

between SLE patients with history of HZ and patients who had never had experienced HZ.

Results: A total of 229 patients with predominantly Malay patients (n=123, 53.7%), followed by Chinese (n=90, 39.3%) and others (n=16, 7.0%) were included. A total of 37 patients had history of HZ (16.2%). Their mean age during HZ episode was 34.4 ± 13.8 years and their SLE disease duration was 68.7 ± 57.1 months. More than half of them (n=21, 56.8%) developed HZ when the SLE disease was active with the mean dose of prednisolone at the time of infection was 20.7 ± 9.2 mg daily. A total of 21 HZ patients (56.8%) had ever received cyclophosphamide with the median interval of the last infusion was 6 (0.2-84) months. Almost half of the HZ patients (n=18, 48.6%) developed the infection while on cyclosporine A. Meanwhile, 4 (10.8%) were on azathioprine and mycophenolate mofetil respectively. Chinese patients tend to have HZ as compared to other ethnics (27% vs 41.7%), p=0.07. HZ occurred in a higher proportion among male patients (29%) as compared to female patients (14.1%), p=0.05. The use of azathioprine (10.8% vs 55.2%, p<0.01) and mycophenolate mofetil (10.8% vs 31.8%, p=0.009) were less associated with HZ. On the other hand, the use of cyclosporine A (48.6% vs 32.3%, p=0.05) and prednisolone ≥ 60mg daily (44.4% vs 28%, p=0.04) were associated with HZ. Higher HZ patients had hematological manifestation (81.1% vs 62.5%, p=0.04) and positive lupus anticoagulant (LA), 32.4% vs 14.6%, p=0.02. A forward logistic regression which included all factors with p<0.1 in the univariate analyses revealed that the use of prednisolone ≥ 60mg daily and hematological manifestation were the independent predictors of HZ with OR= 2.28 (95% C.I = 1.01-5.17), p=0.049 and OR= 2.78 (95% C.I = 1.09-7.04), p=0.03 respectively. The use of azathioprine was associated with a lower risk of HZ with OR 0.08 (95% C. I= 0.03-0.25), p=<0.01.

Conclusion: Our study demonstrated the possible influence of male gender, Chinese ethnicity and disease characteristics such as hematological manifestation and lupus anticoagulant positivity with the occurrence of HZ. In addition, the use high dose oral prednisolone ≥ 60mg daily was the independent predictor of HZ while on the other hand, the use of azathioprine was associated with a lower risk of developing HZ as compared to other immunosuppressive agents. Further larger studies are needed to confirm these associations.

REFERENCES:

- [1] Chen D, Li H, Xie J, Zhan Z, Liang L, Yang X. Herpes zoster in patients with systemic lupus erythematosus: Clinical features, complications and risk factors. *Exp Ther Med.* 2017;14(6):6222-6228.

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POS0724

GENDER DIFFERENCES IN THROMBOTIC PRIMARY ANTIPHOSPHOLIPID SYNDROME IN A LARGE COHORT OF PATIENTS FROM FOUR EUROPEAN CENTERS

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Background: Autoimmune diseases occur more frequently in females and their course and severity can be affected by gender. Antiphospholipid syndrome (APS) is a systemic autoimmune disorder in which antiphospholipid antibodies (aPL) exert a pathogenic role resulting in vascular thrombosis and/or pregnancy morbidities. Data about gender differences in thrombotic APS (t-APS) are still scarce^{1,2}.

Objectives: To evaluate the differences in frequency, disease expression and severity between females and males affected by primary t-APS.

Methods: Retrospective study enrolling subjects with a formal diagnosis of primary APS (Miyakis 2006) with vascular thrombosis at onset. Women who presented with obstetric events as first aPL-related manifestation were excluded. All the patients were followed from 1967 to 2019 in four European centers: three French centers and one Italian center.

Results: The study included 433 patients (68% females, 32% males). Median age at t-APS onset [31 (24-46) vs 41 (29-53) years, p<0.001] and at diagnosis [34 (27-50) vs 46 (34-57) years, p<0.001] was significantly lower in females. The most common presenting manifestations were venous thrombosis (60%) followed by arterial events (37%) and catastrophic APS (3%). Venous events were more frequent in women as compared to men (64% vs 51% p:0.012 OR:1.7 [1.1-2.5]). Sites of venous thrombosis included: limbs (35%), pulmonary (17%),

cerebral (3%), portal and inferior cava (2%) and retinal (1%) veins, without gender differences. The arterial events were more frequent among men (43% vs 34% p:0.053). Strokes (27%) and myocardial infarctions (4%) were the most frequent manifestations, followed by thrombosis of limbs (2%), retina (2%) and abdominal organs (1%). Noteworthy, only men presented with visceral ischemia. During the follow-up, new thrombosis occurred in 41% of patients (179/433). 33% out of them had at least two episodes and these occurred especially among males (22% vs 10% p:0.001 OR:2.5 [1.3-4.8]). New events were mostly of the same type, but 1/3 of patients presented a switch from venous to arterial side and viceversa, with no gender differences.

Complete aPL profile was available in 357 subjects: 33% had single aPL positivity, 24% double positivity and 43% triple positivity, with no differences between women and men. About 80% of the patients had a concomitant risk factor (RF) for thrombosis. Established cardiovascular RFs were more represented among men as shown in table 1. In women, estrogenic exposure was the main RFs, present in almost 40% of them.

Table 1.

	MALES n= 137	FEMALES n= 296	P OR [IC 95%]
Traditional cardiovascular RFs, n (%)			
Smoke	66 (48)	81 (27)	<0.001 2.5 [1.6-3.8]
Arterial hypertension	59 (43)	75 (25)	<0.001 2.2 [1.5-3.4]
Dyslipidemia	52 (38)	72 (24)	0.004 1.9 [1.2-2.9]
Diabetes	16 (12)	15 (5)	0.014 2.5 [1.8-5.1]
Obesity	13 (10)	38 (13)	ns
Other thrombophilic factors, n (%)			
Estrogenic stimuli*	0	116 (39)	-
Trauma / surgery / immobilization	21 (15)	32 (11)	ns
Congenital thrombophilia	9/94 (10)	33/204 (16)	ns

Data were compared using contingency tables, p value was calculated with Chi-Squared or Fisher exact test. * = hormonal therapy, pregnancy, post-partum

Conclusion: This gender-oriented analysis of patients with primary t-APS showed that women had the first vascular event at a younger age and mostly on the venous side, while men presented mainly with arterial events, later in life and suffered from more recurrent events. No differences were observed in the distribution of the aPL profile. The different frequency of arterial and venous events in the two groups could be attributed mainly to the presence of additional RFs rather than to biological gender-specific issues. However, it should be underlined that some RFs, such as the use of estrogens or classic cardiovascular RFs, are exclusive or more represented in one gender rather than the other, making it difficult to assess the link of causality between gender and manifestations of t-APS.

REFERENCES:

- [1] JF de Carvalho. *Rheumatol Int.* 2011.
[2] LJ Jara. *Lupus.* 2005.

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CLINICAL AND IMMUNOLOGICAL CHARACTERISTICS OF PATIENTS WITH JUVENILE-, ADULT- AND LATE-ONSET SYSTEMIC LUPUS ERYTHEMATOSUS

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Background: Systemic lupus erythematosus (SLE) predominantly develops in women of child-bearing age. However, nearly 20% of cases present during childhood, generally after puberty (juvenile-onset SLE, JSLE). On the other hand, 10-20% of patients develop SLE after the age of 45-50 years (late-onset SLE, LSLE) [1]. It is known that age at disease onset can influence the clinical presentation and course of SLE, but the findings are not always consistent across the studies [2].

Objectives: The aim of this study was to evaluate the spectrum of clinical manifestations and autoantibody profile in patients with SLE in the central region of Ukraine regarding age at onset.

Methods: The study included 258 SLE patients before starting an adequate therapy, comprising 225 females (87.2%) and 33 males (12.8%). The median age at SLE onset was 28 (20-39) years. The patients were classified into 3 groups: I – age at SLE onset ≤18 years (JSLE; n=52; 20.2%), II – SLE onset at age 19-44 years (adult-onset SLE, ASLE; n=161; 62.4%), III – age at disease onset ≥45 years (LSLE; n=45; 17.4%). The clinical and demographic data, SLE Disease Activity Index (SLEDAI), erythrocyte sedimentation rate (ESR), C-reactive protein