## AB0362 ANALYSIS OF INSULIN RESISTANCE IN A RHEUMATOID ARTHRITIS INCEPTION COHORT: CASE-CONTROL STUDY

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**Objectives:** To describe insulin resistance (IR) in patients with rheumatoid arthritis (RA) and compare it with healthy controls and to analyze the association between the accumulated inflammatory burden in patients with RA and IR.
**Methods:** *Design:* Observational case-control study. *Population:* consecutive RA-patients (ACR/EULAR 2010 criteria), >16 years, selected from a prospective inception cohort (diagnosis of RA between 2007 and 2011). Patients with Diabetes Mellitus (according to ADA 2010 criteria) were excluded. *Controls:* sex- age and BMI -matched controls were collected from a health center in our hospital area. *Protocol:* Cases and controls were evaluated by a rheumatologist. Clinical data of disease activity (RA patients), analytical values and oral glucose tolerance test (OGTT) were determined. All participants signed informed consent. *Main outcome:* IR measured by the homeostasis model for insulin resistance (HOMA-IR) (IR>2.29 μU * mmol/ml). *Secondary outcome:* IR measured by quantitative insulin sensitivity check index (QUICKI) (<0.337μU * mmol/ml) and by the homeostatic model assessment of β-cell function (HOMAβ). *Variables:* Demographic, clinical-analytical variables, Disease Activity Score of 28 joints (DAS28-ESR), Health Assessment Questionnaire (HAQ), BMI (according to OMS classification) and glucose and insulin before and after OGTT values. *Statistical analysis:* Descriptive and paired T-test or Chi-square test followed by binary logistic regression in RA patients (Dependent variable: Insulin Resistance).
**Results:** Sixty-two subjects were studied, 8 of them were excluded after OGTT (4 diabetic patients and their respective controls). Finally, 54 subjects were included; 27 RA and 27 healthy controls. The mean age of patients with RA was 52.2 (12.1) years. Most of them were women (88.9%), with seropositive (FR 81.5% and ACPA 74.1%) and erosive (63%) RA. The mean duration of the disease was 85.6 months (27.1) and mean DAS 28 index since the onset of the disease of 2.98 (0.9).
Differences between clinical characteristics and in relation to IR between cases and controls are shown in Table 1. No significant differences in the proportion of subjects with IR in cases and controls were observed. 33.3% of patients with RA had IR. In multivariate analysis, the only independent variable associated with IR in RA patients was disease activity score (DAS28) (OR [95% CI] = 3.6 [1.0–12.9], p=0.045).

Table 1

| VARIABLE | CASES n=27 | CONTROLS n=27 | P - VALUE |
|---|---|---|---|
| Age, years; mean(±SD) | 52.2(12.0) | 52.3(12.3) | 0.979 |
| Sex, women; n(%) | 24(88.9) | 24(88.9) | 1 |
| Comorbidities | | | |
| BMI > 30 (obesity) n(%) | 5(18.5) | 4(14.8) | 0.715 |
| BMI, mean(±SD) | 26.7(4.6) | 26.3(5.4) | 0.776 |
| Waist perimeter(cm), mean(±SD) | 88.7(13.2) | 89.1(14.4) | 0.891 |
| Hip perimeter (cm), mean(±SD) | 103.9(9.5) | 106.8(15.8) | 0.395 |
| Dyslipemia, n(%) | 5(18.5) | 7(25.9) | 0.513 |
| Hypertension, n(%) | 3(11.1) | 6(22.2) | 0.273 |
| Insulin Resistance Indexes | | | |
| HOMA-IR>2,25, n(%) | 9(33.3) | 7(25.9) | 0.551 |
| HOMA-IR, mean(±SD) | 1.9(10) | 1.7(1.1) | 0.514 |
| HOMA-β, mean(±SD) | 41.03(22.3) | 37.7(25.26) | 0.630 |
| QUICKI, mean(±SD) | 0.35(0.0) | 0.36(0.0) | 0.255 |

**Conclusions:** The only predictor of IR in RA patients was the inflammatory activity measured by DAS28. We did not find a higher IR in RA patients than in healthy controls, it could be because the patients were well treated and the inflammatory activity was controlled in the most of them.
**Disclosure of Interest:** None declared
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## AB0363 RESULTS OF SCREENING FOR VIRAL HEPATITIS IN RA PATIENTS TREATED WITH BIOLOGICS: HUR-BIO REAL LIFE RESULTS

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**Background:** Turkish Society of Rheumatology (TSR) proposed a guideline of recommendations for viral hepatitis screening before biological therapy in 2015.[1]
**Objectives:** The aim of this study was to assess results of viral hepatitis serological tests performed before biologics in RA patients.
**Methods:** HUR-BIO (Hacettepe University Rheumatology Biologic Registry) is a prospective,single center database of biological treatments including 1229 RA patients by August 2016. Results of serological tests for HBV of 468 RA patients were evaluated. The guideline includes 5 groups according to hepatitis B virus (HBV) serology; group 1 –HBV seronegative [HbsAg (-),anti HbS (-), anti-Hbc total (-)], group 2-vaccinated [HBsAg (-), anti-HBs (+), anti-HBc total (-)], group 3-previous HBV infection [HBsAg (-), anti-HBs (-), anti-HBc total (+)], group 4-Chronic HBV infection [HBsAg (+), anti-HBs (-), anti-HBc total (+)], group 5-secondary immunity [HBsAg (-), anti-HBs (+), anti-HBc total (+)]. Patients were also classified according to risk for HBV reactivation as very high risk (Group 4 patients receiving rituximab), high risk (group 3 patients receiving rituximab) and medium risk (Group3 or Group 4 patients receiving TNFi or T-cell blockers,IL12/23 pathway inhibitor). Screening results for hepatitis C virus (HCV) were also evaluated.
**Results:** Among 1229 patients (79.7% female), mean age was 54.9±11.7 and mean disease duration was 12.3±8.2 years. In total, 104 (22.2%) of patients had received rituximab. Serology for HbsAg, anti-Hbs and anti-HbC were avaliable in 468 patients. There were 273 (58.3%) patients in group 1, 81 (17.3%) in group 2, 19 (4.1%) in group 3, 9 (1.9%) in group 4 and 86 (18.3%) in group 5. Table 1 represents distribution of patients according to HBV reactivation risk. Anti-HCV was positive in 21 (2.5%) of patients.

Table 1. Distribution of patients according to HBV reactivation risk

| HBV reactivation risk (%) | N (%) |
|---|---|
| Very high risk (>%20) | 2 (%0.4) |
| High risk (%11–20) | 22 (%4.7) |
| Medium risk (%1–10) | 81 (%17.3) |
| No risk | 363 (%77.6) |

**Conclusions:** Among patients registered in HUR-BIO, 1.9% had chronic HBV infection and 2.5% anti-HCV positivity. 5.0% of them were under high and/or very high risk for HBV reactivation. Medium risk group which includes 17.0% of patients, seems to deserve most of the attention. Screening for viral hepatitis must be performed before biologics and TSR guideline may be useful in this matter.
**References:**
[1] Karadag O, Kasifoglu T et al. Guideline of the viral hepatitis screening before biologic agents use in patients with rheumatic diseases. RAED Journal;7:28–32.
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## AB0364 CHARACTERISTICS OF BLOOD PRESSURE PHEHOTYPES IN PATIENTS WITH RHEUMATOID ARTHRITIS - EULAR

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**Background:** Patients with rheumatoid arthritis (RA) have increased cardio-vascular risk. Arterial hypertension (AH) is highly prevalent, and seems to be under-diagnosed and under-treated among patients with RA. Data on ABPM profile in patients with rheumatoid arthritis are lacking.
**Objectives:** The aim of the study was to evaluate ABPM parameters and characterize phenotypes of blood pressure (BP) in patients with RA.
**Methods:** 62 patients with RA (EULAR 2010) without known cardio-vascular disease were examined (73% females, age 58,5±15,4 (M±SD) years, 13% 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 (DMARDs), 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”). P<0.05 was considered significant.
**Results:** Mean office BP was 130±15/80±10 mmHg (peripheral) and 123±21/80±10 mmHg (central). 10 (17%) patients had elevated office BP (>140/90 mmHg). Mean BP values for peripheral and central BP were as follows: 125±15/73±9 and 116±14/75±9 mmHg for 24-h BP; 127±15/74±9 and 117±14/77±9 mmHg for daytime BP; 119±15/69±10 and 112±15/70±10 mmHg for nighttime BP. AH according to daytime BP was found in 15 (24,2%) pts, nighttime BP – in 29 (46,8%) pts, 24-h BP - in 19 (30,6%) pts. Phenotypes of BP were as follows: sustained normotension – in 38 (61,2%), masked hypertension in 12 (19,4%), sustained AH – in 10 (16,1%), white-coat hypertension in 2 (3,2%) patients. Isolated nocturnal AH was observed in 12 (19,4%) pts. 10 (16,1%) patients had isolated elevated central BP. 20 (32,3%) pts had elevated central SBP according to individual reference values; all patients with high office BP had elevated central BP.
**Conclusions:** Patients with RA free of CVD are characterized by high prevalence of with the satisfactory control of office BP in the majority of patients. Relatively high prevalence of masked and isolated nocturnal hypertension despite antihy-pertensive treatment is observed in this population. These findings may help to optimize hypertension treatment in patients with RA.