IgAV compared to healthy blood donors (HBD), and determine associations with IgAV clinical signs.
Methods: Flow cytometry of stained, lysed and fixed whole blood was performed in IgAV (n=30), and HBD (n=17) (Miltenyi). Cytokines were quantitated by multiplex bead assay (Luminex), ELISA (IL-6) and immunonephelometry (acute phase serum amyloid A (SAA)) in 57 IgAV vs. 53 HBD.
Results: Percentage of $CD16^+$ neutrophils was significantly higher, while percentages of $CD3^+$ T-cells (including $CD4^+$ and $CD8^+$ cells), as well as $CD19^+$ B-cells were significantly lower in peripheral blood of IgAV patients vs. HBD. The expression of l-selectin (CD62L) on $CD16^+$ neutrophils was significantly increased in IgAV vs. HBD, as were the sera levels of TNF-α (2-fold), IL-6 (3-fold), IL-8 (2.2-fold) and SAA (11.7-fold changed levels) (table 1). Association was found between GIT involvement and lower neutrophil expression of integrin αM (CD11b) (median; IQR: 7.2; 4.2–16.0), compared to skin limited (17.8; 9.9–40.5) IgAV cases (p=0.047). There was no association found between different cytokines and IgAV clinical phenotype.

Abstract FRI0516 – Table 1. Cell profiles, neutrophil surface proteins and cytokines in IgAV patients compared to HBD

	MEDIAN (Q_{25}-Q_{75})				MEDIAN (Q_{25}-Q_{75})		
Cells (% of WBC)	**HBD** (n=15)	**IgAV** (n=15)	**P value**	**Cytokines (pg/ml)**	**HBD** (n=53)	**IgAV** (n=57)	**P value**
Neutrophils	51.0 (47.1–56.9)	67.5 (63.6–73.3)	**<0.001**	IL-1β	0.4 (0.4–0.4)	0.4 (0.4–1.5)	ns
T-cells	26.4 (23.0–31.8)	16.6 (10.2–21.4)	**<0.001**	**IL-6**	2.0 (1.0–6.0)	6.0 (2.8–14.3)	**0.015**
$CD4^+$T cells	13.6 (11.7–18.4)	10.4 (7.7.–14.4)	**0.003**	**IL-8**	53.3 (10.9–195.0)	117.1 (29.3–443.9)	**0.018**
$CD8^+$T cells	10.3 (6.0–12.6)	5.0 (1.9–7,9)	**0.002**	IL-9	19.0 (19.0–19.0)	19.0 (19.0–19.0)	ns
B-cells	3.8 (2.9–4.7)	2.4 (1.6–2.9)	**0.006**	IL-10	1.0 (0.8–2.8)	0.04 (0.04–1.3)	ns
NK cells	4.6 (3.8–6.3)	3.6 (2.3–6.1)	ns	IL-13	665.2 (354.1–1668.0)	23.0 (23.0–102.2)	ns
Neutrophil surface proteins (MFI)	**HBD** (n=17)	**IgAV** (n=30)		IL-23	1.4 (1.4–82.9)	1.4 (1.4–118.6)	ns
CD62L	56.4 (44.9–73.7)	86.5 (45.4–107.5)	**0.036**	**TNF-α**	3.9 (0.8–15.5)	8.1 (3.0–20.2)	**0.003**
CD11b	8.7 (5.5–27.4)	15.7 (6.4–31.3)	ns	**SAA (μg/ml)**	2.8 (1.9–4.7)	32.8 (7.2–168.0)	**<0.001**

Conclusions: We found significant up-regulation of neutrophils and their CD62L expression, as well as sera levels of IL-6, IL-8, TNF-α and SAA in IgAV, implying a pathogenic role of neutrophils in IgAV. CD11b might represent a promising surface marker of GIT involvement in adult IgAV.

REFERENCE:

[1] Nagy GE, Kemény L, Bata-Csörgő Z, et al. Neutrophil-to-lymphocyte ratio: A biomarker for predicting systemic involvement in adult IgA vasculitis patients. J Eur Acad Dermatol Venereol 2017;31(6):1033–1037.

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FRI0517 VESSEL WALL MORPHOLOGY IN GIANT CELL ARTERITIS– A LONGTERM SONOGRAPHIC FOLLOW-UP STUDY

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Background: Ultrasound (US) is a cornerstone in the diagnosis of GCA. Only limited data on how US documented large vessel wall thickening changes during treatment is available.
Objectives: To assess arterial vessel wall findings by US during long term follow-up in GCA patients with large vessel vasculitis (LVV) and to correlate findings with the disease course
Methods: Patients with GCA and US defined LV vasculitis were scheduled semi-annually for clinical and laboratory assessment as well as US of the temporal (TA), vertebral (VA), carotid (common, internal, external), subclavian (SA), axillary (AXA), deep (DFA), superficial (SFA) and common (CFA) femoral, and popliteal arteries (PA). US findings were classified as normal, moderate or marked vessel wall thickening.
Results: From 42 patients (16 male) with a median age of 75 years at diagnosis 28 had typical vessel wall thickening in the temporal artery and in at least one LV segment and 14 in the LV only. The following vessels (marked/moderate) were most often involved: PA in 11/21, SFA in 13/20, AxA in 14/5, SA in 8/13 patients respectively.
A reduction of the vessel wall thickening in the temporal artery during follow-up was found in 79% of patients after in median 7 months, with bilateral normalisation in 10 patients after in median 13 months.
In contrast 55% had no, 43% a partial and only one patient a complete reduction of thickening of all LV walls during follow-up. From initially marked supra-aortic LV segments 35% were moderate and 16% normal and from initially moderate LV 13% were normal at 1 year FU. From initially marked infra-aortic LV segments 36% were moderate and 3% normal and from initially moderate 10% were normal at 1 year FU.
Progression of vessel wall thickening in the LV during FU was seen in a total of 3 patients, in 2 of those, a clinical relapse of GCA was diagnosed one respectively 2 months before US.
There was no difference between patients with reduction of the vessel wall thickening and without during follow-up in respect to clinical parameters (relapse rate over the observation time, cumulative steroid dose after one year).
Conclusions: Regression of US morphological documented thickening of LV in patients with GCA is rare despite clinical remission. US remains sensitive for the diagnosis of LVV long after treatment initiation. Most plasticity is seen in the TA and more rarely in the supra-aortic segments.
Disclosure of Interest: None declared
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FRI0518 INCIDENCE, CHARACTERISTICS AND MANAGEMENT OF GIANT CELL ARTERITIS IN FRANCE: A STUDY BASED ON NATIONAL HEALTH INSURANCE CLAIMS DATA

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Background: Giant cell arteritis (GCA) is an immune-mediated, primary systemic vasculitis that affects large and medium-sized arteries. GCA may cause vision loss in up to 20% and requires long term glucocorticoids (GCs). There are currently few data available in France on the epidemiology, patients' (pts) characteristics, diagnosis and management of GCA in a real-world setting.
Objectives: The objectives of this study were to address these questions using Health insurance claims data.

Methods: This retrospective cohort study used the EGB (*Echantillon Généraliste des Bénéficiaires)* database which is a 1% random and representative sample of the French national Health insurance system. EGB contains anonymous demographic and comprehensive medical data on conditions with long-term disease (LTD) status, hospitalizations and reimbursement claims for medications dispensed in the community. The study used the data collected between January 1, 2007 and December 31, 2015. Inclusion criteria were: 1) age ≥50 years; 2) hospitalisation for GCA or LTD status for GCA (ICD-10 codes: M31.5/6); and 3) at least 4 drug dispensing of oral GCs within 6 months around the index date. The index date was defined as the date of 1 st occurrence of GCA code and cases were considered as incident if the GCA code first occurred after ≥2 years of follow-up. Demographics, co-morbidities, diagnostic tests and therapies were analysed. A treatment sequence was defined as the start of a new drug or the resumption of the same drug after a stop ≥3 months. Annual incidence was calculated by using the people recorded in the EGB as denominator.
Results: Among the 7 52 717 pts recorded in the EGB, 241 pts fulfilled our criteria. Around 24 pts were newly diagnosed/year with an annual incidence of 7 to 10/100,000 people≥50 years-old. 72% of the 241 pts were females, mean age was 77.5 (±8.9) years, mean follow-up 3.7 (±2.6) years. In the 12 months before index date, 74.3% of the pts had at least 1 proxy for hypertension, 39.4% for depression/insomnia and 33.6% for osteoporosis. After index date, temporal artery biopsy (TAB) was performed in 43.2%, high-resolution Doppler ultrasound in 35.3% and positron emission tomography (PET) in 11.6%. Among the 235 pts (97.5%) who had at least 1 drug dispensing of oral GCs, 198 pts (84.3%) used only GCs while 37 (16.7%) also received 1 to 3 adjunctive agents. Mean 1 st GCs sequence duration was 17.2 months (±16.5) in 96.6%. 95 pts (40.4%) had a 2nd sequence, i.e. resume GCs and or start a new drug for a duration of 6.7 months (±8.1) for GCS alone or 12.2 months (±8.8) for GCs+adjunctive drug. The most prescribed GCs-sparing agent was methotrexate (12.0%). Others were marginal: hydroxychloroquine 7 pts, azathioprine 4, cyclophosphamide 1, infliximab 1, adalimumab 2 and etanercept 1 pt.
Conclusions: These real-world data indicate an incidence of GCA in France of 7 to 10 cases/100,000 people≥50 years-old and underline that most patients with GCA are treated with GCs alone whereas adjunctive agents, mainly methotrexate, are given to 17% of patients. The utilisation of TAB in only half of the patients might reflect a shift towards increasing use of imaging techniques to diagnosed GCA.
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FRI0519 WORK PRODUCTIVITY IS IMPAIRED IN PATIENTS WITH BEHÇET'S SYNDROME

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Background: Behçet's syndrome (BS) is most active during young adulthood and working years, thus affecting productivity. Work disability was previously reported especially among BS patients with eye, vascular and joint involvement.
Objectives: In this study, we aimed to evaluate the work productivity and instability of patients with BS compared to ankylosing spondylitis (AS) patients and healthy controls (HC).
Methods: 100 (80 M/20 F) consecutive BS patients who were routinely followed in our dedicated BS centre were studied. Patients with AS;[26] 22 M/4 F) who were followed in the rheumatology outpatient clinic of our unit and HC;[30] 18 M/12 F) were included as controls. Work Productivity and Activity Impairment Questionnaire (WPAI), Work Productivity Survey (WPS), Work Instability Scale (WIS) were used. Quality of life was assessed with the Behçet Disease Quality of Life (BDQoL) scale and disease activity with the Behçet's Disease Current Activity Index.
Results: Table 1 shows the characteristics of the included subjects. 28 of BS patients with only mucocutaneous, 28 with eye, 23 with vascular and 21 with neurologic involvement were included. Among BS patients 41% reported missing work days (mean 1.4 days/mo), and 49% reported that their productivity was reduced at least by half (mean 4.1 days/mo). The mean WIS score was 11.7 (5.8) in BS patients. 52 BS patients had moderate and 14 BS patients had high work instability. Patients with BS had significantly higher absenteeism (8.4% vs. 1.7%), presenteeism (37.6% vs. 9.3%), and daily activity impairment (27.5% vs. 8.6%) than HCs (p<0.001) assessed by WPAI. Scores were similar between BS and AS patients. WIS and WPS scores were also similar between BS and AS patients and worse than healthy controls. Work impairment was more pronounced in patients with eye involvement compared to mucocutaneous involvement (p=0.006) and there were no differences between other BS groups. The WPAI presenteeism score was moderately correlated with Behçet Disease Quality of Life scale score (r=−0.57). Multivariate analysis showed that QoL (OR=0.77, 95% CI=0.66–0.88) and disease activity (OR=1.66, 95% CI=1.01–2.50) were related with WPAI-presenteeism.

Abstract FRI0519 – Table 1. Characteristics of the included subjects

	Behçet's syndrome (n=100)	Ankylosing spondylitis (n=26)	Healthy controls (n=30)
Male, n (%)	80 (80)	22 (85)	18 (60)
Mean (SD) current age,	36±7.8	36±6.4	31±8.1
Mean (SD) disease duration	8±5.5	7.46±4.6	N/A
WIS (mean±SD)	12±6	11±5.5	6±4
WPAI-Absenteeism (mean±SD)	8±15	8±19	2±7
WPAI-Presenteeism (mean ±SD)	38±29	32±26	9±21
WPS-Absenteeism (mean±SD)	1.4±3	1.2±3	0.1±0.3
WPS -Presenteeism (mean ±SD)	4±7	4±6	1±3
BDCAF (mean±SD)	4.47±2.79	N/A	N/A
BSAS (mean±SD)	21.47±17.5	N/A	N/A
BDQoL (mean±SD)	19.53±8.3	N/A	N/A
BASDAI (mean±SD)	N/A	3.3±1.8	N/A
BASFI (mean±SD)	N/A	2.8±2.9	N/A

N/A: Not applicable; Behçet Disease Quality of Life: BDQoL; Behçet's Disease Current Activity Index (BDCAI); Behçet's Syndrome Activity Score (BSAS)
Conclusions: Work productivity is impaired in BS patients, especially among those with eye involvement. Work instability is frequent and correlated with disease activity and quality of life.
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FRIDAY, 15 JUNE 2018: Osteoarthritis

FRI0520 DISCOVERY OF POTENTIAL BIOMARKERS FOR THE DIAGNOSIS OF EROSIVE AND NODAL HAND OSTEOARTHRITIS

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Background: Two different phenotypes of hand osteoarthritis (HOA) have been defined: nodal hand osteoarthritis (NHOA) and erosive hand osteoarthritis (EHOA). NHOA involve bone enlargement of the underlying interphalangeal joints, which may typically give rise to Heberden's nodes, synovitis and swelling. EHOA is a particularly aggressive form characterised by an abrupt onset, as well as signs of inflammation and subchondral erosions. In the absence of efficient diagnostic methods, searching for specific biomarkers for each subtype may help to characterise them.
Objectives: To define a panel of specific protein markers for the characterisation of EHOA and NHOA and its potential use in clinic.
Methods: A proteomic approach based on peptide labelling with Isobaric tags for relative and absolute quantitation (iTRAQ) was performed using two different sets of sera (n=55). Samples were classified in 4 groups of study (EHOA, n=10; non-EHOA, n=10; NHOA n=10; non-NHOA, n=5) and 2 control groups (rheumatoid arthritis (RA), n=10 and psoriatic arthritis (PSA), n=10). Serum proteins were digested and peptides from each condition to be compared were differentially labelled with iTRAQ reagents (Sciex). Then, samples were combined and analysed by two-dimensional liquid chromatography coupled to mass spectrometry in a TripleTOF 5600 Mass Spectrometer System (Sciex). Protein identification and quantitation was carried out using ProteinPilot software v.5.0.1.
Results: A total of 257 different proteins were identify with more than two peptides and a total score ≥2 at 95% confidence. In order to identify specific biomarkers for the characterisation of NHOA and EHOA phenotypes, each group was compared with the non-NHOA or non-EHOA respectively, and also with the control groups. After all the comparisons were made, 26 unique different proteins were found specific of the nodular phenotype. Vasorin (VAS) showed elevated levels in patients diagnosed with NHOA when compared to non-NHOA, RA and PSA groups. On the other hand, 36 unique proteins were identified in those patients with EHOA. Extracellular matrix protein 1 (ECM1) was found with higher concentrations in EHOA than in non-EHOA, RA and PSA patients. In addition, both HOA phenotypes were compared to the control groups and a panel of 30 different proteins