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FRI0215 **RESPONSE TO TOCILIZUMAB IN LARGE VESSEL VASCULITIS ACCORDING TO THE EXTENT OF BASELINE 18F-FDG VASCULAR UPTAKE**

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Background: ¹⁸F-FDG PET/CT is useful to establish the presence and extent of large vessel vasculitis (LVV)(1-2). Early therapy is needed to prevent severe compli-
 cations. Tocilizumab (TCZ) has shown efficacy in LVV (3-5). However, it is unknown
 if the extent of FDG vascular uptake may influence on clinical response to TCZ

Objectives: To assess the correlation of the extent of baseline FDG vascular
 uptake in PET/CT scan with clinical response to TCZ in patients with LVV.

Methods: Single center study of patients with LVV treated with TCZ who were
 divided into 2 groups depending on the extent of vascular uptake in baseline
 PET/CT scan: **a)** 1-2 affected areas **b)** ≥affected 3 areas. Vascular uptake was
 qualitatively assessed by two experienced nuclear medicine physicians in five
 areas (supraaortic trunks, thoracic aorta, abdominal aorta, iliac and femorotibial
 arteries). We assessed clinical improvement (no improvement/partial/complete),
 normalization of CRP (≤0.5mg/dL) and/or ESR (≤ 20 mm/1st h) and reduction of
 prednisone dose (mg/day).

Results: 30 patients (24 w/6 m); mean age 65.3±10.6 yrs. In baseline PET/CT,
 vascular uptake was observed in 1 or 2 areas (n=13) and in ≥3 areas (n=17).
 There was a trend to higher ESR/CRP and shorter evolution of clinical symp-
 toms before TCZ onset in patients with ≥3 affected areas (TABLE 1). Clinical/
 serological evolution and reduction of prednisone dose is shown in TABLE 2.
 No statistical differences were found. However, patients with ≥ 3 affected areas
 tended to experience a slower clinical response.

TABLE 1.

	1-2 vascular affected areas (n=13)	≥3 vascular affected areas (n=17)	P
Demographic data			
Age, mean ± SD	66.0 ± 10.8	64.8 ± 10.7	0.77
Sex (women), n (%)	11 (84.6)	13 (76.5)	0.67
Evolution time before TCZ (months), median [IQR]	26.0 [3.5-34.0]	5.0 [1.5-10.0]	0.02
Laboratory markers			
ESR (mm/1st h), mean ± SD	30.0 ± 27.3	34.8 ± 27.6	0.64
CRP (mg/dL), mean ± SD	1.3 ± 1.2	1.8 ± 1.7	0.28
Previous treatment			
Prednisone dose (mg/day), mean ± SD	9.4 ± 6.2	7.9 ± 6.9	0.53
TCZ therapy			
Intravenous, n (%)	10 (76.9)	11 (64.7)	0.47
Combined with MTX, n (%)	6 (46.2)	8 (47.1)	0.96

TABLE 2.

	1-2 vascular affected areas (n=13)	≥ 3 vascular affected areas (n=17)	P
Complete clinical improvement, n/N (%)			
6 m	11/13 (84.6)	12/17 (70.6)	0.43
12 m	12/13 (92.3)	13/17 (76.5)	0.36
18 m	10/11 (90.9)	11/12 (91.7)	0.99
24 m	8/8 (100)	9/10 (90.0)	0.99
Normalization of ESR and/or CRP, n/N (%)			
6 m	13/13 (100)	16/17 (94.1)	0.99
12 m	13/13 (100)	16/17 (94.1)	0.99
18 m	11/11 (100)	11/12 (91.7)	0.99
24 m	8/8 (100)	10/10 (100)	0.99
Dose of Prednisone (mg/day), median [IQR]			
6 m	5.0 [1.3-5.0]	5.0 [0.0-5.0]	0.98
12 m	2.5 [0.0-3.8]	0.0 [0.0-5.0]	0.97
18 m	0.0 [0.0-2.5]	0.0 [0.0-1.9]	0.72
24 m	0.0 [0.0-2.2]	0.0 [0.0-2.5]	0.77

Conclusion: TCZ therapy was effective in patients with LVV regardless the
 extent of FDG vascular uptake in baseline PET/CT scan. However, a trend to a
 slower clinical response was observed in patients with ≥3 affected areas.

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FRI0216 **STERIOD SPARING EFFECT, LOWER INCIDENCE OF DISEASE RELAPSE AND DIABETES IN GIANT CELL ARTERITIS TREATED WITH IMMUNOSUPPRESSORS AB INITIO OR VERY EARLY: A MULTICENTER RETROSPECTIVE CASE-CONTROL STUDY**

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Background: Glucocorticoids (GC) are associated with serious side effects in
 giant cell arteritis (GCA). Immunosuppressive therapies (IT) gave conflicting
 results in GCA, regarding GC sparing effect. Recently, tocilizumab by blocking
 IL-6, has been licensed as first biologic treatment for GCA, being clinically effec-
 tive and saving GC (1).

Objectives: To evaluate the usefulness of IT for GCA in: 1) minimizing the rate of
 GC-induced adverse events (AEs) and 2) reducing the risk of relapse.

Methods: A multicenter retrospective case-control study included 165 GCA
 was performed. The first group of patients (GCA-IT) included 114 patients
 who were treated with at least one IT given ab initio or within 3 months from
 the start of GC. The control group included 51 GCA who received only GC
 or an IT later than 3 months (GCA-steroid). The primary endpoints were the
 rate of GC-related side effects: infections, hospitalized infections, new
 onset systemic arterial hypertension, GC-induced diabetes and osteoporotic
 fractures.

Results: Methotrexate up to 20 mg/week (138 patients), followed by cyclophos-
 phamide (48 patients) and tocilizumab (27 patients) were the most frequently
 used IT. No difference was observed as concerns the follow-up time between the
 two groups [48.5 (IQR 26-72) vs 40 (IQR 24-69), p=0.3, rank-sum test]. The two
 groups were similar as concerns sex (p=0.13), while the first group (69±8 yrs)
 was slightly younger than the second one (72±7 yrs) (p=0.005). Comorbidity
 was similar between groups. Patients in the GCA-IT group showed a significant
 lower incidence of GC-induced diabetes (8/114, 7% vs 12/51, 23.5%; p=0.003,
 chi-square test), while no differences were documented for rate of infections
 (p=0.64), including hospitalized infections (p=0.44), new onset systemic arterial
 hypertension (p=0.68), or osteoporotic fractures (p=0.32). Forty-four patients in
 the GCA-IT group (38.6%), while 34 patients in the GCA-steroid group (66.7%)
 experienced at least one relapse (p=0.001, chi square test). There was no dif-
 ference in terms of time to first relapse between the two groups (p=0.53, log-
 rank test). GCA-IT group was exposed to lower dose of GC at first (p<0.0001,