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POS0306

IMPACT OF MULTIMORBIDITY ON DISEASE MODIFYING ANTI-RHEUMATIC DRUG THERAPY IN EARLY RHEUMATOID ARTHRITIS: DATA FROM THE ESPOIR COHORT

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Background: Multimorbidity is frequent in rheumatoid arthritis (RA) and could interfere with the therapeutic response.

Objectives: The aim of this study was to evaluate multimorbidity in the French cohort of early arthritis (ESPOIR cohort) and its possible impact on the therapeutic response.

Methods: We included patients fulfilling 2010 ACR/EULAR criteria for RA. An adapted MultiMorbidity Index (aMMI) was developed [1]. Each patient was assigned scores of binary aMMI (0= no comorbidity, 1= at least 1 comorbidity) and counted and weighted aMMI. The primary endpoint was achievement of Clinical Disease Activity Index (CDAI) low disease activity after initiation of a first disease-modifying anti-rheumatic drug (DMARD) according to the aMMI. Secondary endpoints were other disease activity scores and response criteria. We collected data from the visit preceding the first DMARD initiation (baseline visit) and the visit after at least 3 months of treatment (follow-up visit). The impact of aMMI on therapeutic maintenance at 1, 3, 5 and 10 years was evaluated.

Results: Analyses involved 472 patients: 302 (64%) had at least 1 comorbidity. Overall, 45.3% and 44.7% with binary aMMI= 0 or 1, respectively (p= 0.9), achieved CDAI low disease activity (Table 1). Similar results were found with counted and weighted aMMI. Use of other disease activity scores or response criteria did not show a significant impact of multimorbidity on the therapeutic response. Therapeutic maintenance was significantly better with binary aMMI = 1 than binary aMMI = 0. Increased counted aMMI was associated with increased probability of still being on the first initiated DMARD at each time point (Table 2).

Conclusion: In the ESPOIR cohort, therapeutic response to a first DMARD was not affected by multimorbidity but therapeutic maintenance was better in multimorbid patients.

REFERENCES:

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Table 1. Impact of aMMIs on CDAI, DAS28 and SDAI low disease activity (LDA) achievement at follow-up visit (univariate analyses)

	LDA achievement								
	CDAI			DAS28			SDAI		
	Yes	No	p	Yes	No	p	Yes	No	p
Binary aMMI, n (%)									
0	77 (45.3)	93 (54.7)	0.9 [*]	85 (50.0)	85 (50.0)	0.2 [*]	80 (47.1)	90 (52.9)	0.9 [*]
1	135 (44.7)	167 (55.3)		131 (43.4)	171 (56.6)		141 (46.7)	161 (53.3)	
Counted aMMI, mean (SD)	1.0 (1.1)	1.1 (1.1)	0.7	1.0 (1.1)	1.1 (1.1)	0.2	1.1 (1.1)	1.1 (1.1)	1.0
Weighted aMMI, mean (SD)	4.1 (5.2)	4.0 (4.7)	0.9	4.0 (5.2)	4.1 (4.7)	0.3	4.0 (5.0)	4.0 (4.9)	1.0

aMMI= adapted MultiMorbidity Index; CDAI= Clinical Disease Activity Index; SDAI= Simplified Disease Activity Index^{*} Proportion of patients achieving LDA between patients with binary aMMI= 0 and binary aMMI= 1. Because of no statistically significant results, no multivariate analysis was performed.

Table 2. Probability of first DMARD maintenance at 1, 3, 5 and 10 years (multivariate analysis)

Time point	First DMARD maintained or stopped	Binary aMMI [#]		Counted aMMI [§]
		0	1	
1 year	Maintenance (n= 300) OR [95% CI]*	2 [286.2->999]	298 > 999	1.71 (0.93) 221.3
(n= 530)	Withdrawal (n= 230)	205	25	[84.0-583.0] 0.12 (0.37)
3 years	Maintenance (n= 285) OR [95% CI]*	10 153.9	275	1.66 (0.94) 26.1
(n= 493)	Withdrawal (n= 208)	175	33	[15.1-45.3] 0.22 (0.64)
5 years	Maintenance (n= 116) OR [95% CI]*	9 10.9	107	1.72 (1.05) 2.2
(n= 459)	Withdrawal (n= 343)	163	180	[1.8-2.7] 0.82 (1.0)
10 years	Maintenance (n= 40) OR [95% CI]*	2 14.0	38	1.58 (0.84) 1.6
(n= 415)	Withdrawal (n= 375)	158 [3.3-59.1]	217	[1.2-2.0] 0.99 (1.12)

[#]data are number of patients[§] data are mean (standard error)* data are odds ratios (ORs) and 95% confidence intervals (95% CI) of still being on the first initiated DMARD at 1, 3, 5 and 10 years between patients with binary aMMI = 1 and binary aMMI = 0 and according to counted aMMI, per additional point.

The variables included in multivariate analyses were sex, rheumatoid factor and/or anti-citrullinated peptide antibody positivity, age, CDAI at baseline visit, number of treatments at baseline visit.

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POS0307

FATIGUE IN RHEUMATOID ARTHRITIS PATIENTS IS ASSOCIATED TO SUBJECTIVE BUT NOT OBJECTIVE ASSESSMENTS OF DISEASE ACTIVITY DURING TREATMENT WITH TOCILIZUMAB

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Background: Fatigue is common in patients with rheumatoid arthritis (RA), and its association with inflammatory activity is not fully understood.

Objectives: To explore the associations between fatigue and inflammation by clinical, laboratory and ultrasound examinations during follow-up of RA patients on biological treatment.