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AB1240 C4B BINDING PROTEIN AND WARFARIN IN THE ANTIPHOSPHOLIPID SYNDROME

G. Grosso¹, K. Sandholm², I. Gunnarsson¹, A. Zickert¹, A. Vikerfors³, A. Antovic¹, B. Nilsson⁴, K. Nilsson Ekdhah^{2,4}, E. Svenungsson¹. ¹Karolinska University, Rheumatology, Solna, Sweden; ²Linnaeus University, Center for Biomaterials Chemistry, Kalmar, Sweden; ³Swedish Medical Products Agency, Uppsala, Sweden; ⁴Uppsala University, Immunology, Genetics and Pathology, Uppsala, Sweden

Background: Complement plays a role in the Antiphospholipid Syndrome (APS). C4b Binding Protein (C4BP) is a complement inhibitor with anticoagulant function (1). It belongs to the same protein family as β 2GPI, the main antigen in APS. Its main isoform is bound to protein S in the circulation. Levels of both protein S and C4BP are known to be reduced by warfarin treatment (2) as well as by aPL, directly and indirectly.

Objectives: To investigate the levels of C4BP in primary (p) and secondary (s) APS, also considering warfarin treatment.

Methods: The total amount of C4BP (C4BPt) was measured by using magnetic carboxylated microspheres which were coupled with a monoclonal antibody against the α -chain of human-C4BP to capture the antigen. To detect C4BPt the same antibody was used, biotinylated. The binding of biotinylated antibodies was detected by streptavidin-phycoerythrin and data were collected using a MAG-PIX Multiplex Reader. Using independent t-test, we compared C4BP in 118 SLE patients with repeated positivity for Antiphospholipid antibodies (aPL) (39/118 on warfarin), 291 aPL negative SLE patients (16/291 on warfarin), 67 pAPS (33/67 on warfarin), and 322 controls (none on warfarin). We then performed an interaction and a mediation analysis (3) in the SLE group to study the impact of warfarin on C4BP levels: since warfarin is mostly prescribed to aPL+ patients, it is considered a mediator in the reducing effect of aPL on C4BP. Therefore we compared individuals exposed and non-exposed to the presence of aPL with or without the mediator warfarin and calculated the percentage of reduction in C4BP that could be attributed to aPL or warfarin.

Results: Overall C4BP is 20% reduced in aPL+ patients (fig 1), independently of SLE, past thrombotic events and nephritis. Warfarin treated patients have lower levels of C4BP (fig 2). According to mediation analysis 11% of C4BP reduction is due to aPL and 9% to warfarin.

Figure 1. C4BP in different subgroups (67 pAPS, 118 SLEaPL+, 291 SLEaPL-, 322 controls)

Figure 2. C4BP in 67 pAPS patients, 33/67 on warfarin

Conclusion: Both aPL and warfarin decrease levels of C4BP, a complement and coagulation regulator. Reduction of this complement inhibitor could contribute to complement activation and thrombosis in APS. Our results raise new questions regarding the effects of warfarin treatment on complement and coagulation in APS.

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AB1241 EVALUATION OF A PATIENT COMPLETED DISEASE FLARE QUESTIONNAIRE IN PSORIATIC DISEASE

P. Helliwell¹, W. Tillet², R. Waxman¹, L. C. Coates³, O. Fitzgerald⁴, J. Packham⁵, N. Mchugh⁶ on behalf of On behalf of the PROMPT study group. ¹Chapel Allerton Hospital, Leeds, United Kingdom; ²Royal National Hospital for Rheumatic Diseases, Bath, United Kingdom; ³University of Oxford, Oxford, United Kingdom; ⁴University College Dublin, Dublin, Ireland; ⁵University of Nottingham, Nottingham, United Kingdom; ⁶University of Bath, Bath, United Kingdom

Background: Psoriatic Disease (PsD) is a chronic inflammatory disease of the skin, nails, joints, and entheses. A number of composite disease activity measures have been developed though there is yet consensus as to which to use in the clinic and in clinical trials. A patient completed disease flare questionnaire, covering multiple domains of disease impact, has been developed but has yet to be fully validated.

Objectives: To validate the FLARE questionnaire in PsD.

Methods: The 10 question FLARE instrument¹ was administered to 141 patients in an observational study of treatment change in PsD over 6 months follow up. Disease activity was measured by the PASDAS and the gold standard of flare