Methods: Prospective, multicenter, observational, open-label, study of TA patients treated with infliximab originator.

Results: As of 2016 (2 years of follow-up), the study included 14 patients (13/14 were female; median age 32 [range 12–56] years) with TA (diagnosis according to Ishikawa criteria). At study entry, the median TA duration was 4.7 (0.4–16) years, 12 patients were already treated with infliximab originator (for a median duration of 34 [1–78] months) and 11 patients were receiving corticosteroids (CS). Infliximab originator was administered at a median dose of 5 (3–6) mg/kg with a median interval of 8 (2–67) weeks between each infusion. Seven patients had an improvement in at least 1 of the NIH disease activity criteria for TA [3] after a median follow-up time of 2 (0.4–11) months, 4 had smoldering disease and 1 patient worsened.

The median daily dose of CS decreased from 13 (5–35) mg/day of prednisone or equivalent at baseline to 7 (5–10) mg/day at 6 months, to 5 (5–6) mg/day at 12 months, and remained stable up to 22 months of follow-up.

Infliximab was discontinued in 6 patients due to inefficacy (n=3), prior to pregnancy (n=2), or remission of TA (n=1). Two adverse events (1 disease flare and 1 spontaneous miscarriage) were reported, without infliximab interruption.

Conclusions: Infliximab originator appears to provide an effective and favourable benefit:risk treatment option to refractory TA patients.

References:

[1] Mekinian et al, Efficacy of Biological-Targeted Treatments in Takayasu Arteritis: Multicenter, Retrospective Study of 49 Patients, *Circulation* 132(18) (2015) 1693–700.

[2] Mekinian et al, Efficacy and tolerance of infliximab in refractory Takayasu arteritis: French multicentre study, *Rheumatology* (Oxford) 51(5) (2012) 882–6.

[3] Kerr and al. Takayasu arteritis. *Ann Intern Med.* 1994; 120: 919–29.

Acknowledgements: The patients were included by AP-HP Cochin (Dr X Puéchal), CHU Angers (Dr C Lavigne), CHU Tours (Pr E Diot), CHU Besançon (Pr N Magy, Dr H Gil), CHU Lille (Pr E Hachulla, Pr M Lambert, Dr H Maillard), AP-HP Kremlin-Bicêtre (Pr I Koné-Paut), AP-HM Marseille (Pr JR Harlé, Dr N Schleinitz), HEGP Pompidou (Dr JE Kahn), CH Royan (Dr A Bonnin), CHU Strasbourg (Pr T Martin, Dr V Poindron), CHU Bordeaux (Pr J Constans).

Disclosure of Interest: J.-F. Kleinmann Consultant for: MSD, L. Arnaud: None declared, E. Sauleau Consultant for: MSD, N. Gouyette Employee of: MSD, R. Tajima: None declared, J. Sibilia Consultant for: MSD

DOI: 10.1136/annrheumdis-2017-eular.1793

FRI0330 FATIGUE AND DEPRESSION IN PATIENTS WITH BEHCET'S DISEASE

J.L. Silva, D. Santos-Faria, J. Sousa-Neves, J. Rodrigues, J. Costa, C. Afonso, D. Peixoto. *Rheumatology, ULSAM, Ponte de Lima, Portugal*

Background: Behcet's disease (BD) is a systemic vasculitis of unknown etiology defined by a classic triad consisting of aphthous ulcers of the mouth and genital and uveitis. In addition to these, BD may involve cardiovascular, pulmonary, neurological, articular and gastrointestinal manifestations. Fatigue, anxiety and depression are important problems in chronic inflammatory diseases. There are few studies on fatigue in BD patients. *Ilhan et al.*¹ reported more fatigue in BD patients than in healthy controls.

Objectives: The objective of this study was to investigate fatigue and depression in patients with BD and to examine the relationship between these symptoms and disease activity and gender.

Methods: Forty four patients with BD and thirty nine healthy controls (HC) were included in this study. Age, gender, disease duration and clinical involvements were recorded. All subjects completed the FACIT Fatigue Scale (FACIT-F), Short Form-36 (SF-36), Hospital Anxiety and Depression Scale (HADS) and Health Assessment Questionnaire (HAQ). Disease activity among BD patients was assessed using the Birmingham Vasculitis Activity Score (BVAS).

Results: The mean age was 40.0 years for BD patients and 38.7 for HC. 77% of BD patients were women. The mean disease duration for BD patients was 6.1 years. All patients had oral ulcers and genital ulceration; 20 had pseudofolliculitis; 9 had uveitis, 9 had erythema nodosum, 12 had articular involvement, 5 patients had vascular involvement, 4 had pathergia, 1 had orchitis and one had gastrointestinal involvement. Thirty two BD patients were taking medication, including colchicine or DMARDs or their combinations. Seventeen patients had inactive disease and

twenty seven had BVAS ≥ 1 . As shown in Table 1, both the HADS-depression (HADS-D) (4.7 vs 2.5) and HADS-anxiety (HADS-A) (8.3 vs 5.7) scores were elevated in BD patients compared to healthy controls. FACIT-F was higher in healthy controls in comparison with BD group (44.1 vs 36.6), revealing lower levels of fatigue. There were no differences between gender on these scores.

Table 1. Comparison of BD patients and HC

Scales	BD (n=44)	HC (n=39)	P-value
FACIT-F	36.6 $\pm$ 7.3	44.1 $\pm$ 6.4	<0.001
HADS-D	4.7 $\pm$ 2.4	2.5 $\pm$ 2.4	0.004
HADS-A	8.3 $\pm$ 4.2	5.7 $\pm$ 2.8	0.03

There were no significant differences in FACIT-F, HADS-A and HADS-D scores with the disease activity (P=0.952, P=0.391 and P=0.286, respectively). FACIT-F had a negative correlation with HAQ and HADS and a positive correlation with the different components of SF-36 and age. FACIT-F score was not correlated with disease duration (Table 2).

Table 2. Correlations between FACIT-F and HAQ, HADS-A, HADS-D, SF-36, age, disease duration in BD

	HAQ	HADS-A	HADS-D	SF-36	Age	Disease duration
r-value	-0.670	-0.569	-0.562	0.857	-0.370	0.053
P-value	<0.001	<0.001	<0.001	<0.001	0.013	0.103

Conclusions: In our study, fatigue and increased levels of anxiety and depression were more common in BD patients. Contrary to the study of *Ilhan et al.*¹, we found that fatigue was not higher in patients with active disease. Similarly, there were no correlation between the assessed scores and gender. In spite of these results, the authors believe that controlling the symptoms may improve the quality of life in BD patients.

References:

[1] Ilhan et al. Fatigue in patients with Behcet's syndrome: relationship with quality of life, depression, anxiety, disability and disease activity. *International Journal of Rheumatic Diseases.* 2016.

Disclosure of Interest: None declared

DOI: 10.1136/annrheumdis-2017-eular.4459

FRI0331 IDENTIFICATION AND VALIDATION OF POTENTIAL METABOLOMIC BIOMARKERS FOR RELIABLE DIAGNOSIS OF BEHCET'S DISEASE USING GAS CHROMATOGRAPHY WITH TIME-OF-FLIGHT MASS SPECTROMETRY

J.K. Ahn¹, J. Hwang², H.-S. Cha³, E.-M. Koh³. ¹Department of Internal Medicine, Kangbuk Samsung Hospital, Sungkyunkwan University School of Medicine; ²Department of Internal Medicine, Natonal Police Hospital; ³Department of Medicine, Samsung Medical Center, Sungkyunkwan University School of Medicine, Seoul, Korea, Republic Of

Background: Although many diagnostic criteria have been developed and revised by experts in the field, diagnosing Behcet's disease (BD) is still complicated and challenging. Metabolomic studies can lead to a better understanding of pathophysiological processes and may uncover new diagnostic markers for classification of disease subgroups and assessment of disease activity in rheumatic diseases. No metabolomic studies on serum have been attempted to improve the diagnosis and to identify potential biomarkers of BD.

Objectives: The purposes of this study were to investigate distinctive metabolic changes in serum samples of BD patients and to identify metabolic candidate biomarkers for reliable profilosis of BD using the metabolomics platform.

Methods: Metabolomic profiling of 90 serum samples from 45 BD patients and 45 healthy controls (HC) was performed via gas chromatography with time-of-flight mass spectrometry (GC/TOF-MS) with multivariate statistical analyses. Thirty-five patients with BD and age- and sex-matched 35 HCs were randomly selected to form the discovery set, and the validation set is composed of 10 patients with BD and 10 HCs.

Results: We identified a total of 104 metabolites in the serum samples of the discovery set. To maximise the discrimination between groups BD and HCs, we applied supervised partial least squared-discrimination analysis (PLS-DA). A PLS-DA score plot of the discovery set indicated that the cluster of BD patients is well separated from HC clusters in component 1. The variation values of the PLS-DA model are R^2X of 0.246, R^2Y of 0.913, and Q^2 of 0.852, respectively, indicating strong explanation and prediction capabilities of the PLS-DA model. The PLS-DA models did not show clear and consistent discrimination between groups according to drug administration, indicating that drugs used in patients with BD had a negligible effect on the distinct metabolic profiles discriminating BD patients from HCs. A panel of five metabolic biomarkers, namely, decanoic acid, fructose, tagatose, linoleic acid, and oleic acid were selected based on their variable importance on projection values and adequately validated as putative biomarkers of BD (sensitivity 100%, specificity 97.1%, area under the curve 0.993) in the discovery set and validation set. Principal component analysis showed clear discrimination of BD and HC groups by the five metabolic biomarkers in the validation set.

Conclusions: This is the first report on detection of a characteristic metabolic profile of BD and identifying and validating potential metabolite biomarkers in