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SAT0071

ANALYSIS OF CHRONOLOGICAL CHANGES IN JAPANESE VERSION OF HEALTH ASSESSMENT QUESTIONNAIRE SCORE AND FACTORS ASSOCIATED WITH J-HAQ REMISSION AT 5 YEARS AFTER DISEASE ONSET IN PATIENTS WITH RHEUMATOID ARTHRITIS USING THE IORRA COHORT

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Background: Recent advances in rheumatoid arthritis (RA) treatment including the introduction of biologics have greatly affected treatment strategies for RA, achieving remission as a realistic treatment target. However, few reports have been concerned chronological changes in long-term physical dysfunction among large numbers of RA patients in daily practice.

Objectives: To evaluate chronological changes in Japanese version of Health Assessment Questionnaire score (J-HAQ) score and J-HAQ remission rates at 5 years after RA onset using the Institute of Rheumatology, Rheumatoid Arthritis (IORRA) cohort.

Methods: RA patients who developed RA between 2000 and 2010 and who first visited our hospital during the year of RA onset were divided into two groups: 1) former onset group (RA onset between 2000 and 2005) and 2) recent onset group (RA onset between 2006 and 2010). J-HAQ scores and J-HAQ remission rates at baseline and at 5 years after onset were investigated for each group, and factors associated with J-HAQ remission after 5 years were assessed by logistic regression analysis. Methotrexate (MTX), corticosteroid (steroid) and biologic DMARDs user (bDMARDs) was defined as the patients if they were used each medication during the observation period.

Results: The former onset group and recent onset group included 357 and 291 RA patients, respectively. For the former onset group, the average J-HAQ score/J-HAQ remission rate at baseline and 5 years after the onset were 0.659/54.6% and 0.430/71.4%, respectively. The recent onset group showed significant improvements relative to the former onset group in J-HAQ score/J-HAQ remission rates at baseline and 5 years of 0.705/52.2% and 0.316/78.4%, respectively ($p=0.011/0.044$). The percentage of MTX and bDMARDs users was significantly higher in the recent onset group (former vs. recent onset group; MTX: 70.9% vs. 86.6% [$p<0.0001$]; bDMARDs: 5.3% vs. 23.0% [$p<0.0001$]). Significant factors associated with achieving J-HAQ remission at 5 years after RA onset were: patients in the recent onset group ($p<0.001$), male ($p<0.001$), younger ($p<0.001$), lower J-HAQ score ($p<0.001$) at baseline, and non-steroid user ($p<0.001$).

Conclusion: In daily practice, J-HAQ scores for RA patients remarkably improved with recent advances in RA treatment strategies. To achieve J-HAQ remission at 5 years of RA onset, beginning treatment in the early disease stage is needed to prevent deterioration of J-HAQ and treatments that avoid steroid use appear to be important.

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SAT0072

EVALUATION OF RHEUMATOID ARTHRITIS TREATMENTS AND JOINT OUTCOMES IN RHEUMATOID ARTHRITIS-ASSOCIATED INTERSTITIAL LUNG DISEASE

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Background: RA-associated interstitial lung disease (RA-ILD) is an extra-articular manifestation of RA and is one of the leading causes of death in patients (pts) with RA.¹ Previous studies have indicated that clinical factors such as age, sex, smoking and autoantibody positivity are strongly associated with RA-ILD.² There is also evidence of active RA being related to increased risk for clinically apparent ILD.³ However, there are limited data on how pts with RA-ILD are managed for their joint conditions and joint outcomes.

Objectives: To evaluate RA treatment patterns in pts with subclinical and clinical RA-ILD compared with pts with RA without ILD, and to assess joint disease activity at baseline and change in disease activity by treatment in all cohorts.

Methods: Data from adult pts with RA enrolled in a longitudinal sequential RA registry were analysed. Pts in the registry were evaluated annually by a rheumatologist for disease activity and treatment, and semi-annually on multiple clinical patient-reported outcomes (PROs) and resource utilisation parameters. Pts with chest computed tomography (CT) scans performed to evaluate clinical indications for ILD and with blood samples were included in this analysis. Pts with chest CT scans that were indeterminate for ILD were excluded from the study. Pts were then divided into two mutually exclusive groups: non-ILD RA pts and RA-ILD pts. RA-ILD pts were further divided into subclinical and clinically evident ILD. Date of chest CT scan was considered the index date. The two cohorts were compared using descriptive statistics to summarise baseline differences in demographics, disease activity measures, serostatus and treatments. Kruskal-Wallis test for continuous variables and chi-square test for categorical variables were performed, with two-sided significance level of 0.05. Multivariable linear regression was used to evaluate change from baseline to 12 months in joint disease activity for pts with available data at baseline and follow-up.

Table 1. Baseline characteristics and treatments by RA-ILD groups

	No ILD (n=29)	ILD (n=46)	Subclinical ILD (n=29)	Clinically evident ILD (n=17)
Age, years, mean (SD)	53.0 (12.2)	66.9 (9.5)*	68.3 (9.6)*	64.6 (9.1)*
Duration of RA, years, mean (SD)	16.9 (11.6)	23.0 (13.3)*	24.4 (14.4)*	20.6 (11.0)
Female, n (%)	28 (96.6)	36 (78.3)*	23 (79.3)	13 (76.5)
History of smoking, n (%)	12 (41.4)	29 (63.0)	20 (69.0)	9 (52.9)
RF positive, n (%)	n=27 18 (66.7)	39 (84.8)	24 (82.8)	15 (88.2)
RF titre, IU/mL, mean (SD)	n=27 105.0 (177.9)	338.7 (618.0)*	423.2 (759.3)*	194.7 (174.1)*
ACPA positive, n (%)	15 (51.7)	40 (87.0)*	26 (89.7)*	14 (82.4)*
ACPA titre, IU/mL, mean (SD)	87.1 (130.0)	212.8 (191.9)*	183.7 (149.3)*	262.6 (245.7)*
CDAI score, mean (SD)	n=21 21.1 (15.6)	n=39 26.3 (14.5)	n=25 26.3 (14.6)	n=14 26.4 (14.9)
mHAQ score, mean (SD)	n=27 0.4 (0.4)	n=43 0.6 (0.5)	n=27 0.5 (0.5)	n=16 0.6 (0.5)
Previous TNFi bDMARD, n (%)	2 (6.9)	7 (15.2)	2 (6.9)	5 (29.4)
Current TNFi bDMARD, n (%)	12 (41.4)	16 (34.8)	10 (34.5)	6 (35.3)
Previous non-TNFi, n (%)	0 (0.0)	3 (6.5)	0 (0.0)	3 (17.6)*
Current non-TNFi, n (%)	3 (10.3)	5 (10.9)	2 (6.9)	3 (17.6)
Previous steroids, n (%)	16 (55.2)	31 (67.4)	19 (65.5)	12 (70.6)
Current steroids, n (%)	6 (20.7)	22 (47.8)*	13 (44.8)*	9 (52.9)*
Previous MTX, n (%)	3 (10.3)	5 (10.9)	4 (13.8)	1 (5.9)
Current MTX, n (%)	7 (24.1)	17 (37.0)	14 (48.3)	3 (17.6)

* $p<0.05$ vs no ILD

ACPA=anti-citrullinated protein antibody; bDMARD=biologic DMARD; ILD=interstitial lung disease; mHAQ=modified HAQ; TNFi=TNF inhibitor