AB1319

EFFICACY AND SAFETY OF THE TREATMENT WITH JAK INHIBITORS IN PATIENTS WITH RA. RESULTS OF A CASE SERIES OF USUAL CLINICAL PRACTICE

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Background: The JAK inhibitors, a new group of targeted synthetic DMARDs were marketed in Spain in 2018. These oral drugs are a good therapeutic alternative for patients with MTX failure. These are not biologic DMARDs and its place in clinical practice is not clear.

Objectives: To identify the clinical characteristics of the patients treated with JAK inhibitors in a Rheumatology service in the South of Spain. To know the efficacy and safety of these drugs used in usual clinical practice.

Methods: Setting: Rheumatology department in a 3rd level University Hospital.

Design: an observational and analytical case series.

From September 2018 to January 15, 2019 clinical data were collected of all patients with RA (ACR/EULAR 2010) treated with JAK inhibitors. The variables collected were demographics, clinical, related to RA, comorbidities, activity (DAS28ESR) and EULAR response. Safety variables included severe adverse events, and adverse events that caused the interruption of the treatment. The protocol was approved and conducted according to the local ethic committee regulations. The statistical analysis was done with descriptive and inferential non parametric tests. Data are shown as median (percentile 25 – percentile 75).

Results: In the study period, 33 patients were treated with JAK inhibitors. Two patients were excluded of this review due to lack of an evaluation of follow-up. Data of 31 RA patients are presented. They were female (74%) with RF+, ACPA+ and erosive disease in more of 90% of cases; 61% had at least one comorbidity. The Charlson comorbidity index was 3 (2-6). The median age at the time of the start of the JAK inhibitor was 63.3 (56.8 – 70.7) years. The disease duration at the time of the start of the JAK inhibitor was 14.7 (8.6 – 27.5) years. All the patients had received synthetic conventional DMARDs, the number of previous scDMARDs was 2 (2 – 6); 26% had been treated with biologic DMARDs. The number of previous bDMARDs was 2 (1 – 5); 26 (84%) patients were treated with baricitinib and 5 with tofacitinib, of these 25 (77%) were treated with corticosteroids, the median daily dose of prednisone was 7.5 (5 – 15) mg/day, and 16 (52%) were treated with MTX, the mean weekly dose was 15 (10 – 25) mg/week. The baseline DAS28ESR was 4.9 (4.1 – 5.7) and the end DAS28ESR was of 2.6 (2.07 – 3.5), $p < 0.0001$; the EULAR response was good in 15 (52%), Moderate in 11 (35%) and Poor in 5 (13%). At the last visit 15 (38%) were in remission (DAS28ESR ≤ 2.6), and the follow-up was of 11.1 (6.8 – 16.7) months. In 8 patients the treatment was stopped, one due to primary inefficacy, three due to secondary inefficacy and in five patients due to adverse events. The most relevant adverse events were one case with septic arthritis of the knee after a intra articular injection; one case with a community acquired pneumonia; one case with pyometra, one breast cancer recurrence, one severe neutropenia and one with severe psoriasis flare. There were no thrombotic events. The only variable related with remission was the low baseline DAS.

Conclusion: The JAK inhibitors are tsDMARD with good profile of efficacy and safety in clinical practice. The patients treated with these drugs had a long and severe disease with failure to several drugs and poor prognostic variables, and a high comorbidity index, however these drugs show good response rates.

Disclosure of Interests: None declared

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AB1320

NEUTROPHIL-TO-LYMPHOCYTE RATIO AND PLATELET-TO-LYMPHOCYTE RATIO ARE ASSOCIATED WITH DISEASE ACTIVITY IN POLYMYALGIA RHEUMATICA

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Background: Polymyalgia rheumatica (PMR) is a systemic inflammatory disorder, which develops inflammatory pain and stiffness of large joints. There is no specific serological marker or test to differentiate PMR.

Objectives: In this study, we compared the neutrophil-to-lymphocyte ratio (NLR), platelet-to-lymphocyte ratio (PLR), and monocyte-to-lymphocyte ratio (MLR) among patients with polymyalgia rheumatica (PMR) and rheumatoid arthritis (RA), and explored possible associations with clinical features, disease activity, and prognosis in PMR.

Methods: A total of 94 PMR and 242 RA patients who were initially diagnosed at the rheumatology clinic of a university-based tertiary hospital were enrolled. Symptoms, physical examination, and medical histories were collected with the results of laboratory tests.

Results: NLR (4.5 ± 3.3 vs. 2.8 ± 1.8), PLR (222.7 ± 115.5 vs. 159.7 ± 78.1), and MLR (0.4 ± 0.3 vs. 0.3 ± 0.2) were higher in patients with PMR compared with patients with RA (all $p < 0.001$). NLR, PLR, and MLR were correlated with specific serological values, including CRP and albumin, in patients with PMR. After disease activity resolved, NLR (2.95 ± 2.32 , $p < 0.001$), PLR (137.5 ± 82.3 , $p < 0.001$), and MLR (0.26 ± 0.16 , $p < 0.001$) decreased significantly. By comparing patients according to the disease course, swollen joint counts were higher in the chronic course group compared with the remission group ($p = 0.03$), while NLR, PLR, and MLR levels were similar.

Conclusion: This study found that NLR, PLR, and MLR in patients with PMR were higher than in those with RA. Furthermore, NLR, PLR, and MLR levels were associated with disease activity and specific clinical features, although they could not predict prognosis in patients with PMR.

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AB1321

PSYCHOMETRIC PROPERTIES OF THE ASAS HEALTH INDEX IN PATIENTS WITH ACTIVE AS/RADIOGRAPHIC AXIAL SPA WHO HAVE PRIOR INADEQUATE RESPONSE/INTOLERANCE TO TNF INHIBITORS IN A PHASE 3 TRIAL

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Background: The Assessment of SpondyloArthritis international Society Health Index (ASAS HI) assesses function, disability, and health in patients with ankylosing spondylitis/radiographic axial spondyloarthritis (AS/r-axSpA).

Objectives: To evaluate the psychometric properties of the ASAS HI in patients with active AS/r-axSpA in a placebo-controlled study of ixekizumab, a humanized IL-17A monoclonal antibody (COAST-W, NCT02696798).

Methods: The ASAS HI questionnaire consists of 17 dichotomous items that yield a total score ranging from 0 (good health) to 17 (poor health). The psychometric properties of the questionnaire, including test-retest reliability, convergent and discriminant validity, and responsiveness, were evaluated using pooled data from three exposure groups (placebo and ixekizumab 80 mg every 2 or 4 weeks). Adults enrolled fulfilled ASAS criteria (sacroiliitis defined centrally by modified New York Criteria and ≥ 1 SpA feature), had active disease (BASDAI ≥ 4 , back pain ≥ 4), and either prior inadequate response or intolerance to 1 or 2 TNF inhibitors.

Results: Mean baseline ASAS HI score was 9.7 (SD=3.62, n=316). Intra-class correlation (0.78) indicated test-retest reliability of ASAS HI between screening and baseline. ASAS HI score was moderately correlated at baseline ($|r| > 0.30$, Figure [circles]) and strongly correlated at Week (Wk) 16 ($|r| > 0.50$; Figure [crosses]) with BASDAI, BASFI, SF-36 PCS, and spinal pain, and strongly correlated at both baseline and Wk 16 with EQ-5D-5L UK Population-based Index and SF-36 MCS. Greater improvements in disease activity were associated with greater improvements in ASAS HI scores at Wk 16 (Table).

Conclusion: The ASAS HI demonstrated reliability, validity, and responsiveness in adults with AS/r-axSpA, supporting its use in clinical trials.

Magnitude of correlation is presented without regard for directionality. Correlation for moderate (>0.3) and high (>0.5).
Abbreviations: MCS=mental component summary; PCS = physical component summary; SF-36 = 36-item short-form health survey
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Figure. Correlation between ASAS-HI and other health measures

Table. Association between ASAS HI Change from Baseline and Disease Activity at Wk 16 (Pooled Treatment Groups)

	ASAS20 Nonresponder	Patient Achieving ASAS20, but Not ASAS40	ASAS40 Responder
N	181	60	72
ASAS HI (LSM [SE])	-0.3 (0.21)	-1.9 (0.37)***	-4.2 (0.34)***,§
	ASDAS Improvement <1.1	ASDAS Improvement ≥1.1 but <2.0 (clinically important improvement)	ASDAS Improvement ≥2.0 (major improvement)
N	196	74	43
ASAS HI (LSM [SE])	-0.4 (0.20)	-2.8 (0.33)***	-4.6 (0.43)***,§
	BASDAI 50 Nonresponder	BASDAI 50 Responder	
N	255	58	
ASAS HI (LSM [SE])	-0.8 (0.18)	-4.6 (0.38)***	

ASDAS = AS Disease Activity Score; BASDAI = Bath Ankylosing Spondylitis Disease Activity Index; LSM = least squares mean

***p<.001 versus lowest response group; § p<.001 versus middle response group.

Note: An ANCOVA model with change in ASAS HI score as dependent variable and clinical outcome response and baseline ASAS HI as independent variables was applied. Post hoc comparison was conducted using Scheffé's correction.

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AB1322

DEPRESSION IN ESTABLISHED RHEUMATOID ARTHRITIS; MULTICENTER PROSPECTIVE COHORT STUDY FOR EVALUATION OF JOINT SURGERY ON PATIENT'S REPORTED OUTCOME

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Background: Loss of physical function is a clinical feature of RA. Total management including reconstructive joint surgery and rehabilitation should be needed for further improvements of physical function for established RA patients. In these days, it is very important to evaluate the effectiveness of joint surgery as well as drug therapy based on patient-reported outcome (PRO).

Objectives: The purpose of this study is to explore the relationship among depression, clinical variables and other PROs including physical function and improving of depressive status with joint surgery.

Methods: Multicenter prospective observational cohort study was conducted among patients who underwent elective joint surgery for RA from April 2012 to March 2016 (Study registration: UMIN000012649) (ref.1). In this study, we collected data at baseline and at 6 or 12 months after the surgery. These data were as follow; age, sex, disease duration, drug therapies, and disease activity (DAS28-CRP), and PRO measures [HAQ-DI, EQ-5D (QOL), pain VAS and BDI-II (depression)]. Correlation between BDI-II and other variables were determined using multiple liner regression analysis with forward stepwise.

Results: Totally, 346 patients before elective joint surgery were analyzed cross-sectionally. Mean age, disease duration, pain(VAS), DAS28, HAQ-DI, EQ-5D and BDI-II were 64.2 years, 17.0 years, 36.2 mm, 3.02, 1.111, 0.641 and 13.0, respectively. 52.6% of elective joint surgeries were in upper limbs and 47.4% were in lower limbs. Multiple liner regression analysis showed that HAQ-DI [β : -0.48, p <0.001] pain VAS(β : -0.26, p <0.001) and BDI-II (β : -0.19, p <0.001) were independent factors for EQ-5D. Furthermore, HAQ-DI (β : 0.31, p <0.001) and pain VAS (β : 0.17, p =0.002) had significant impact on BDI-II. Especially, walking (β : 0.12, p <0.001) and eating (β : 0.16, p =0.005) were independent factors for BDI-II in HAQ-DI categories. As longitudinal analyses (n =138), mean BDI-II was significantly improved from 12.1 at baseline to 10.5 at last observation (6 or 12 months) after joint surgery in lower limbs (paired t-test, p <0.001). Change in HAQ-DI (β : 0.23, p =0.031) had significant impact on that in BDI-II. The improving in walk category (β : 0.21, p =0.012) was a relevant factor for improving of BDI-II after the surgery.

Conclusion: Loss of physical function is an important factor for impairment of depressive status as well as QOL in established RA patients. Improving of physical function with joint surgery in lower limbs caused improving of depressive status. Rheumatologists should take the joint surgery into consideration as effective intervention for treatment of established RA patients.

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