REFERENCE:

- [1] Zouboulis C., Vaiopoulos G., Macromichelakis N. et al. Onset signs, clinical course, prognosis, treatment and outcome of adult patients with Adamantiades – Behçet's disease in Greece. *Clin.Exp.Rheum.*2003, 21, (suppl.30) S19-S26.

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THU0303 THE OMERACT CORE DOMAIN SET FOR CLINICAL TRIALS IN BEHÇET'S SYNDROME

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Background: There is an unmet need for reliable, validated, and widely-accepted outcome measures for clinical trials in Behçet's syndrome (BS).

Objectives: The Outcome Measures in Rheumatology Clinical Trials (OMERACT) Behçet's Syndrome Working Group has worked to advance the creation of a data-driven Core Domain Set for use in all clinical trials.

Methods: The Core Domain Set was developed through a comprehensive, iterative, multi-stage, multi-year project that followed the methodologically rigorous processes and standards set forth by OMERACT: i) a systematic review; ii) a survey among experts in BS; iii) an outcome measures interest group meeting during the International Conference on Behçet's Disease; iv) qualitative patient interviews; v) a three-round modified Delphi exercise involving both patients with BS and a multidisciplinary set of physicians expert in BS, focused on obtaining consensus on the domains of illness necessary in the study of BS; and vi) utilization of the data, insight, and feedback generated by the outlined processes to develop a final Core Domain Set. The final Core Set was presented and put up for a vote of endorsement at the 2018 OMERACT meeting.

Results: All steps in the processes outlined were completed. The systematic review clearly demonstrated the substantial variability in the domains studied in clinical trials of BS and a lack availability of validated outcome measures in BS. The survey of physicians, the in-person meeting of experts, and the qualitative research with patients all helped generate an extensive list of candidate domains and sub-domains to consider for use in clinical trials. It also became clear that there was a need and strong interest in delineating domains across the several major organ systems involved in this disease and in recognizing that clinical trials in BS often focus on specific manifestations and not the disease in its entirety. The Delphi involved 74 physicians expert in BS from 21 countries and from a wide range of specialties, and 64 patients from 10 countries. The Delphi utilized both ratings and rankings to prioritize the 56 domains and sub-domains originally under consideration.

The final proposed Core Set included 5 sub-domains mandatory for study in all trials in BS, with additional sub-domains mandatory for study of specific organ-systems when that system is the focus of a trial: mucocutaneous (2 additional sub-domains), ocular (4), central nervous system (3), musculoskeletal (2), vascular (4), and gastrointestinal (2). The final Core Set was strongly endorsed at the 2018 OMERACT meeting.

Conclusion: Multiple disease-related domains in BS have been identified by physicians and patients as important to address in clinical trials, leading to the development and endorsement of a final Core Set of Domains for use in clinical trials in BS. The Core Set provides the foundation through which the international research community, including clinical investigators, patients, the biopharmaceutical industry, and government regulatory bodies can harmonize the study of this complex disease, compare findings across studies, and advance development of effective agents.

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Sanofi, Employee of: Samumed, LLC, Peter Tugwell: None declared, Hasan Yazici: None declared, Peter Merkel: None declared
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THU0304 PREVALENCE AND MANAGEMENT OF CARDIOVASCULAR RISK FACTORS IN ANCA-ASSOCIATED VASCULITIS: A CROSS-SECTIONAL STUDY IN THE NETHERLANDS AND CANADA

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Background: Patients with ANCA-associated vasculitis (AAV) are at increased risk of cardiovascular (CV) disease.(1)

Objectives: The aim of the present study was to determine the prevalence of CV risk factors in patients with AAV and to evaluate the management of CV risk factors according to current guidelines.

Methods: A cross-sectional study was performed in patients with AAV in the Netherlands and Canada. Information on traditional CV risk factors, as well as markers of inflammation and kidney function, were collected. Their prevalence and treatment were studied and compared with recommendations in current guidelines.

Results: A total of 144 consecutive patients with AAV were included (71 from the Netherlands; 73 from Canada). Mean age was 62 ± 15 years, and 56% were male. The mean disease duration was 7.0 ± 6.6 years; 69% had granulomatosis with polyangiitis, 17% microscopic polyangiitis and 14% eosinophilic granulomatosis with polyangiitis. Mean body mass index was 28 ± 6 kg/m² and 65 patients (45%) had an estimated glomerular filtration rate <60 ml/min. The mean C-reactive protein was 6.5 ± 12.3 mg/l. Dyslipidemia was present in 69% and hypertension in 72%. In 36% and 25% of the included patients, blood pressure and dyslipidemia, respectively, were not managed in accordance with national guidelines.

Conclusion: Patients with AAV have a high prevalence of traditional CV risk factors. Whether past or persistent inflammation and chronic kidney disease further increases the CV risk remains to be studied. Strict adherence to CV risk management guidelines should be encouraged.

REFERENCE:

- [1] Houben E, Penne EL, Voskuyl AE, van der Heijden JW, Otten RHJ, Boers M, et al. Cardiovascular events in anti-neutrophil cytoplasmic antibody-associated vasculitis: a meta-analysis of observational studies. *Rheumatology (Oxford)* 2018; 57: 555-62.

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THU0305 ABSTRACT WITHDRAWN

THU0306 NEUTROPHIL ADHESION MOLECULES AND INFLAMMATORY CYTOKINES AS BIOMARKERS FOR MONITORING DISEASE PROGRESSION IN GIANT CELL ARTERITIS

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Background: Monitoring giant cell arteritis (GCA) activity with appropriate biomarkers is important, as current evaluation, based mainly on clinical symptoms/signs and traditional markers of inflammation, is not always sufficient and reliable.

Objectives: Our goal was to identify cellular and molecular biomarkers that could help clinicians to closely monitor GCA progression and/or treatment response.

Methods: Peripheral blood was obtained from 27 GCA patients at time of diagnosis (before glucocorticoid (GC) treatment), and subsequently at

weeks 1, 4, 12, 24 and 48 of follow-up (FU). At diagnosis, all patients received GC in line with EULAR recommendations with a slow GC tapering starting after week 4. At week 12, some of the patients (16/27) received additionally leflunomide (10 mg). Whole blood samples were stained, lysed, fixed and analyzed by flow cytometry. The expression of adhesion molecules (CD62L, CD11b) was determined on neutrophils. Sera levels of serum amyloid A (SAA) and IL-6 were measured by nephelometry and ELISA, respectively. Levels of IL-8, IL-18, IL-23, L-selectin and CHI3L1 were determined by MagPix using human pre-mixed multi-analyte kits.

Results: At weeks 1 and 4 of FU we detected a decrease in neutrophil expression of CD62L and CD11b, as well as in sera levels of SAA, IL-6, IL-8, IL-18, L-selectin and CHI3L1 in all GCA patients. At week 12 (8 weeks after GC tapering) an elevation of CD11b, SAA, IL-6 and IL-23 as compared to week 4 was observed (Figures 1 and 2). At weeks 24 and 48 of FU we identified four different groups of biomarkers. The first group consisted of neutrophil CD62L ($p<0.05$) and serum IL-6, that showed a marked increase in patients receiving GC therapy only, while decreasing in patients receiving GC in combination with leflunomide. The second group is represented by neutrophil CD11b and serum IL-8 that were higher at week 24 in the GC-treated group (the first FU after receiving leflunomide), however their levels were equal at week 48 in both groups of GCA patients (Figures 1 and 2). In the third group, the serum levels of SAA, IL-18 and L-selectin decreased at week 24 and remained stable through week 48, regardless of therapy used. The fourth group of biomarkers included serum IL-23 and CHI3L1, levels of which declined at weeks 24 and 48 in patients receiving GC only and substantially increased in patients receiving leflunomide and GC (Figure 2).

Conclusion: Neutrophil surface markers CD62L and CD11b together with inflammatory parameters (SAA, IL-6, IL-8 and IL-23) could represent informative biomarkers for monitoring disease progression in GCA patients. Important biomarker differences were observed between GC-treated GCA patients, in the presence and absence of leflunomide, serving as a good basis for predicting relapses.

Abstract THU306 – Figure 1. Longitudinal L-selectin (CD62L) and integrin α M (CD11b) surface expression on neutrophils from GCA patients at T0 (prior to therapy) and 1, 4, 12, 24 and 48 weeks after therapy. Shown is mean $\pm$ SEM. At week 12, 16/27 GCA patients received leflunomide, in addition to GC therapy.

Abstract THU306 – Figure 2. Serum levels of IL-6, IL-8, SAA, IL-18, L-selectin, IL-23 and CHI3L1 in longitudinally followed GCA patients at T0 (prior to therapy) and 1, 4, 12, 24 and 48 weeks after therapy. Shown is mean $\pm$ SEM. At week 12, 16/27 GCA patients received leflunomide, in addition to GC therapy.

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THU0307

THE HALO SIGN IN THE EMERGENCY DEPARTMENT: COMPLEMENTARY VALUE TO THE APPLICATION OF THE CRITERIA FOR THE CLASSIFICATION OF GIANT CELL ARTERITIS IN AN ACUTE ENVIRONMENT

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Background: In a previous study (Acta Reum 2018; Vol.4.No.1:5), we identified the low diagnostic value of the criteria for classification of giant cell arteritis (GCA) in patients with such suspicion in an emergency setting of a third level hospital. In some emergency units, linear probe ultrasound equipment is available for immediate use. It would be of interest to determine whether the training of healthcare personnel in halo sign recognition could be useful in addition to the CGA criteria in situations of suspicion.

Objectives: We present a sub-study in which we incorporate the ultrasound study of temporal arteria (TA) as an added criterion to determine its contribution in terms of diagnostic validation.

Methods: We reviewed the casuistry of patients who consulted the emergency department with different combinations of the rest of the ACG classification criteria, included in the aforementioned study. The entry requirements were: Age > 40 years and headache as a reason for consultation. We identified those patients who underwent temporal artery ultrasound during assessment before receiving corticoid therapy. The pattern of comparison was the definitive diagnosis of ACG (biopsy).

Results: Thirty cases of ACG were identified by compatible biopsy that had an ultrasound study of AT in the emergency department. On the other hand, 47 ultrasound AT studies were identified in patients who were not finally diagnosed with ACG. All included records were distributed between 2012 and 2016. Ultrasound exploration of positive AT was understood as that with 2 or more branches with positive halo sign (Sifuentes, Ann Rheum Dis 2013-eular- OP0208). Tables 2x2 were elaborated to establish the results of the validation test with three and four ACG classification criteria. One patient was identified with the combination of criteria: cephalaea + VSG > 50mm/h + Alt. of the exploration of the AT and 4 with cephalaea + Age > 50 years + Alt. of the exploration of the AT. Of these patients, only one had ultrasound study of AT so they were excluded from the study. With 4 criteria + halo sign (+), an S of 93.3% and NPV of 93.3% was achieved; with 3 criteria + halo sign (+) an S of 83.3% and NPV of 93.7% was achieved. The attached table shows all the results of the validation test.

Abstract THU0307 – Table 1.

CRITERIA COMBINATION	SENSITIVITY	SPECIFICITY	PPV	NPV
HEADACHE + AGE > 50 YEARS + ESR > 50 + TEMPORAL ARTERY ANORMALITY	94.1%	35.4%	56.2%	93.6%
4 CRITERIA + HALO (+)	82.3%	93.3%	93.3%	82.3%
HEADACHE + AGE > 50 YEARS + ESR > 50MM/H	96.9%	25.7%	38.3%	94.5%
3 CRITERIA + HALO (+)	76.9%	93.7%	83.3%	90.9%

Conclusion: Although the application of the GCA classification criteria has insufficient specificity and low positive predictive value, when adding the ultrasound study of TA, specificity exceeds 93% and PPV exceeds 93% when combined with 4 criteria and 83% when combined with 3 criteria. Although our results should be supported by a larger sample size, our findings assume that the routine use of this technique would contribute to improving the diagnostic accuracy of this disease and our ability to initiate treatment in a more timely manner.

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THU0308

ASSESSMENT OF SEXUAL AND PSYCHOLOGICAL STATES OF BEHÇET'S DISEASE MALE PATIENTS

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Background: Behçet's disease (BD) is a chronic multisystem autoimmune disease characterized by orogenital ulceration, uveitis, skin lesions and vascular involvement of different organs in the body. The sexual and psychological aspects of the disease are still not fully recognized.

Objectives: We aimed to evaluate the sexual and psychological status of BD male patients and to assess the relationship between the sexual function and depression in this cohort.