Results She showed complete recovery after rituximab.

Conclusions Rituximab can be considered as an effective treatment modality in APLA related chorea where conventional measures have failed.

64   DYSBIOSIS AND GUT BARRIER DYSFUNCTION IN ANTIPHOSPHOLIPID SYNDROME AS REVEALED BY IGA-SEQ PROFILING

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Background and aims The antiphospholipid syndrome (APS) is an autoimmune thrombophilic non-gut disorder with high mortality. Various pathogens have been associated with transient antiphospholipid antibody production. We hypothesised that members of the gut microbiota in APS patients could represent a chronic trigger and exhibit heightened adaptive immune responses to the microbiota. The purpose of this study was to explore gut barrier function and faecal IgA-coated microbial composition in APS patients.

Methods Stool from 15 APS patients, 5 non-autoimmune thrombotic states, and 12 normal donors (total of 17 controls) was collected. Faecal homogenates were analysed for the gut permeability marker calprotectin and, in parallel, stained stained with PE-conjugated anti-human IgA prior to cell sorting. Faecal DNA was isolated and PCR-amplified targeting the V4 region of the 16S rRNA gene. Samples were sequenced on the Illumina MiSeq platform.

Results Faecal calprotectin and IgA-coated faecal bacterial levels were significantly higher in APS patients compared to controls (p<0.003; p<0.05). LEfSe analysis of IgA+ fractions showed that the strongest IgA-coated genus is *Blautia* in APS.

Conclusions These data suggest gut barrier dysfunction and aberrant IgA coating of commensals in APS. Markedly enhanced bacterial IgA coating in several APS patients supports a stronger adaptive immune response to the microbiota. Increased IgA coating of *Blautia* might reflect altered gut homeostasis as a *Blautia* species was shown to be part of proinflammatory IgA+ consortium in a recent study in IBD. To our knowledge, this study represents the first 16S rRNA profiling of IgA-coated gut commensals in patients with non-gut autoimmunity.

65   ANTIPHOSPHOLIPID SYNDROME LONG TERM FOLLOW UP: REAL LIFE EXPERIENCE OF A SINGLE CENTRE

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Background and aims The antiphospholipid syndrome (APS) has wide clinical and outcome spectrum overtime. The aim of this study was to assess the real life prevalence of morbi-mortality APS during 10 year-follow-up of a single referral centre.

Methods The cohort included 160 consecutive APS patients followed by the Autoimmune Diseases Unit of Hospital Clínic Barcelona from 2003 to 2013. Epidemiological, clinical, immunological and treatment features were analysed prospectively.

Results The cohort consisted of 126 (79%) women and 34 (21%) mens. Mean (SD) age at diagnosis was 39 (14) years. The diagnostic causes were thrombosis (56.3%), obstetric morbidity (26.9%) and both (16.9%). 65% were primary APS, 22.5% associated with systemic lupus erythematosus (SLE), 8.8% associated with lupus-like syndrome and 3.7% associated with other diseases. Fifty-five patients were lost to follow-up (3.4% every year). In evolution, 10 primary APS patients were reclassified as SLE-associated APS and 2 patients developed catastrophic APS. Table 1 shows the frequencies of the main APS clinical manifestations at baseline and during the 10-year-follow-up. At diagnosis, 95% received antithrombotic treatment: low dose antiaggregants (39.5%), oral anticoagulants (67.1%), heparin (2.6%). During the study, 72.7% of recurrences were without antithrombotic treatment and 27.3% were despite it. Eleven major bleeding episodes occurred and 2 were fatal. The global mortality rate was 6.9% and 50% in catastrophic APS. Table 2 shows the main causes of death and Figure 1 is a Kaplan–Meier survival curve.

Conclusions This study shows long-term morbidity and mortality of a large APS patient cohort and exposed the real-life experience of a referral unit.

66   ANTIPHOSPHOLIPID SYNDROME – CINICAL AND IMMUNOLOGICAL CORRELATIONS AND ATHEROSCLEROSIS

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Background and aims In recent years, it is found that role in atherogenesis plays inflammatory component of immune response. In recent years found unarguably data for accelerated development of atherosclerotic plaques in patients with APS.

Our aim is to investigate the frequency of cardiovascular events and atherosclerosis in patients with primary and secondary antiphospholipid syndrome compared to healthy individuals and patients with systemic lupus erythematosus without antiphospholipid antibodies.

Methods We studied 99 patients with APS, 13 SLE and 32 healthy controls. They were tested for aPL antibodies (aCL, anti-b2gp1, anti-prothrombin), ANA-screen, ANA - profile and standart laboratory.

We examine Intima-Media thickness of carotit arteries and Calcium score of: a. coronaria sinister, a. anterior descendens sinister, a. circumflexa sinister, a. coronaria dexter, Aorta, Valvaorte to validate the atheroslerosis.

Results We found strong, statistically significant correlation between aCL antibodies and the presence of plaques in the left common carotid artery (p=0.041) and absent a correlation between aPL titers and presence of carotid plaques. In the group with APS, 33,3% (14) establishes a positive calcium score of coronary arteries, 11.9% (5) positive for aorta, Aortic valve Absent deposits, In the control group positive calcium score is one person (5.88%).

Conclusions It was established the relationship of antiphospholipid syndrome with the process of atherosclerosis.

The presence of atherosclerotic plaques is not associated with traditional risk factors.

Not establish a connexion between antiphospholipid antibodies and IMT.

Proven connexion between aCL and carotid plaques.

Not establish correlation between aPL and Ca score.

Persons with APS have a higher incidence of Calcium score versus healthy controls.

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67 | SOME ANTI-CALDIOLIPIN-BETA2-GPI ANTIBODIES BRING THROMBOPHILIC DIATHESIS BY THE DUAL REACTIVITY TO DNA AND INTERNALISATION TO LIVE CELLS ACCOMPANYING DNA

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Background and aims In antiphospholipid syndrome (APS), antibodies reactive to CL-beta2-GPI are known to be the important pathogenic factor, but the mechanism of the interaction between the antibodies and cells, and the reason why APS is highly associated with SLE are not fully elucidated.

Methods Since we obtained a monoclonal antibody WB-6 which shows reactivity to CL-beta2-GPI and induces a prothrombotic state in normal mice by tissue factor expression upon circulating monocytes, we tried to clarify how this antibody interacts with live cells.

Results In the current study, we found unexpectedly that WB-6 reacted with DNA by direct-binding ELISA which was confirmed by inhibition ELISA. The result of epitope mapping on the domain 1 of beta2-GPI suggested that WB-6 binds to the arginine- and lysine-rich peptides close to the N-terminal of beta2-GPI, not directly but indirectly via DNA. Incubation of endothelial cell lines or monocytic THP-1 cells with WB-6 revealed that WB-6 enter into the live cells. Because pre-treatment of the cells with DNase 1 significantly reduced the internalisation, and addition of extracellular DNA into the culture significantly increased the internalisation, this phenomenon is likely to be resulted from interaction of WB-6 and cell surface DNA.

Conclusions These results suggest that some anti-DNA antibodies show dual reactivity with CL-beta2-GPI via DNA, and this may contribute to the high percentage of association with SLE in APS. Such an antibody can enter live cells with DNA, and activate intracellular DNA sensors to induce tissue factor expression, without participation of the cell surface bata2-GPI and its still controversial receptors.

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68 | IDENTIFYING CLINICAL AND EPIDEMIOLOGICAL RISK FACTORS ASSOCIATED WITH THROMBOSIS AND PREGNANCY MORBIDITY IN A LARGE COHORT OF CHINESE APS PATIENTS

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Background and aims The evaluation of thrombotic and pregnancy risks associated with antiphospholipid antibodies (aPLs) in individual patients is challenging. Our objective was to identify potential clinical and epidemiological predictors of thrombosis and pregnancy morbidities in a large Chinese antiphospholipid syndrome (APS) cohort.

Methods This cohort included 177 consecutive APS patients and 146 asymptomatic aPLs control patients who attended the rheumatology clinic at People's Hospital of Beijing University Health Science Centre. All APS patients fulfilled the 2006 revised criteria APS. All control patients had at least one persistent positive aPLs without any other criteria APS manifestations. When assessing risk factors associated with pregnancy morbidities, only reproductive age (age <45) female controls were used. Chi-squared or Fisher's exact test univariate analysis and multivariable logistic regression analyses were used to assess association between different clinical and epidemiological risk factors and clinical manifestations.

Results Of the 177 APS patients, 134 (75.7%) were women with a mean age of 43. 5 (S.D. 16). When comparing to controls, risk factors associated with thromboembolic events included: Raynaud's phenomenon (odds ratio (OR)=2.371, 95% Confidence interval (CI) 1.039–5.637, p=0.0462), hypertension (OR=1.829, 95% CI 1.114–3.05, p=0.022), and smoking (OR=3.941, 95% CI 1.816–8.799, p=0.0004). Age, hyperlipidemia, diabetes, hypocomplementemia, and thrombocytopenia did not demonstrate significant association with thrombosis. None of the analysed clinical characteristics showed significant association with pregnancy morbidities. A high frequency of thrombocytopenia and hypocomplementemia were observed in both APS patients and control patients with persistent +aPLs.

Conclusions Smoking, Raynaud's phenomenon, and hypertension are potential predictors of thromboembolic events in +aPLs Chinese patients.

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69 | LONG-TERM PROGNOSIS AND PREDICTING FACTORS OF CHINESE PATIENTS WITH ANTIPHOSPHOLIPID SYNDROME

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Background and aims 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 was 36.5±14.9 years. In total, 50.6% of the patients had primary APS, 45.9% had APS associated with SLE. The most prevalent immunological features at baseline were LA (71.3%), aCL (55.0%), and β2GPI(49.4%). No significant statistical