

tool to distinguish ACPA-negative elderly RA patients from PMR patients at initial presentation.

**Methods:** From April 2011 to December 2016, 21 RA patients and 24 PMR patients in our hospital, whose onset age was over 75 years, were recruited for this study. PMR patients did not have any evidence of giant cell arteritis. The diagnosis of RA was made based on 2010 ACR/EULAR RA classification criteria. The diagnosis of PMR was made based on 2012 EULAR/ACR classification criteria or Bird's criteria. Data were obtained from medical records under informed consent. Statistical analysis was performed using the Mann-Whitney U-test to compare median values and Fisher's exact test to compare frequencies (IBM SPSS version 24).  $P < 0.05$  indicated statistical significance.

**Results:** RA patients (6 men and 15 women) consisted of fifteen ACPA+ (11 RF+, 4 RF-), six ACPA- (1 RF+, 5 RF-). PMR patients consisted of 12 men and 12 women. All of them were ACPA-/RF- and did not meet 2010 RA criteria. Twenty patients met 2012 PMR classification criteria, and 4 patients without bilateral shoulder pain met Bird's criteria. Clinical features and statistical results are shown in the Table. Sixty-seven percent of RA patients and 13% of PMR patients had left-right differences in joint pain.

Scoring was performed based on clinical findings. Tenderness and/or swelling joint counts among wrists, fingers, ankles, and knees = each 1 point, left-right difference = 1 point, no bilateral shoulder pain = 1 point, no girdle pain = 1 point, no fever = 1 point; the maximum score was 8. The mean score in RA patients was 4.8 (SD = 1.44), whereas that in PMR patients was significantly lower at 1.5 (0.98) ( $P < 0.001$ ). Receiver operating characteristic (ROC) curve analysis was used to determine the most suitable cut-off level to find RA. A score over 3 was 100% sensitivity and 87.5% specificity. All 6 ACPA-negative RA patients showed a score over 4.

Table Clinical features in patients with rheumatoid arthritis (RA) and polymyalgia rheumatica (PMR)

		RA $\geq 75$ (n=21)		PMR $\geq 75$ (n=24)	P-value
Age at onset (years)	mean (SD)	81.5 (4.18)		80.5 (3.95)	0.4
Male	n (%)	6 (33)		12 (50)	0.1
Time from onset to start of treatment (months)	median (IQR)	2.0 (1.5)		1.5 (1.4)	0.09
Joint/muscle pain at onset	Bilateral shoulder	n (%)	10 (48)	20 (83)	0.03
	Girdle	n (%)	0 (0)	12 (50)	<0.001
	Wrist	n (%)	19 (91)	7 (30)	<0.001
	Finger	n (%)	4 (19)	0 (0)	0.04
	Foot	n (%)	6 (29)	0 (0)	0.007
	Knee	n (%)	13 (62)	2 (8)	<0.001
Systemic symptoms	Fever	n (%)	3 (14)	14 (58)	0.002
	Body weight loss	n (%)	6 (29)	14 (58)	0.07
Rheumatoid factor positive	n (%)	12 (57)		0	<0.001
Anti-CCP antibody positive	n (%)	15 (71)		0	<0.001
C-reactive protein (mg/dL) at onset	mean (SD)	6.1 (5.66)		8.4 (4.61)	0.1
Matrix metalloproteinase 3 (ng/mL) at onset	mean (SD)	431 (373.6)		421 (342.0)	0.9

SD, standard deviation; IQR, interquartile range; CCP, cyclic citrullinated peptide

**Conclusions:** Pease et al studied RA at onset 60 years and over and PMR, and reported that arthritis of wrists and fingers was suggestive of RA<sup>1</sup>. However, in our study, small joint swelling was rare in RA patients 75 years and older. The scoring system we made might be useful for the differential diagnosis of ACPA-negative RA and PMR in elderly patients 75 years and older.

#### References:

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## AB0293 METABOLIC SYNDROME AND INSULIN RESISTANCE IN ADULT EGYPTIAN FEMALES WITH RHEUMATOID ARTHRITIS

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**Background:** Patients with Rheumatoid Arthritis (RA) have an increased risk for cardiovascular disease (CVD) due to higher prevalence of traditional risk factors (1). Insulin resistance (IR) is implicated in inflammatory diseases such as RA (2). The prevalence of Met.Syn and IR in Egyptian female RA patients has not been studied before.

**Objectives:** To find out the prevalence of Met.Syn and IR in a cohort of Egyptian females with RA and in controls and to study the associated risk factors

**Methods:** 60 female RA patients and 30 healthy females matched for age were included according to the ACR/EULAR 2010 classification criteria. Disease activity was assessed using DAS- 28. IR using HOMA- index (HOMA- IR) (3) Met.Syn was defined according to the updated third report of the National Cholesterol Education Program's Adult Treatment Panel (NCEP-ATP III) criteria (4).

**Results:** Prevalence of Met.Syn in female RA patients is significantly (sig.) higher (56.7%) than that of controls (33.3%,  $P=0.04$ ). IR is prevalent in RA patients (63.4%). Patients with Met.Syn exhibited sig. higher serum levels of TG ( $P < 0.001$ ), FBG ( $P=0.02$ ), CRP ( $P=0.02$ ), Fasting insulin ( $P=0.01$ ) and IR

( $P=0.03$ ) than those without. Median CRP (24) and mean DAS- 28 ( $5.6 \pm 1.5$ ) in RA patients with increased IR are sig. higher than those of RA Patients with normal IR ( $6.5$ ,  $P < 0.01$ ) & ( $4.7 \pm 1.5$   $P < 0.04$ ) respectively. Significant positive correlation was found between DAS-28 and IR ( $R_s = 0.3$ ,  $P=0.03$ ). Using logistic regression, high systolic blood pressure (OR = 1.2, 95% CI: 1.02 – 1.39,  $P=0.03$ ) and elevated CRP (OR = 1.07, 95% CI: 1.01 – 1.14,  $P=0.04$ ) have shown to be the significant independent predictors for the development of Met.Syn

**Conclusions:** Met.Syn. and IR are prevalent in female Egyptian RA patients adding to the CV risk of the disease and both are related to increased disease activity. Rheumatologists should pay an attention to control RA disease activity in addition to screen patients for components of the Met.Syn and introduce appropriate treatment strategies. Further studies are warranted to get more conclusive results.

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## AB0294 PREGNANCY IN RHEUMATOID ARTHRITIS – A ROMANIAN COHORT

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**Background:** Planning a pregnancy in rheumatoid arthritis (RA) meets several issues, mostly concerning potential drug toxicity and disease flares

**Objectives:** The purpose of this study is to evaluate pregnancy planning, RA activity during pregnancy and postpartum, pregnancy and fetal outcomes in a Romanian cohort of female patients diagnosed with RA.

**Methods:** This is an observational, ambispective study, including 58 RA Caucasian females with obstetric history after the onset of RA (20 females - prospective, 38 - retrospective). The cases were obtained from several Clinics of Rheumatology from Romania

**Results:** The mean age at inclusion was 37.1 years, age at RA diagnosis 3.9 years and mean age at conception 32.2 years. We recorded a total number of 96 pregnancies: 48 deliveries at term, 4 premature births, 15 elective abortions, 24 spontaneous abortions, and 5 ongoing. 34/96 (35.4%) had at least one unplanned pregnancy, while being on treatment.

Concerning the exposure to synthetic DMARDs during the pregnancy: 6 patients received Leflunomide and 4 received Methotrexate during the first trimester, the pregnancy outcomes being: 3 spontaneous and 3 elective abortions, 3 normal birth (1- Cholestiramine wash-out), 1 premature twin pregnancy.

Regarding biologic DMARDs: 5 were exposed to Etanercept - 3 less than 3 weeks, (2 normal births and one elective abortion- due to Methotrexate use), 2 treated in second trimester: 1 only in the 15th and 16th weeks due to relapse - normal birth, and the other one until week 20, pregnancy still ongoing.

One patient was treated with Certolizumab until week 12, the pregnancy is ongoing, and one with Adalimumab until week 4, the fetus had intrauterine growth restriction, premature birth.

6 patients treated with Rituximab were included, last infusions were: 4 weeks before conception (1- spontaneous abortion and 1 normal birth), 48 weeks (2 normal births and 1 premature), and one at 4 weeks after conception - normal birth.

In 4 cases the patients stopped the biological DMARD before conception: Etanercept 6 months and 2 years, Adalimu-mab, 6 months with normal outcome, and for Tocilizumab 9 months (growth restriction)

81.25% of our patients were in Remission or Low Disease Activity (by DAS28CRP) at conception and generally this status was maintained, excepting several situations.