PREDICTING FACTORS OF CHINESE PATIENTS WITH ANTIPHOSPHOLIPID SYNDROME

J. Zhao, Y. Sun, P. Zhang, Q. Wang, M. Li, X. Zeng. *Peking Union Medical College Hospital, Beijing, China*

Background: Antiphospholipid syndrome (APS) is an acquired autoimmune prothrombotic condition characterized by persistent circulating antiphospholipid antibodies (APL). The pathogenic mechanisms that lead to clinical manifestations associated with APL are only partially understood. And to date, long-term anticoagulation has been the only treatment shown to reduce vascular complications.
Objectives: The aims of the present study were to assess and identify the prognostic factors of the long-term outcomes and mortality of antiphospholipid syndrome (APS) in Chinese patients.
Methods: Records of 160 patients with APS admitted to Peking Union Medical College Hospital in Beijing between 2005 and 2015 were investigated. Demographic characteristics, cumulative clinical and laboratory features, autoantibody profiles were retrieved from the database. Survival rates were studied by Kaplan-Meier method, and COX proportional hazard model was adopted to perform the analysis of predicting factors for mortality.
Results: The entire cohort consisted of 110 (68.8%) female and 50 (31.3%) male patients. Mean (SD) age at study entry was 36.5±14.9 years. The most prevalent thrombotic risk factors were hypertension, dyslipidemia, and smoking, present in 5–15% of the total cohort. In total, 50.6% of the patients had primary APS, 45.9% had APS associated with SLE, 2.0% APS associated with other connective tissue diseases. The most prevalent immunological features at baseline were LA (71.3%), aCL (55.0%), and β2GPI (49.4%). No significant statistical differences were found in the clinical presentation of the APS according to the presence or absence of any of these antibodies. During the 10-year period, 16 (10.0%) patients (8 female and 8 male) died. The overall 1, 3, and 5-year survival rate was 92.6%, 89.1% and 87.1%, respectively. The most common causes of death were severe thrombotic events, including pulmonary embolism, strokes and myocardial infarction (43.8% of total deaths), infections (18.8%). COX proportional hazard model show thrombocytopenia is the independent prognostic factor of mortality (HR 8.228, 95% CI 1.866–36.282).

Table 1. Baseline characteristics of APS patients

Clinical characteristics	Prevalence	Thrombotic event	
		No (N=51)	Yes (N=109)
Female, n/%	110 (68.8%)	42 (82.4%)	68 (62.4%)
Age, year, mean+SD	36.5±14.9	34.2±14.9	37.4±14.9
Thrombotic events			
Arterial thrombosis	59 (36.9%)	–	59 (54.1%)
Venous thrombosis	72 (45.0%)	–	72 (66.1%)
Coexist of arterial and venous thrombosis	22 (13.8)	–	22 (20.2%)
Systemic autoimmune diseases	79 (49.4%)	33 (64.7%)	46 (42.2%)
Thrombophylic risk factors			
Smoking	8 (5.0%)	2 (3.9%)	5 (5.5%)
Dyslipidemia	20 (12.5%)	6 (11.8%)	14 (12.8%)
HTN (systolic>140)	24 (15.0%)	7 (13.7%)	17 (15.6%)
ACL	88 (55.0%)	32 (62.7%)	56 (51.4%)
β2GP1	79 (49.4%)	31 (60.8%)	48 (44.0%)
Lupus anticoagulants	114 (71.3%)	39 (76.5%)	75 (68.8%)
Tri-positive	41 (25.6%)	21 (41.2%)	20 (18.3%)
Thrombocytopenia	71 (44.4%)	23 (45.1%)	48 (44.0%)
Hypocomplementaemia	59 (36.9%)	25 (49.0%)	34 (31.2%)



Conclusions: patients with APS develop significant morbidity and mortality despite current treatment. More attention should be devoted to APS patients with thrombocytopenia.
Disclosure of Interest: None declared
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SAT0293 PNEUMOCOCCAL INFECTION IN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS

J. Schurder, T. Goulenok, R. Jouenne, A. Dossier, D. van Gysel, T. Papo, K. Sacre. *Paris-7 University, APHP, Bichat Hospital, Paris, France*

Background: A 5-fold increase in the risk of death is due to infection in systemic lupus erythematosus (SLE) patients when compared to age- and sex-matched controls Pneumococcal infection (PI) has been reported to be more frequent and severe in SLE
Objectives: Our study aimed to analyze the risk factors associated with the occurrence and severity of PI in SLE patients
Methods: Medical records of all SLE patients and all patients admitted with PI in the Department of Internal Medicine (Bichat Hospital, Paris, France) from January 2005 to December 2014 were retrospectively reviewed. Clinical characteristics associated with PI occurrence and severity were analyzed, both in SLE and non SLE patients.
Results: One hundred and ninety SLE patients (42.2+14.9 years; 87.4% females) were hospitalized over a 10-year period. PI was the reason for admission in 6 (3.2%) patients, including 5 cases of invasive infection. With a follow-up of 2112.8