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AB0362 **PROFESSIONAL COUNTRY-WIDE SURVEY ON CLINICAL DECISION-MAKING IN THE TREATMENT OF RHEUMATOID ARTHRITIS**

Keywords: Work-related issues, Disease-modifying Drugs (DMARDs), Best practices

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Background: Incorporation of conventional synthetic (cs), biologic (b) and targeted synthetic (ts) disease-modifying drugs (DMARDs) has enriched the therapeutic arsenal, but at the same time has complicated the decision-making process, since it requires considering not only the profile of each patient and the characteristics of each drug, but also the high cost of many of them and diverse administrative limitations.
Objectives: To analyze the way of acting of Spanish rheumatologists in different clinical situations in order to understand the decision-making process in the treatment of rheumatoid arthritis (RA).
Methods: A questionnaire that consisted of 15 questions was sent to several groups of rheumatologists country wide between October 19 and 26, 2022. Descriptive statistical analysis and Pearson's Chi2 test were performed to compare responses to the items by the different groups, significance level 0.05 (p>0.05 N.S.)
Results: A total of 108 questionnaires were collected. Work experience of the respondents is reflected in Table 1. In patients with recent-onset RA associated with poor prognostic factors, in addition to corticosteroids half of the respondents (50%) opt to start treatment with csDMARD + rapid escalation to d/tsDMARD if clinical response is insufficient. The most important factor when choosing the drug is the patient´s profile (47.2%), followed by clinical practice guidelines (34.3%). The most relevant factors when choosing each DMARD were: anti-TNF - cost-effectiveness (47.2%); anti-IL6 - efficacy (72.2%); abatacept - efficacy and safety in patients with RA-associated interstitial lung disease (53.7%); rituximab - its safety in patients that didn´t respond to other treatments (76.9%); and JAK inhibitor - its possibility of use in monotherapy (40.7%). The most important factors that lead to change treatment are the disease activity measures (57.4%) and personal perception of the clinician based on anamnesis and physical examination (31.5%). If there is a good therapeutic response, the majority of respondents first taper the b/tsDMARD (50%). If bDMARD-csDMARD combination therapy is used, 59.3% of respondents try to maintain csDMARD in addition to b/tsDAMRD. Regarding the use of corticosteroids, the vast majority of colleagues (79.6%) prefer to try to discontinue them as soon as possible. In case of pregnancy, more than half of the respondents (59.3%) switch to a safer drug. Incidentally diagnosed cancer is a reason for discontinuation of all b/tsDMARD for 47.2% of respondents, while 29.6% additionally discontinue csDMARD and use corticosteroids for disease control; in this clinical situation, respondents with <30 years of work experience discontinue all DMARDs in higher proportion than those with >30 years of work experience (p<0.05). The majority of respondents (80.6%) consider biosimilar drugs to be equally effective and safe as the origininator.

Table 1. Years of work experience in rheumatology.

Resident	9,3%
0-10 years	43,4%
11-20 years	17,6%
21-30 years	9,3%
>30 years	20,4%

Conclusion: The study revealed a striking heterogeneity in the way of acting in complex clinical situations, which confirms that the decision-making process depends on many factors but also that there is still room for homogenizing clinical practice guidelines in rheumatology. However, there seems to be agreement on the need to minimize systemic exposure to corticosteroids, on the use of disease activity measures to evaluate therapeutic response and on the wide acceptance of biosimilar drugs.
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AB0363 **UTILITY OF EPITHELIAL CELL BIOMARKERS TO ASSESS SEVERITY AND DISCRIMINATE BETWEEN DIFFERENT PATTERNS OF INTERSTITIAL LUNG DISEASE IN PATIENTS WITH RHEUMATOID ARTHRITIS**

Keywords: Rheumatoid arthritis, Biomarkers, Lungs

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Background: Several biomarkers have been studied in rheumatoid arthritis (RA) interstitial lung disease (ILD), but their clinical application has not been well established yet [1]. Given that usual interstitial pneumonia (UIP) is the most common pattern of ILD in patients with RA, the utilization of biomarkers that give information about the epithelial cell activation could be an interesting approach to assess the severity of lung disease in these patients [2].
Objectives: To know the ability of CA19-9, CA125 and CEA to discriminate different patterns on HRCT and assess the severity of ILD in patients with RA.
Methods: We conducted a cross sectional study. Patients with a diagnosis of RA-ILD who were evaluated in three different rheumatic diseases clinics between December 2021 and January 2023 were consecutively included. The diagnosis of RA was defined according to ACR/EULAR 2010 classification criteria. The diagnosis of ILD was confirmed by an experienced radiologist. We performed HRCT, lung function tests, joint disease evaluation, and blood extraction to determine the values of CA 19-9, CA 125, CEA, rheumatoid factor (RF) and ACPAs. The pattern found on HRCT was classified in UIP pattern, probable UIP, indeterminate for UIP, and suggestive of another diagnosis, as proposed the inter society consensus of 2022 [4]. The score proposed by Goh was calculated to determine the extension of lung opacities (inflammatory, fibrotic, and total extension scores) [5]. The joint disease activity was assessed using the DAS28 score. The values of the biomarkers in serum were measured by electrochemiluminescence. T-test, Mann Whitney test, and Chi square were used for comparisons. The Spearman test was used for correlation analysis.
Results: We included 38 patients, 29 were women (76.3%). The mean (SD) age was of 62.1 (11.5) years. The median (IQR) of DAS28 was 3.3 (2.6-4). Regarding serologic tests, 35/36 (97.2%) and 36/37 (97.3) were positive for ACPAs and RF respectively. In relation to lung disease, the mean (SD) of FVC% was 83.8 (23.4) and the median (IQR) DLCO was 59 (52-81). Eighteen patients (47.3%) showed UIP or probable UIP pattern in the HRCT, while 20 (52.7%) had another pattern. The median (IQR) of Goh score for total lung disease extension was 20 (8-25). Patients with UIP pattern showed significantly higher values of CA19-9 [11.5 (7-35.7) vs 6.5 (2-12.5), p=0.017] and a trend to higher values of CA125 [22 (15-52) vs 14 (11.4-20.7), p=0.06] than those with other patterns. The values of CA19-9 showed a good correlation with total Goh score (r=0.52, p=0.02) and fibrosis Goh score (r=0.65, p=0.03) in patients with UIP pattern. Also, the values of CEA showed an acceptable correlation with total Goh score (r=0.46, p=0.05) and fibrosis Goh score (r=0.43, p=0.07) in patients with UIP pattern.
Conclusion: Patients with RA ILD and UIP pattern showed higher plasmatic values of biomarkers that reflect epithelial cell activation. Also, the values of some of these biomarkers showed good correlation with the extension of the disease on HRCT. Therefore, these biomarkers could be a useful tool to identify a more aggressive clinical behavior in patients with RA ILD.

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AB0364 CIGARETTE SMOKING AMONGST RHEUMATOID ARTHRITIS PATIENTS IN A TERTIARY CENTER IN SOUTH AFRICA

Keywords: Patient reported outcomes, Descriptive Studies, Rheumatoid arthritis

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Background: Cigarette smoking is associated with poorer outcomes amongst rheumatoid arthritis (RA) sufferers, with poorer disease control, increased extra-articular complications and more comorbidities[1]. There are currently no data from sub-Saharan Africa.
Objectives: To describe the prevalence of cigarette smoking, and explore disease control, comorbidities, extra-articular disease and attitudes of smokers to their habit amongst RA patients in an outpatient clinic at tertiary level public hospital in South Africa. Further, we asked patients about the impact of prohibition during the COVID pandemic.
Methods: A cross-sectional study of consenting adult outpatients with RA meeting the EULAR/ACR 2010 Classification Criteria. Demographic, clinical and patient-reported outcome measures (PROMs) including the Health Assessment Questionnaire-Disability Index (HAQ-DI), FACIT-fatigue scale, Brief Pain Inventory-short form and Hospital Anxiety and Depression Scale (HADs) together with a questionnaire about smoking and Fagerström test for nicotine dependence were collated.
Results: Of 632 patients (536 females), the mean (SD) age and disease duration were 55.4 (13.0) and 10.1 (9.3) years. A poor socio-economic setting (SES) (defined using a pooled index) was noted in 67.0%. The mean (SD) Clinical Disease Activity Index (CDAI) and HAQ-DI were 14.3 (11.8) and 1.5 (0.7). The cohort included 218 (34,5%) smokers, and 89 (14.1%) ex-smokers, and more males smoked (49/218 vs 47/414, p=0,0002). Compared to non- or ex-smokers, smokers had lower BMI (29.7 vs 32.7 (p= 0.01), higher anxiety scores (8.8 vs 8.0, p=0,048) and incidence of COPD (7.8 % vs 1.0%, p< 0.005). The vast majority (74.1%) had two or more comorbidities, and the commonest comorbidities were hypertension, dyslipidaemia and diabetes. There were no significant differences in age of RA onset, disease duration, SES, number of comorbidities, CDAI nor its individual components, extra-articular diseases nor in HAQ-DI, FACIT, depression or pain scores. Of 160 patients who completed the smoking questionnaire, 83 (51.9%) believed smoking worsened their arthritis, and 119 (74.4%) reported receiving smoking cessation advice at the RA clinic. Participants' most common reasons for smoking were emotional support (32.2%), nicotine craving (21.7%) and pain control (27.3%). Although 50.1% felt that living with RA made quitting difficult, 86.9% had considered quitting, and almost half (45.6%) had previously quit for more than 3 months. The Fagerström score revealed mild, moderate and severe nicotine dependence in 67.5%, 24.4%, and 7.5% respectively. The Fageström score was significantly associated with anxiety (r=0.2, p=0.02) and depression (r=0.28, p<0.005). Smoking prohibition during COVID pandemic resulted in 60.0% (96) patients quitting or reducing cigarette consumption. Patients felt that helpful services from their RA team might include referral to a smoking cessation clinic (48.1%) and availability of more reading material (36.1%).
Conclusion: In this cohort of indigent RA patients, a third of RA patients are smokers, with higher prevalence in males, and associated with lower BMI and higher anxiety scores but with no differences in disease parameters or other PROM's. Smoking is a modifiable risk factor, of great importance given the high prevalence of comorbidities in the cohort. Only half the cohort were aware that smoking worsened their RA disease control. The mild to moderate nicotine dependence in this cohort, together with patients' willingness to quit should encourage both patient and health care providers to positively engage in smoking cessation.
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AB0365 PATIENTS WITH RHEUMATOID ARTHRITIS CLASSIFIED AS "HIGH ACTIVITY" ACCORDING TO DAS28 OR CDAI INCLUDE 55% AND 70% WHO SCREEN POSITIVE FOR DEPRESSION AND 67% AND 80% WHO SCREEN POSITIVE FOR FIBROMYALGIA, RESPECTIVELY

Keywords: Rheumatoid arthritis

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Background: No single measure can serve to assess all patients with rheumatoid arthritis (RA), and indices based on a core data set of 7 measures are used in clinical trials and clinical care. Two prominent RA indices are DAS28 (disease activity score 28) and CDAI (clinical disease activity index), which are classified into 4 categories of high, moderate, low disease activity and remission. It has been reported that comorbid fibromyalgia (FM) and depression (DEP) may elevate DAS28 and CDAI values, but systematic comparison of the proportions of patients in different activity categories who screen positive for these comorbidities has not been reported. Feasible screening for FM and DEP is available using MDHAQ (multiple dimensional health assessment questionnaire) FM and DEP indices, which agree more than 80% with reference standards.
Objectives: To analyze the proportion of routine care RA patients who screen positive for FM and DEP according to the 4 DAS28 and CDAI activity categories.
Methods: The 7 RA core data set measures - SJC, TJC, PaGA, PhGA, ESR, CRP, physical function and pain - were collected in unselected RA patients in a cross-sectional study at a routine care visit to an academic site. The patient measures were all collected on an MDHAQ which is completed by all patients and includes physical function, pain, PaGA, fatigue visual numeric scales (VNS), 0-3.3 DEP query, self-report 0-54 patient RADAI painful joint count, 60-symptom checklist including DEP, medical history queries, and FAST4 and MDS2 indices. FAST4 FM screen is positive if 3/4 of: pain VNS ≥6/10, fatigue VNS ≥6/10, self-reported painful joint count ≥16/54, and/or symptom checklist ≥16/60. MDS2 DEP screen is positive if 0-3.3 DEP response is ≥2.2 OR positive DEP on the symptom checklist. DAS28-ESR and CDAI were computed according to standard methods, and patients were classified into 4 activity categories: high (>5.1/28 and >22/76), moderate (3.2-5.1 and 10.1-22), low (2.6-3.2 and 2.9-10), and remission (≤2.6 and 2.8), for DAS28-ESR and CDAI, respectively. The median SJC, TJC, and proportions of FAST4 and MDS2 patients in each category were compared using chi-square analyses.
Results: Among 122 patients, categories of remission, low, moderate, and high activity, respectively, included 44%, 15% 34%, and 7% by DAS28-ESR, and 13%, 31%, 39% and 16% by CDAI. Median SJC was 0, 0, 2 and 4 for DAS28-ESR and 0, 0, 0 and 4 for CDAI categories. Median TJC was 0, 2, 5 and 5 in DAS28-ESR and 0, 1, 3 and 14 in 4 CDAI categories (Table 1). Positive FM FAST4 FM screen was seen in 13%, 22%, 44% and 67% in 4 DAS28-ESR categories and 0%, 2.6%, 38%, and 80% in 4 CDAI categories. Positive DEP MDS2 was seen in 20%, 44%, 46% and 56% in 4 DAS28-ESR categories, and 6%, 24%, 40% and 70% in 4 CDAI categories.
Conclusion: Among RA patients classified as high DAS28-ESR or CDAI "activity", respectively, 55% and 70% screened positive for DEP, 67% and 80% for FM respectively. These phenomena may affect treat-to-target and other aspects of RA management.