smokers, 61% with AH, 34% with dyslipidemia). Median duration of RA was 8 years (IQR 3–17). Seropositive RA was diagnosed in 69% of patients. Median CRP was 12,1 mg/dl (IQR 2,2–23,4 mg/dl), median rheumatoid factor (RF) was 32,5 IU/ml (IQR 8,3–173 IU/ml). All patients received disease-modifying antirheumatic drugs, 22 (38%) - biological treatment. Median duration of AH was 6,1 years (IQR 0–10 years. All patients with AH received antihypertensive treatment. 24-h peripheral and central BP monitoring was performed (BPLab Vasotens, "Petr Telegin"). Arterial stiffness was assessed by applanation tonometry (Sphygmocor, AtCor, Australia). $P<0.05$ was considered significant.

Results: Mean office BP was 130±15/80±10 mmHg. Mean pulse wave velocity (PWV) was 9,3±3,2 m/s. The dipping states were as follows: non-dipping in 39 (62,9%) patients, dipping – In 7 (11,3%), extreme dipping – in 5 (8,1%) and reverse dipping in 11 (17,7%). Median of nocturnal fall in systolic BP was 3,5% (IQR 0–9%). Isolated nocturnal AH was observed in 12 (19,4%) pts. Patients were divided into 2 groups according to nocturnal fall of BP: G1 (non-dipping - >10%) – 42 (67,7%) pts and G2 (dipping- <10%.) – 16 (32,3%) pts. Non-dippers were older (56,7±16,2 vs 49±12,5 years), more often were smokers (20 vs 0%), had higher BMI (25,4±6,0 vs 22,3±5,1 kg/m^2), median duration of AH (1,5; IQR 0–11 vs 0; min 0, max 1 years), median duration of RA (10; IQR 7–19 vs 2,5; IQR 2–6,5 years), PWV (8,6±2,8 vs 7,2±2,1 m/s), nocturnal BP (120,4±12,7/69,8±10,4 vs 103,8±8,8/59,4±4,4 mmHg), $p<0,05$ for trend. Spearmen analysis revealed significant correlations between nocturnal fall in SBP and RA duration (r=-0,3), central BP (r=0,2 for SBP and DBP), night SBP and DBP (r=-0,3 and -0,5 respectively), $p<0,05$ for trend. Multiple regression analysis showed that elevation of central office DBP and night DBP were significant predictors of non-dipping state (β=-3,7, p=0,008 and -0,7, $p<0,0001$ respectively).

Conclusions: The majority of patients with rheumatoid arthritis are characterized by non-dipping state. Diastolic nocturnal hypertension is a significant predictor of non-dipping in this patient population.

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SAT0104 THE IMPACT OF DISEASE ACTIVITY ON PATIENT REPORTED COGNITIVE DYSFUNCTION ("BRAIN FOG") IN RHEUMATOID ARTHRITIS

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Background: Rheumatoid arthritis (RA) is a systemic, inflammatory disease and its burden extends beyond joint disease. In recent years, there has been significant advances in treating joint disease but we need a greater understanding of physical and especially psychosocial comorbities to improve quality of life in RA patients. In particular, patients often report "brain fog" meaning a diminished ability to think, learn, remember and perform other mental tasks. Doctors have long recognized that patients with certain physical conditions can experience cognitive dysfunction. Limited information is available in the literature with regard to the prevalence of cognitive dysfunction and factors associated with the condtion in RA.

Objectives: To characterize the association of disease activity with patient reported cognitive dysfunction in patients with RA overall and stratified by age.

Methods: We identified patients with RA aged ≥18 years who were enrolled in the Corrona registry who were biologic naïve at their last follow-up visit (October 2010–June 2016). We compared those who reported cognitive dysfunction (responded "yes" to the question asking if they had "problems with thinking") to those who did not with respect to disease activity based on the Clinical Disease Activity Index (CDAI). Unadjusted and adjusted logistic regression models controlling for demographic (age, gender, race, education), comorbidity/lifestyle (diabetes, fibromyalgia, body mass index, smoking) and RA disease characteristics (disease duration, disability and prednisone dose) were conducted. We further examined whether the relationship between disease activity and cognitive dysfunction varied based on patients age (<55 vs. >55 years) testing the moderating effect using a likelihood ratio test.

Results: There were 10,401 patients who met inclusion criteria of whom 863 (8%) reported cognitive dysfunction. Those who reported cognitive dysfunction were more likely to be women (83% vs. 73%, $p<0.001$), younger (62 vs. 64 years, $p<0.001$), disabled (24% vs. 8%, $p<0.001$), with moderate/high disease activity based on the CDAI (51% vs. 31%, $p<0.001$). In adjusted models, the likelihood of cognitive dysfunction increased with higher levels of disease activity in the total population (Table). The impact was more pronounced in those age <55 (p=0.007; Table).

	Total population*	Age <55**	Age ≥55**
Disease activity OR (95% CI)*			
Remission	1	1	1
Low	2.70 (2.11–3.45)	3.97 (2.34–6.75)	2.42 (1.84–3.20)
Moderate	3.56 (2.75–4.61)	5.93 (3.45–10.19)	3.01 (2.24–4.05)
High	3.90 (2.92–5.21)	7.92 (4.49–13.98)	2.90 (2.04–4.12)

*Adjusted for age, gender, race, disability, education, smoking status, body mass index, diabetes, fibromyalgia, disease duration and prednisone dose. **Adjusted for gender, race, disability, education, smoking status, body mass index, diabetes, fibromyalgia, disease duration and prednisone dose.

Conclusions: Increasing disease activity is associated with a higher likelihood of reporting cognitive disfunction. The effect was more pronounced in younger as opposed to older RA patients.

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SAT0105 SURVIVAL IN FIRST LINE OF BIOLOGIC AGENTS IN AN APULIAN COHORT OF RHEUMATOID ARTHRITIS PATIENTS WITH OCCULT HEPATITIS B VIRUS INFECTION

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Background: The occurrence of hepatitis B virus (HBV) infection may be a concern during the treatment of patients with Rheumatoid Arthritis (RA). We wondered whether a state of HBV occult infection (anti-HBcAg-pos, HBsAg-neg, HBV-DNA-neg) might influence the effectiveness of biological drugs in RA patients in real-world settings.

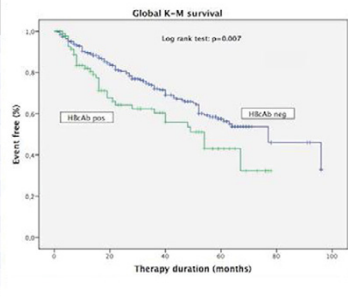
Objectives: We performed a retrospective analysis to evaluate the survival on first line biologic drug of RA Apulian patients with HBV occult infection.

Methods: We analyzed longitudinal data of 384 consecutive RA patients starting a first biological drug in a time frame from 1st January 2008 to 31st December 2014. Demographic and disease related characteristics were collected at baseline and at last observation visit. Baseline serological markers of HBV infection and causes of discontinuation of treatment were also recorded. Primary endpoint was the influence of anti-HBcAg-pos on drug survival, estimated by Kaplan-Meier life table analysis. Estimates hazard ratios (HRs) of drug discontinuation or achievement of Clinical Disease Activity Index (CDAI) based remission at last visit, adjusted for disease characteristics, biological drug class and anti-HBcAg-pos were computed by Cox-regression models.

Results: No baseline demographic and disease characteristics difference between anti-HBcAg-pos and anti-HBcAg-neg RA patients were detected, except for DAS28 that was significantly higher in anti-HBcAg-pos group. Drug survival rate was significantly lower in anti-HBcAg-pos (57.6%, median survival time (95% CI) 54 months (38–69)) than in anti-HBcAg-neg patients (67.8%, median survival time (95% CI) 77 months (59–94)). Median survival time for ineffectiveness was 15 months (12–17) for anti-HBcAg-pos and 24 months (18–30) for anti-HBcAg-neg patients (p=0.04). Cox regression models showed a significant association between anti-HBcAg-neg (HR 0.60, 0.39–0.92) or RF/ACPA-neg (HR 1.69, 1.16–2.46) and drug discontinuation, while co-therapy with MTX (HR 2.14, 1.01–4.58) or with steroids (HR 0.38, 0.16–0.91), and RF/ACPA neg (HR 0.45, 0.21–0.95) were independently associated with the achievement of CDAI based remission.

	All (nr. 384)	Anti-HBc neg (nr. 298)	Anti-HBc pos (nr. 86)	P
Age	59 ±10	59 ±10	57 ±12	ns
Female. nr (%)	290 (75)	229 (77)	61 (72)	ns
Disease duration	41 ±58	38 ±58	51 ± 60	ns
Comorbidities. nr (%)	263 (63)	132 (44)	28 (33)	ns
ESR-DAS28	4.5 ±1.2	4.4 ±1.1	4.8 ± 1.2	0.007
CDAI	20.3 ±11	20 ±10	21 ±11	ns
HAQ-DI	1.4 ±0.7	1.4 ±0.6	1.3 ± 0.7	ns
RF nr (%)	252 (66)	199 (67)	53 (62)	ns
Etanercept nr (%)	135 (35)	112 (38)	23 (27)	ns
TNFa mAb nr (%)	122 (32)	103 (35)	19 (22)	ns
Tocilizumab nr (%)	60 (16)	39 (13)	21 (25)	ns
Abatacept nr (%)	66 (17)	44 (15)	22 (26)	ns
Glucocorticoids nr (%)	304 (80)	235 (79)	69 (80)	ns
MTX nr (%)	323 (84)	262 (88)	61 (71)	ns

Values are the mean ± SD unless otherwise indicated. *28 joints Disease Activity Score; CDAI = Clinical Disease Activity Index; RF =Rheumatoid Factor; MTX =Methotrexate.



Conclusions: HBV occult infection seems to influence negatively the effectiveness