

74 patients. 55/74 (74,3%) patients experienced more than one hospitalization. In the majority of the hospitalizations (119/285, 41,7%), the cause of hospitalization was directly attributable to the disease itself, while the second cause of hospitalization was the infections (26/285, 9,1%). In 10/103 patients (9,7%), an end stage renal disease was recorded as event. The presence of at least one positivity for ANCA antibodies was documented in 76/103 patients (73,8%), mainly in patients carrying GPA. Globally, the presence of ANCA antibody seems to be associated with greater likelihood of an event ($p=0,07$, log-rank test). The first event occurred in 50% of ANCA-positive patients within 180 days from diagnosis, while in 50% of ANCA negative patients in 859 days. 6 out of the 7 deaths occurred in ANCA positive patients.

Conclusion: the rate of hospitalization in AAV is very high confirming the high health care burden of illness. The disease itself is often the cause of the hospitalization, as well as the infectious complication, highlighting the need for more effective treatments, and glucocorticoid sparing therapies. ANCA antibody may represent a biomarker of a more serious disease.

Disclosure of Interests: Luca Quartuccio Consultant of: Abbvie, Bristol, Speakers bureau: Abbvie, Pfizer, Elena Treppo: None declared, Salvatore De Vita Consultant of: Roche, GSK, Speakers bureau: Roche, GSK, Novartis, Francesca Valent: None declared
DOI: 10.1136/annrheumdis-2020-eular.2567

AB0521 COST OF ILLNESS OF ANCA-ASSOCIATED VASCULITIS IN ITALY: DATA LINKAGE ANALYSIS OF MULTIPLE CLINICAL AND ADMINISTRATIVE DATABASES IN THE PROVINCE OF UDINE, ITALY

L. Quartuccio¹, E. Treppo¹, S. De Vita¹, F. Valent². ¹*Clinic of Rheumatology, Department of Medicine, Academic Hospital "Santa Maria della Misericordia", ASUI, Udine, Italy, Udine, Italy;* ²*Institute of Epidemiology, Academic Hospital "Santa Maria della Misericordia", ASUI, Udine, Italy, Udine, Italy*

Background: ANCA-associated vasculitides (AAV) are a group of systemic vasculitis carrying a high risk of hospitalization because the multiorgan involvement, the acute nature of some clinical manifestations, the chronic but very disabling course of some other manifestations and finally the risk of severe infections due to chronic glucocorticoid and immunosuppressor administration. However, data on cost of illness due to AAV are lacking.

Objectives: to estimate the cost of illness in patients suffering from AAV in the province of Udine (about 500,000 inhabitants), Friuli Venezia Giulia (FVG), Italy, from year 2010 to 2018.

Methods: integration of the information coming from many administrative databases were used to this end. The Regional Health Information System of FVG was used as the source of information for this retrospective cohort study. The system covers the entire regional population and includes various electronic health administrative databases that can be linked with one another on an individual basis through a unique encrypted identifier. In particular, the following databases were matched: the database of the health care beneficiaries (including demographic information and the residential history of all of the subjects living in FVG), the hospital discharge database, the database of exemptions from medical charges, the database of the laboratories. The population under study was selected based on the following inclusion criteria: patients were residents in the province of Udine and they had to carry the exemption code for AAV, including GPA, or EGPA, or MPA. This population was observed from 2010 to 2018.

Results: 57 patients (201 patient-years) with AAV were identified. They were ANCA-positive in 44/57 (77%). GPA, EGPA and MPA was diagnosed in 18 (31,6%), 15 (26,3%), 11 (19,3%) patients, respectively. The mean age at diagnosis was 54,5 (17,5) years. The disease itself was the main cause of hospitalization in almost half of the hospital discharges (60/126, 47,6%). Four patients died during the observation period due to vasculitis itself (1), pneumonia (2), or haematological malignancy (1). Time to the first event (death or hospitalization) was significantly higher in ANCA-negative AAV patients than in ANCA-positive AAV patients ($p=0,03$, Log-Rank test), ANCA-positive AAV patients having a three-times higher risk (HR 3,38 95%CI 1,13-10,08, $p=0,03$). Total estimated cost was € 1,215,078, corresponding to € 6,168 patient-year. Costs for ANCA-positive AAV patients were much higher than those for ANCA-negative AAV patients (€ 1,115,253 vs € 99,825, and € 7058 per person-year vs € 2,559 per person-year, respectively). GPA and MPA showed the highest costs if compared to EGPA [GPA: € 239,168 (€ 5199 per person-year) vs MPA: € 281,502 (€ 4771 per person-year) vs EGPA: € 214,287 (2329 per person-year), respectively]. Costs for hospitalization were the highest [€ 734,957 (€ 3731 per person-year) vs other costs € 480,121 (€ 2437 per person-year)].

Conclusion: costs for AAV are very high, confirming the high health care burden of this illness. Management of ANCA-positive patients rather than ANCA-negative patients was burdened by the highest costs. GPA and MPA showed the

highest direct costs for hospitalization, which very frequently occurred due to the vasculitis itself.

Disclosure of Interests: Luca Quartuccio Consultant of: Abbvie, Bristol, Speakers bureau: Abbvie, Pfizer, Elena Treppo: None declared, Salvatore De Vita Consultant of: Roche, GSK, Speakers bureau: Roche, GSK, Novartis, Francesca Valent: None declared

DOI: 10.1136/annrheumdis-2020-eular.2585

AB0522 GENDER DIFFERENCES IN GIANT CELLS ARTERITIS: ANALYSIS OF A MONOCENTRIC COHORT OF 100 PATIENTS.

F. Regola¹, A. Tincani¹, F. Franceschini¹, P. Toniati¹. ¹*ASST Spedali Civili and University of Brescia, Rheumatology and Clinical Immunology Unit, Brescia, Italy*

Background: Giant Cells Arteritis (GCA) is the most common primary vasculitis in adults and usually occurs in patients older than 50 years. Epidemiological studies shown a higher prevalence of the disease in women compared to men. However, differences in clinical presentation between men and women have not been demonstrated, even if some distinctions have been suggested (1,2).

Objectives: The purpose of the present study is to analyze differences in the clinical presentation of GCA according to sex.

Methods: We collected retrospectively clinical data of a monocentric cohort of 100 consecutive GCA patients. Mann Whitney test was used to compare continuous variables, while Chi-square test and Fisher's exact test were applied for comparison between qualitative variables.

Results: One-hundred patients with a clinical diagnosis of GCA were enrolled in the study (68 women, 32 men). In all patients the diagnosis of vasculitis was histologically and/or radiologically confirmed. Main clinical data are reported in the table.

Patients were classified according to vascular involvement in three groups: temporal arteritis (C-GCA), extracranial large vessel vasculitis (LV-GCA) and both cranial and extracranial vasculitis (LV-C-GCA). No significant differences in vascular distribution of the disease were found according to sex, even if large vessel involvement seems to be more frequent in women (43% vs 28%; p : ns).

Male and female patients presented at diagnosis a similar clinical picture, with the same frequency of systemic symptoms (fever, fatigue, weight loss), polymyalgia rheumatica, visual symptoms and claudication. However, male patients complained more often temporal headache (90% vs 71%, p : 0.01), even no significant differences were found in the incidence of pathological findings at temporal artery physical examination (38% vs 32%; p : ns) and biopsy (59% vs 50%). On the contrary, in female patients a longer time to diagnosis was recorded (8 (2-49 vs 4 (0-35) months; p : 0.01).

Conclusion: In our cohort of GCA patients, clinical presentation was similar in male and female patients, with no significant differences in clinical, radiological and laboratory findings. However, male patients presented more often temporal headache, the most typical symptom of GCA, and this could explain a shorter time to diagnosis, if compared to female.

References:

- [1] Sturm A et al. Clin Exp Rheum, 2016
[2] Nir-Paz R et al. J of Rheum, 2002

| | All GCA (n:100) | WOMAN (n:68) | MAN (n:32) |
|---|-----------------|--------------|-------------|
| Age: median (10 th -90 th percentile) | 76 (62-80) | 73 (60-83) | 76 (62-80) |
| Time to diagnosis (weeks) * | 8 (1-42) | 8 (2-49) | 4 (0-35) |
| C-GCA | 61 (61%) | 38 (56%) | 23 (72%) |
| LV-C-GCA | 16 (16%) | 13 (20%) | 3 (9%) |
| LV-GCA | 23 (23%) | 17 (25%) | 6 (20%) |
| New temporal headache* | 77 (77%) | 48 (71%) | 29 (90%) |
| Visual symptoms | 39 (39%) | 24 (35%) | 15 (47%) |
| Jaw or tongue claudication | 35 (35%) | 23 (34%) | 12 (38%) |
| Fever | 39 (39%) | 24 (35%) | 15 (47%) |
| Fatigue | 71 (71%) | 48 (71%) | 23 (72%) |
| Weight loss | 49 (49%) | 34 (50%) | 15 (47%) |
| Polymyalgia rheumatica | 43 (43%) | 33 (49%) | 10 (31%) |
| Arm or leg claudication | 5 (5%) | 2 (3%) | 3 (9%) |
| Positive temporal artery biopsy | 53 (53%) | 34 (50%) | 19 (59%) |
| Pathological findings at temporal artery physical examination | 34 (34%) | 22 (32%) | 12 (38%) |
| CRP (C-reactive protein) | 83 (22-160) | 89 (21-159) | 78 (23-155) |
| ESR (erythrocyte sedimentation rate) | 72 (34-109) | 79 (37-113) | 54 (32-100) |
| FDG-PET activity throughout aorta | 32 (32%) | 25 (37%) | 7 (22%) |

*: $p \leq 0.05$