

Issue: Ir Med J; Vol 113; No. 8; P170

## Compliance with Immunosuppression for Rheumatic Disease During the COVID-19 Pandemic

A. O'Leary, A. Urbaniak, M. Phelan, L. Harty

Department of Rheumatology, South Infirmary Victoria University Hospital, Cork.

Dear Editor,

Reassuring data is continuing to emerge regarding the safety of continued use of drugs for rheumatic disease during the COVID-19 pandemic <sup>(1,2,3)</sup>. Patients on immunosuppressant medication and their doctors have however been concerned about increased risk during the COVID-19 crisis.

A New York case series of 86 patients with pre-existing rheumatic disease who developed COVID-19 showed that the percentage of patients on biologic therapy was higher among those not requiring hospital admission <sup>(1)</sup>. Two reports from the Lombardy region of Italy have reached similar conclusions. Monti et. al. reported that of 320 patients with rheumatic disease who were treated with a biologic or DMARD, 8 had a confirmed or strongly suspected diagnosis of COVID-19, and only one patient required hospital admission <sup>(2)</sup>. A second report from Damiani et al which looked at a large population found that patients on biologic therapy for psoriasis were at higher risk of symptomatic COVID-19 and hospitalisation compared to the general population, however their risk of ICU admission or death was similar to that of the control group <sup>(3)</sup>.

An Irish interim clinical guidance document regarding immunosuppressant therapy during the COVID-19 pandemic was released by the national Health Service Executive on 6<sup>th</sup> April 2020. This document outlined which medications were likely to confer an increased or high risk of infection and identified other risk factors for serious infection including co-morbidities and advanced age. No recommendation was made to consider routinely stopping these medications <sup>(4)</sup>.

Our rheumatology department wished to establish the confidence of our patients in continuing their immunosuppression during the COVID-19 pandemic. We performed a survey of our outpatient population to analyse compliance with treatment. We sent a postal survey to 643 rheumatology outpatients requesting them to indicate their immunosuppressant medications and whether or not they remained compliant throughout the pandemic.

We received 398 completed surveys after a two-week period, which was a 62% response rate. Of these, 6% of patients reported stopping one or more medications during the pandemic (n=23), whereas 94% continued taking all of their anti-rheumatic medication as prescribed.

Patients taking at least one DMARD made up 75% of patients (n=299), the majority of which were taking methotrexate (n=271). Of this group, 287 out of 299 patients continued to take at least one DMARD (96%). Seven patients were taking 2 DMARDs, and two of these patients stopped taking one DMARD.

There were 195 patients taking biologic therapy (59%). Nine people reported stopping a biologic during the COVID-19 pandemic; whereas 95% of patients continued to take their biologic as prescribed.

There were 37 patients who were prescribed a steroid medication – the dose was not specified. Two of these patients reported stopping their steroid during the pandemic (5%).

As far as we are aware, none of those who returned completed surveys have had COVID-19. Very few patients stopped treatment during the pandemic. It is encouraging that the majority of our outpatients continued to be compliant in accordance with current guidelines. We infer that our patients are confident in their immunosuppressant therapy.

## **Corresponding Author:**

Annie O'Leary SHO in General Medicine Department of Rheumatology, South Infirmary Victoria University Hospital, Cork. Email: annie.oleary93@gmail.com

## **References:**

- 1. Haberman R, Axelrad J, Chen A, Castillo R, Yan D, Izmirly P, et al. Covid-19 in Immune-Mediated Inflammatory Diseases Case Series from New York. New England Journal of Medicine. 2020.
- 2. Monti S, Balduzzi S, Delvino P, Bellis E, Quadrelli VS, Montecucco C. Clinical course of COVID-19 in a series of patients with chronic arthritis treated with immunosuppressive targeted therapies. Annals of the Rheumatic Diseases. 2020;79(5):667-8.
- 3. Damiani G, Pacifico A, Bragazzi NL, Malagoli P. Biologics increase the risk of SARS-CoV-2 infection and hospitalization, but not ICU admission and death: Real-life data from a large cohort during red-zone declaration. Dermatologic Therapy.n/a(n/a):e13475.
- Pate M KC, Kane D, Murphy D, Irvine A, Buckley M, Kerins D, et al. HSE COVID-19: Interim Clinical Guidance: Immunosuppressant Therapy [Clinical Guidance Document]. Covid-19 HSE Clinical Guidance and Evidence Repository, National Health Library & Knowledge Service, HSE2020 [updated 12/05/20]. Available from:

https://hse.drsteevenslibrary.ie/ld.php?content\_id=32936271. Accessed 26/08/20.