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THU0287 ANEURYSM IN BEHÇET'S DISEASE: MANAGEMENT, PROGNOSIS AND MORTALITY

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Background: Arterial aneurysms are one of the unique features of Behçet's disease (BD). Although arterial aneurysms are relatively rare, they carry risk of rupture and have poor prognosis.

Objectives: To evaluate the medical and interventional therapies and long-term outcomes of BD patients with extracranial arterial aneurysms.

Methods: We retrospectively reviewed the medical records of 441 BD patients according to ISG criteria between 2013 and 2018 at the Hacettepe University Vasculitis Center (HUVAC). We determined 45 BD patients with an arterial aneurysm. Six patients with isolated carotid and/or cranial arterial aneurysms who were followed by other clinics excluded from the analysis. Overall, 39 BD patients with an extracranial and extra carotid aneurysm included in the study. Data regarding demographic characteristics, clinical, laboratory and vascular imaging findings, history of medical treatments and outcomes were collected. Vascular intervention of patients were grouped as surgery or endovascular intervention. Radiological response after vascular intervention divided into 3 groups as regression, stable and progression according to radiological evaluation. Regression was defined as a decrease or disappearance of the aneurysm. Stable was defined as no change in the aneurysm diameter. Progression was defined as an increase in diameter of a previous aneurysm or occurrence of a new vascular event. We colligated the stable and regression groups and compared with the progression group. Relapse was defined the progression of the aneurysm which underwent an intervention.

Results: A total of 39 BD patients (Male, 80%) with an arterial aneurysm were analyzed in this study. Mean age and mean age of diagnosis patients were 40.9±11.0 and 29.7±7.7 years, respectively. The clinical features of BD was as follows; oral ulcer 100%, genital ulcer 80.6%, acneiform lesion 47.2%, erythema nodosum 33.3%, pathergy positivity 34.5%, arthritis 27.8%, fever 24.3%, uveitis 34.5%, neurological involvement 30.6% and, gastrointestinal involvement 7.7%. Distribution of arterial aneurysms were 5.1% subclavian, 5.1% coronary artery & cardiac, 38.8% pulmonary, 10.3% thoracic aorta, 33.3% abdominal aorta, 5.1% renal, 25.6% iliac and 12.8% femoral. Induction and maintenance treatments are shown in figure 1. In our cohort, 25 (64%) patients needed a vascular intervention, including 9 (23%) open operations and 16 (41%) endovascular interventions. Of 7 (18%) patients had to perform an urgent open operation or endovascular intervention but we didn't find any relation between the progression of an aneurysm and urgent intervention. First induction treatment options and prognosis of arterial aneurysms shown in figure 2. At median 71.8 months follow up, 7 (18%) patient died in the BD aneurysm group. The rate of progression of the aneurysm was 20% in BD patients with pulmonary artery involvement and 64% in BD patients with aortic and its branch involvement (p=0.038). In the absence of medical induction treatment, 5 patients had progression, 1 had regression and 1 had no follow-up.

Abstract THU0287 – Table 1.

	Induction treatment, n=39 (%)	Maintenance treatment*, n=39 (%)
No treatment, n (%)	7** (17.9)	3 (7.6)
Colchicine	32 (82)	15 (38.4)
Medium-high dose steroid, n (%)	31 (79.4)	11 (28.2)
Cyclophosphamide, n (%)	18 (46.1)	9 (23.0)
Interferon-α, n (%)	21 (53.8)	18 (46.1)
Azathioprine, n (%)	5 (12.8)	11 (28.2)
TNFi, n (%)	1 (2.5)	5 (12.8)
Anticoagulant n (%)	12*** (30.7)	7 (17.9)

*Some patients have received more than one type of immunosuppressive in maintenance therapy
** These patients were followed by rheumatology department after the surgical or endovascular intervention.
*** Patients already using anticoagulants due to venous thrombosis

Abstract THU0287 – Table 2.

Figure 2. Evaluation of response according to vascular intervention and induction treatments *

	Stabile/Regression, n=18	Progression, n=18	p
Vascular intervention			
Done, n=23 (%)	10 (43.5)	13 (56.5)	0.298
Not done, n=13 (%)	8 (61.5)	5 (38.5)	
Induction treatment			
Cyc	2	1	0.315
Cyc+IFN-α	10	5	
IFN	3	2	
Anti-TNF	0	1	
Azathioprine	2	3	
No treatment	1	5	
Only steroid	0	1	

*3 patients have no follow-up data
Cyc: Cyclophosphamide, IFN: Interferon-α

Conclusion: Arterial aneurysms in BD have poor prognosis and high mortality. Glucocorticoids, cyclophosphamide and interferon-α are the most preferred treatments for induction and maintenance therapy for aneurysm of the BD. Approximately 2/3 of the patients required a vascular intervention. Clinical and radiological progression was more prominent in the aorta and its branches. As expected, there is more progression in interventional procedures without medical treatment.

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THU0288 LONG-TERM FOLLOW-UP OF ANTI-IL6-RECEPTOR TOLICIZUMAB IN REFRACTORY UVEITIS IN PATIENTS WITH BEHÇET'S DISEASE. MULTICENTER STUDY OF 14 PATIENTS IN CLINICAL PRACTICE

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Background: Ocular involvement in Behçet's disease (BD) is a potential severe and disabling complication. Anti-TNF-α agents have shown an improvement of visual outcome in BD-related uveitis refractory to conventional immunosuppressive (IS) drugs. However, these drugs do not achieve control of intraocular inflammation in all patients or are not well tolerated. Tocilizumab (TCZ) has shown efficacy in different refractory ocular inflammatory diseases.

Objectives: To assess the efficacy of long-term therapy with TCZ in refractory uveitis associated to extraocular manifestations (EOM) due to BD.

Methods: Multicenter study of patients with BD refractory to standard systemic treatment.

Results: We followed up 14 patients (9 men/5 women) (26 affected eyes); mean age 40.8±19.5 years. Pattern of ocular involvement: panuveitis (10; 4 with retinal vasculitis), anterior (3) and posterior (1) uveitis; 8 recurrent and 6 chronic; 9 with cystoid macular edema. At TCZ onset the following EOM were present: oral and/or genital ulcers (10), arthritis (6), folliculitis/pseudofolliculitis (6), erythema nodosum (3), livedo reticularis (1), intestinal affection (1) and neurological involvement (3). Before TCZ, they had received corticosteroids (13 intraocular, 12 oral and 12 iv), conventional IS drugs and biologic agents: methotrexate (11), cyclosporine (8), azathioprine (10), colchicine (1), cyclophosphamide (2), mycophenolate mofetil (1), adalimumab (10), infliximab (6), golimumab (3), canakinumab (1), or etanercept (1). TCZ was used in monotherapy (7) or

combined with conventional IS drugs (7) at 8 mg/kg/iv/4 w (11) or 162 mg/sc/w (3).

Abstract THU0288 – Table 2.

TABLE. Evolution of ocular parameters with TCZ therapy in a long-term follow-up.

	BASAL n=26	1 WEEK n=20	2 WEEKS n=24	1 MONTH n=24	3 MONTHS n=24	6 MONTHS n=20	1 YEAR n=17	2 YEARS n=11	3 YEARS n=7	4 YEARS n=4
BCVA	0.38±0.3 5	0.46±0.3 4*	0.56±0.3 6*	0.58±0. 38*	0.61±0.3 7*	0.65±0.3 7*	0.61±0.3 8*	0.61±0. 33	0.63±0. 29*	0.93±0. 12
AC										
CELL	1 [0-3]	1 [0-2]*	0 [0-1]*	0 [0-0.75]*	0 [0-0.25]*	0 [0-0]*	0 [0-1]*	0 [0-0]	0 [0-0]	0 [0-0]
VITRIS										
TIS	1 [0-2]	1 [0-2]	0 [0-1]*	0 [0-1]*	0 [0-0]*	0 [0-0]*	0 [0-0]*	0 [0-0]*	0 [0-0]	0 [0-0]
OCT	339.9±11	329.3±10	324.6±1	298.7±8	263.4±8	251.8±8	232.8±4	245.8±2	247.25±	247.25±
	0.1	9.1*	08.5	3.5	8.4*	7.4*	5.8*	9.9	6.2	6.2

*p<0.05

Abbreviations: AC= anterior chamber; BCVA= best corrected visual acuity; n= number of available eyes;

OCT= optical coherence tomography.

After a mean follow-up of 21.7±14.5 months using TCZ, all patients experienced ocular improvement, with complete remission in 10. However, TCZ was only effective in 5 of the patients with EOM. TABLE shows the evolution of ocular parameters.

TCZ had to be withdrawn temporarily in 1 case, due to an episode of cellulitis with sepsis, and definitely in 4 cases, due to a severe infusion reaction, arthritis impairment, persistence of oral ulcers or a new episode of uveitis (1 each). Prednisone dose was significantly reduced until suspension in all patients.

Conclusion: TCZ seems a useful and secure therapy in highly refractory BD-related uveitis.

REFERENCES:

- [1] Atienza-Mateo B, Calvo-Río V, Beltrán E, et al. Anti-interleukin 6 receptor tocilizumab in refractory uveitis associated with Behçet's disease: multi-centre retrospective study. *Rheumatology (Oxford)*. 2018 May 1;57(5):856-864.
- [2] Calvo-Río V, de la Hera D, Beltrán-Catalán E, et al. Tocilizumab in uveitis refractory to other biologic drugs: a study of 3 cases and a literature review. *Clin Exp Rheumatol*. 2014; 32(4 Suppl 84): S54-7.

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THU0289

PERSISTENCE OF CIRCULATING CRYOGLOBULINS AND RELATED SYMPTOMS AFTER HEPATITIS C VIRUS ERADICATION IN PATIENTS WITH MIXED CRYOGLOBULIN SYNDROME

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Background: The powerful drugs with direct antiviral action (DAA) against hepatitis C virus (HCV) has made it possible to eliminate the trigger factor of Mixed Cryoglobulin Syndrome (MCS) and to extend the treatment to patients who could not tolerate IFN-based antiviral regimens. However, the persistence of cryoglobulin production and MCS-related symptoms despite SVR achievement is frequently reported.

Objectives: The aim of this study was to assess the persistency rate of MCS-related clinical and laboratory indexes after successful treatment with DAA.

Methods: CRESO (CRYoglobulinaemia Eradication Study Observational) is a multicentre observational study promoted by the Italian Society of Infectious and Tropical Diseases (SIMIT) and the Italian Group for the Study of Cryoglobulinaemias (GISC), aimed to assess the impact of DAA therapy on MCS symptoms and cryoglobulin production. Patients could be enrolled if they presented, during the 12 months before the enrolment, a cryocrit $\geq 0.5\%$ and, at least, one episode of palpable purpura or, alternatively, arthralgia and fatigue with at least one symptom among peripheral neuropathy, Raynaud's phenomenon, lower limb ulcers or nephropathy, and a C₄ level ≤ 8 mg/dL.

Results: The present analysis was based on clinical and laboratory data of 94 patients (75.5% female with a median age of 67.5 years) that have been followed up for a median time of 24 weeks (IQR 12-24) after SVR₁₂ achievement. At baseline the cryocrit was frankly positive in 85 (90.43%), detectable ($>0.5\%$) in 4 and negative in 4 cases; patients with type II cryoglobulins and C₄ levels ≤ 8 mg/dL were prevalent, respectively with 81.5% and 75.9%. Low eGFR values (≤ 45 mL/min/1.73m²) were present in 12 cases (12.8%), 10 patients (10.6%) had a history of B-cell non-Hodgkin's lymphoma (NHL), and 1 of hepatocellular carcinoma, while liver cirrhosis was diagnosed in 22 cases (23.4%) and glomerulonephritis in 17 cases (18.1%). Patients were treated for 12 (72 cases) or 24 (21 cases) weeks with a total of ten different IFN-free DAA regimens. SVR₁₂ was achieved in all 94 cases. Both prevalence and median cryocrit values decreased significantly after DAA treatment ($p<0.0001$), however, at the time of the last observation 56.4% of patients were still positive for MCs. The prevalence of purpura and fatigue significantly decreased ($p<0.0001$) as well sicca syndrome prevalence ($p<0.015$), while arthralgia and lower limb ulcers decrease did not reach statistical significance. In multivariate analysis, eGFR ≤ 45 mL/min/1.73m² was an independent predictor of persistence of cryoglobulin production (AOR 7.7, CI 95% 1.6-37.2; $p<0.011$).

Conclusion: CRESO study data confirm the persistence of cryoglobulin production and MCS symptoms in some patients, despite the eradication of HCV. This finding rises questions about the possible further evolution of the disease over time regardless the persistence of its original trigger.

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THU0290

DISEASE AND TREATMENT-RELATED MORBIDITY IN YOUNG AND ELDERLY PATIENTS WITH ANCA-ASSOCIATED VASCULITIS

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Background: Advancing age may be a risk factor for morbidity in anti-neutrophil cytoplasmic antibody (ANCA)-associated vasculitis (AAV).

Objectives: We aimed to compare the rates and better characterize the type of disease- and treatment-related complications affecting young and elderly patients with AAV.

Methods: All new cases of granulomatosis with polyangiitis or microscopic polyangiitis diagnosed between 2000 and 2016 in three referral centers in Northern Italy were included. Patients were stratified by age into young or elderly ($</\geq 65$ years old). Data were collected from time of diagnosis until end of follow-up, with scheduled annual visits or additional visits in case of relapse or complication requiring hospitalization.

Results: Of 141 patients included, 99 were young and 42 elderly at the time of AAV diagnosis. Median follow-up was 58.0 months (25-75% IQR, 31.0-60.0) in young and 48.0 months (25-75% IQR, 23.25-60.0) in elderly patients ($p>0.05$).

Overall, total chronic damage assessed by Vasculitis Damage Index (VDI) significantly increased in elderly patients compared to young ones during follow-up ($=0.28$, $p<0.05$). Although rates of the most common complications scored in the VDI (i.e. arterial hypertension, heart failure, ischemic cardiovascular complications, diabetes, and malignancy) accumulated over time when analyzed singularly, no difference between the two age groups was observed ($p>0.05$). Sixty-three (44.7%) patients had acute kidney injury due to AAV-glomerulonephritis at diagnosis, 37 were young and 26 were elderly. In these patients, renal function recovery in the first 6 months was significantly lower for elderly (median Δ eGFR (25-75%IQR), 5.3 (0.4-14) mL/min/1.73m²) compared to young patients (22.8 (5.9-52.1) mL/min/1.73m², $p=0.008$) while on induction treatment. Stratification for