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AB0418 INTERSTITIAL LUNG DISEASE IN PATIENTS WITH RHEUMATOID ARTHRITIS TREATED WITH TOFACITINIB

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Background: The presence of interstitial lung disease (ILD) is a common extra-articular manifestation in patients diagnosed with Rheumatoid Arthritis (RA), dyspnea being its cardinal symptom. Several of the drugs commonly used to treat this condition, such as TNF inhibitors (anti-TNF) and Disease Modifying Antirheumatic Drugs (DMARDs), have been implicated in the development or exacerbation of ILD. In regard to Tofacitinib, results of post hoc analysis of its pivotal and extension studies report a numerically lower ILD incidence rate in the group that received this drug compared with placebo.

Objectives: To describe the evolution of dyspnea, spirometric parameters, DLCO and high resolution computed tomography (HRCT) findings in patients with RA diagnosis with associated PID who received Tofacitinib for a period of 12 months.

Methods: Patients with a diagnosis of RA who fulfilled criteria ACR 1987/ACR-EULAR 2010, with interstitial lung disease previously diagnosed from clinical findings, spirometry and/or HRCT were included. Tofacitinib was used in dose of 10 mg/day orally. Design: Descriptive, retrospective, multicentric study. The following variables were analyzed: change at 12 months from baseline in the degree of dyspnea (according to the modified scale of dyspnea MMRC), forced vital capacity (FVC), DLCO and findings in HRCT. Continuous variables were reported as mean and standard deviation or median and interquartile range as appropriate. The categorical variables were reported as percentages.

Results: Fifteen patients were included. 60% (n: 9) were women. The mean age was 64.4 years ($\pm$ 10.92). The median time of evolution of RA was 9 years (IQR: 4-40). The median time of evolution of interstitial lung disease was 4 years (IQR: 1-24). 13% (n: 2) of the patients were receiving methotrexate (MTX) at the time of evaluation, 60% (n: 9) of the patients had previously received it. 80% (n: 12) had previously received DMARD different from MTX. 33% of the patients (n: 5) had received previous biological treatment. All patients received tofacitinib at a dose of 10mg/day. 47% of patients (n = 7) received tofacitinib monotherapy and 53% (n = 8) received it combined with DMARDs. 27% (n: 4) of the patients had grade 3-4 dyspnea at baseline. Improvement in the dyspnea scale was observed in 8 patients, while in the rest, it remained stable. The forced vital capacity (FVC) at baseline was <80% in 5 patients and > 80% in 2 patients. At 12 months, 4 patients achieved a FVC > 80%. The average of DLCO at baseline was 45.6 ($\pm$ 18.84), with an improvement of 30% at 12 months in 4 patients. No progression of the disease was observed in the HRCT at 12 months in any of the patients evaluated.

Conclusion: The present preliminary study was performed with patients of daily practice, not being available in all cases, the corresponding respiratory functional examinations. However, despite these limitations, none of the patients showed worsening of dyspnea, with improvement in some patients. Regarding respiratory functional examinations and DLCO, not only they remained stable after treatment in the majority of patients evaluated, but 4 patients presented improvement with respect to baseline parameters. It is necessary to perform more studies, with systematized controls of the pulmonary function and images, to corroborate this hypothesis.

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AB0419 FRACTURE RISK IN PATIENTS ON LONG TERM GLUCOCORTICOIDS WITH INFLAMMATORY ARTHRITIS

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Background: A main stay treatment of inflammatory arthritis is glucocorticoids (GCs)^[1]. However, long term use of GCs has been associated with an increased risk of fracture, with studies estimating up to 12% of patients having sustained a fracture whilst on GC treatment^{[1][2]}.

Objectives: The aim of this study was to determine the prevalence of fractures in a cohort of patients on long term GCs with a diagnosis of inflammatory arthritis.

Methods: A database of patients with inflammatory arthritis attending the rheumatology department at the Midlands Regional Hospital Tullamore, since 2009, was reviewed. Patients on long term GCs were identified and outpatient summaries were analysed. Data collection included age, sex, diagnosis, vertebral fracture, other fracture sites and osteoporosis treatment.

Results: As of September 2018, out of the 2118 patients with a diagnosis of inflammatory arthritis 364 were on long term GCs. 10% of patients had reported vertebral fractures on imaging. 36.4% of patients had other types of fractures reported on imaging; 20%, and the most common site of fracture, were wrist fractures. 83.7% of those who suffered from a vertebral fracture were female. 18.2% of those who sustained fractures were not on any osteoporosis treatment.

Conclusion: The incidence of fracture in our cohort of patients was higher than suggested in previous studies. Furthermore, it highlights the need for patients on long term GCs to be given osteoporosis prevention therapy.

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AB0420 A PROSPECTIVE, OBSERVATIONAL STUDY ON THE CLINICAL EFFICACY AND SAFETY OF LEFLUNOMIDE IN EGYPTIAN PATIENTS WITH ACTIVE RHEUMATOID ARTHRITIS: CLEAR STUDY

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Background: Due to its anti-inflammatory and immunomodulatory properties, leflunomide can be used as a monotherapy or in combination with other conventional synthetic DMARDs (csDMARDs) in treating active RA.¹

Objectives: The aim of this observational study was to assess efficacy and safety of leflunomide in Egyptian patients with active RA, whether used as first-line and/or add-on therapy to other csDMARDs, with or without steroids.

Methods: Adult Egyptian patients with active RA, fulfilling the ACR/EULAR 2010 classification criteria, for whom leflunomide was prescribed, were included and followed up for 9 months. Leflunomide was prescribed at the physicians' sole discretion for patients who have previously experienced resistance, inadequate response or intolerance to other csDMARDs. Data about CDAI score and HAQ-DI score were acquired from patients who fulfilled the eligibility criteria, along with patients' demographics, medical history, physical examination, concomitant medications, and RA history including disease duration, previous RA medications and treatment response. This study was registered on clinicaltrials.gov (NCT03599986) and the preliminary results were previously published in 2018.²

Results: A total of 398 patients were enrolled in this study. Three hundred sixty-six patients with a mean age of 43.7 (SD 10.2) years and median disease duration of 2 (IQR 5.5) years were eligible for efficacy evaluation; 309 (84.4%) were female. We found that 86.1% of patients were leflunomide naïve. Patients who previously received leflunomide (13.9%) had a wash out period of at least 6 months prior to study enrolment. Patients were either prescribed leflunomide 20 mg/day (37.7%) or were prescribed a loading dose of 100 mg/day for the first 3 days of treatment then maintained with 20 mg/day (62.3%). Leflunomide was prescribed as first-line therapy in 21.1% of patients, as add-on therapy to other csDMARDs without steroids in 34%, and as add-on therapy to other csDMARDs with steroids in 44.9%. The mean total CDAI score