Abstract AB1315 – Table 1 RD-related. medication dispensing prevalence by pregnancy period (N=71)

	Pre-pregnancy	1st Trimester	2nd Trimester	3rd Trimester
cDMARDs	17 (23.9)	15 (21.1)	14 (19.7)	12 (16.9)
Azathioprine	1 (1.4)	1 (1.4)	1 (1.4)	1 (1.4)
Cyclosporin	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Hydroxychloroquine	17 (23.9)	14 (19.7)	13 (18.3)	10 (14.1)
Sulfasalazine	0 (0.0)	0 (0.0)	1 (1.4)	2 (2.8)
Tacrolimus	1 (1.4)	1 (1.4)	0 (0.0)	0 (0.0)
Others	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
bDMARDs	0 (0.0)	0 (0.0)	0 (0.0)	0 (0.0)
Corticosteroids	31 (43.7)	24 (33.8)	24 (33.8)	22 (31.0)
NSAIDs	27 (38.0)	13 (18.3)	3 (4.2)	1 (1.4)

Conclusions: Medications are frequently required during pregnancies of women with RD. RD are a significant burden for pregnant women requiring increased number of medication use.

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AB1316 HOSPITAL ADMISSION TRENDS AND SHORT-TERM OUTCOME FOR IGA VASCULITIS IN CHILDREN AND ADULTS IN WESTERN AUSTRALIA

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Background: Immunoglobulin A vasculitis (IgAV), formerly called Henoch-Schönlein purpura, is an immune complex mediated small-vessel vasculitis that preferentially affects the skin, intestines and kidneys. While more common in children, IgAV is not unusual in adults, where it has been associated with worse outcomes.

Objectives: To compare hospital admission rates and outcomes over time between adult and paediatric inpatients with IgA vasculitis

Methods: Data were extracted from a state-wide registry for all hospital admissions in Western Australia (WA) between 1980 to 2015 for patients with a primary or secondary diagnosis of IgAV (ICD-9-CM code 287.0/ICD-10-AM code D69.0). Paediatric cases were defined as those ≤19 years at first diagnosis.

Results: From a total 764 patients admitted to hospital with an IgAV diagnosis 508 (66%) were paediatric and 256 (34%) adult cases. IgAV was the primary diagnosis in 463 (91.1%) paediatric and in 123 (48%) adult patients ($p < 0.01$). In children, mean age at primary diagnosis was 5.6 years of (range 0–19) versus 50.2 years (range 20–91) in adults. Both groups had similar proportions of Indigenous (3.5 vs 1.6%, $p = 0.4$) and male patients (59 vs 51.2%, $p = 0.3$). Over the observation period, the annual rates per 100,000 for a first admission for IgAV declined from 4.2 to 0.4 for children and from 0.42 to 0.2 for adults, while length of stay in days decreased from 5.8 to 1.8 for children and increased from 10.5 to 21.1 for adults. Three adults (2.4%) but no child required ICU admission, while one adult (0.7%) and no child died in hospital. Readmission rates for IgAV were considerable and higher in children than adults (25.6% vs 18.7%, $p = 0.1$).

Conclusions: Admission rates for IgAV in children in WA have declined steeply over the last decades and now almost equate admission rates for adults. The reduction in length of stay and absence of in-hospital mortality support an increased willingness or necessity to manage children with IgAV outside the hospital setting despite a significant readmission rate. In contrast, hospital admission for IgAV in adults associates with prolonged length of stay and a slight risk for ICU admission and in-hospital mortality.

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AB1317 IDENTIFICATION OF CARDIOMETABOLIC ABNORMALITIES IN THE FIRST VISIT TO A PREVENTIVE CARDIO-RHEUMA CLINIC

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Background: Rheumatoid arthritis (RA) is a chronic, systemic and autoimmune disease with articular and extra-articular manifestations. RA is associated with increased prevalence of comorbidities and higher cardiovascular risk when compared to general population. Atherosclerotic cardiovascular (CV) events are the leading cause of death in RA. In a recent meta-analysis, hypertension, type 2 diabetes mellitus (T2DM) and hypercholesterolemia were shown to increase the risk of CV disease in this population.¹ A study reported a prevalence of hypertension 29.8%; dyslipidemia 27.1% and T2DM 12.4% in Mexican-mestizo RA patients.² The cardio-rheuma clinics were designed to provide healthcare for CV diseases in patients with rheumatic conditions. Specific guidelines recommendations have been published to enhance detection and management of specific comorbidities associated to RA.³

Objectives: To identify the prevalence of unknown cardiometabolic risk factors in a Mexican-mestizo cohort with RA.

Methods: Cross-sectional, observational study. Patients who fulfilled the 1987 ACR and/or the 2010 ACR/EULAR classification criteria were consecutively recruited. Patients were divided in two groups, with and without history of cardiovascular comorbidities. Clinical history and physical exam were performed by a general physician in a cardio-rheuma clinic. Fasting blood glucose and lipid profile were performed on all subjects. Categorical variables are expressed as percentages and numerical variables as means ± standard deviations.

Results: A total of 296 patients were included. Demographical characteristics are shown in Figure 1. Hypertension was the most frequent comorbidity (27.7%), followed by dyslipidemia (26.7%) and T2DM (13.5%). Many of the patients without history of cardiometabolic risk factor had important findings on baseline visit: 18.7% had altered blood pressure without history of hypertension, 76.5% had an abnormal lipid profile without history of dyslipidemia, and 21.5% had an altered fasting glucose without history of T2DM.

A. Demographic data		
Characteristic	N= 296	
Age (years), mean ± SD	55.8 ± 8.5	
Female, n (%)	275 (92.9%)	
Active or former smoker, n (%)	27 (9.1%)	
T2DM history, n (%)	40 (13.5%)	
Hypertension history, n (%)	82 (27.7%)	
Dyslipidemia history, n (%)	79 (26.7%)	
Steroids use	174 (58.8%)	
bDMARDs, n (%)	20 (6.8%)	
Methotrexate, n (%)	249 (84.1%)	
Leflunomide, n (%)	61 (20.6%)	
DAS 28-CRP, mean ± SD	3.36 ± 1.4	
Disease duration (years), mean ± SD	10.91 ± 13.3	
B. Cardiometabolic abnormalities		
	Previous history	No previous history
Hyperglycemia (n)	40	256
Fasting plasma glucose levels (mg/dL)		
≤99 mg/dL, n (%)	13 (32.5 %)	201(78.5%)
100-125 mg/dL, n (%)	13 (32.5 %)	43 (16.8 %)
126-199 mg/dL, n (%)	6 (15 %)	12 (4.7 %)
≥ 200 mg/dL, n (%)	8 (20 %)	0
Hypertension (n)	82	214
Blood pressure (mmHg)		
Blood pressure ≤ 140/90 mmHg, n (%)	52 (63.4 %)	174 (81.3 %)
Systolic blood pressure ≥ 140 mmHg, n (%)	15 (18.3 %)	26 (12.2 %)
Diastolic blood pressure ≥ 90 mmHg, n (%)	5 (6 %)	13 (6.1 %)
Blood pressure ≥ 140/90 mmHg, n (%)	10 (12 %)	1 (0.5 %)
Dyslipidemia (n)	79	217
Normal lipid profile, n (%)	14 (17.7 %)	51 (23.5 %)
Altered lipid profile*, n (%)	65 (82.3 %)	166 (76.5 %)

Abstract AB1317 – Figure 1

*Altered lipid profile was defined as TC $\geq$ 200 mg/dL, HDL-C $<$ 50 mg/dL, TG $\geq$ 150 mg/dL, LDL-C $\geq$ 100 mg/dL. SD=Standard deviation; T2DM=Type 2 diabetes mellitus; bDMARDs=biological agents; DAS 28-CRP=Disease Activity Score 28 joints C-reactive protein.

Conclusions: In our cohort of Mexican-mestizo RA patients there is a high prevalence of cardiometabolic risk factors. An important amount of these were discovered in patients without previous diagnosis at their first visit to a cardio-rheuma clinic.

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AB1318 PRACTICAL ASPECTS OF BIOLOGICAL-DRUG MONITORING IN RHEUMATOID ARTHRITIS AND SPONDYLOARTHRITIS

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Objectives: To prepare recommendations on practical aspects of biological-drug monitoring that may be useful for rheumatologist

Methods: A systematic review of the literature was carried out to determine in which patients and in what clinical circumstances may be most beneficial to monitor the levels of biological drugs and their antibodies in patients suffering Rheumatoid Arthritis (RA) and/or Spondyloarthritis (SpA). With the results of the review, a group of experts produced a series of clinical questions, to be answered through the available scientific evidence, and then, subsequently, to make the recommendations and clinical algorithms for instructing the decision-making process.

Results: Results from the systematic review showed that the biological-drug monitoring might be especially useful in two clinical situations; in case of a treatment failure (primary or secondary) and in sustained remission (see figure 1). It was also reviewed which laboratory technique might be better and the optimal time for blood withdrawal. Specific recommendations are given on the interpretation of drug levels and on factors that should be taken into account are given (i.e. body mass index and concomitant medication).

Abstract AB1318 – Figure 1

Conclusions: Informed algorithms have been developed regarding the optimal time for requesting drug levels and anti-drug antibodies in patients with RA and

SpA. This recommendations may help in the decision-making process and could be useful as part of future guidelines in the field.

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AB1319 DRUG RESISTANCE IN BACTERIA ISOLATED FROM URINE OF RHEUMATOID ARTHRITIS PATIENTS AND INDUCTION OF RESISTANCE BY CHLOROQUINE

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Background: Rheumatoid arthritis (RA) was connected with bacterial infections.¹ Usage of antibiotics generate resistance in pathogens as well as natural microflora.² Some anti-rheumatic drug (chloroquine) probably is associated with selection of quinolone resistant bacteria.³

Objectives: To isolate bacteria from urine of rheumatoid arthritis patients, determine antibiotic resistance profiles for isolated bacteria and induce ciprofloxacin resistance by exposition to chloroquine.

Methods: Two consecutive samples of morning urine was obtained from 26 RA patients without urinary infection tract symptoms. Patients were treatment-naïve or treated with different anti-rheumatic drugs. Bacteriuria was determinate on UTI chromogenic medium (HIMEDIA). Resistance against 38 commonly used drugs (MAST) was determined according EUCAST standards. For OXA-48 carbapenemase detection, a temocillin disc was used. Isolated bacterial strains were cultivated on LB broth supplemented with chloroquine (625 and 1875 µg/ml) for 2 weeks, than incubated on medium with ciprofloxacin (32, 15, 8, 4, 2, 1, 0.5 µg/ml). Growth was measured with spectrophotometer (λ=600 nm) against non-inoculated medium.

Results: Bacteria were cultivated from almost 88% of patients, but only in 26% of them in titer higher than 10⁵ cfu/ml of urine. Bacteriuria were more often in treated individuals. Isolated bacteria belonged to *Escherichia coli*, *Klebsiella pneumoniae*, *Enterobacter cloacae*, *Proteus mirabilis*, *Morganella morganii*, *Staphylococcus* sp. Among tested bacteria 23% were determined as MDRs and one strain were XDR. Screening test detecting OXA-48 revealed that 35% of strains probably possess this resistance mechanism.

Selected 10 ciprofloxacin sensitive strains (*E. coli*, *P. mirabilis*, *E. cloacae*, *M. morganii*) were exposed to increasing concentration of chloroquine. After 2 weeks of passing, 80% of bacteria become resistant to antibiotic (with ciprofloxacin MIC up to 8 µg/ml).

Conclusions: Asymptomatic bacteriuria is general phenomenon in RA patients. This research showed that many of Polish RA patients may be carriers of drug resistant bacteria, including MDR. This phenomenon may be connected with poor comply of antibiotic policy by patients as well as health service in Poland. Exposition on chloroquine induce bacterial resistance against ciprofloxacin. In RA treatment procedure, a risk of induction of quinolone resistance in bacterial flora should be considered.

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