Conclusion: People living with RMD who are part of a real-world US registry are willing to participate in an online mindfulness training program study, but may require additional support to remain engaged and adherent throughout the program and to participate to study conclusion. Participation in a mindfulness training program, whether full-length or brief, appears to improve symptoms of emotional distress among people with RMD.

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New Developments in COVID-Research

OP0281

EXCESS GIANT CELL ARTERITIS CASES ARE ASSOCIATED WITH PEAKS IN COVID-19 PREVALENCE

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Background: Immediately following the first wave of the COVID-19 pandemic, the number of giant cell arteritis (GCA) diagnoses noticeably increased at the Royal National Hospital for Rheumatic Diseases in Bath, UK. Furthermore, there was an increase in the proportion of patients with visual complications [1]. The finding supports the viral hypothesis of GCA aetiopathogenesis as previously described [2]. This not only has ramifications for understanding the underlying disease mechanisms in GCA but also has implications for the provision of local GCA services which may have already been affected by the pandemic.

Objectives: The objective of the study was to estimate the incidence of giant cell arteritis during the COVID-19 pandemic years of 2020 – 2021 and compare it to 2019 data. Given that there have now been two distinct peaks of COVID-19 as reflected by hospital admissions of COVID-19-positive patients this has allowed us to investigate if there is a temporal relationship between the prevalence of COVID-19 and the incidence of GCA.

Methods: The incidence of GCA was calculated by assessing emailed referrals to the GCA service and the hospital electronic medical records to identify positive cases from 2019 to the current date. Local COVID-19 prevalence was estimated by measuring the number of hospital beds taken up by COVID-19 positive patients, available publicly in a UK Government COVID-19 dataset [3].

Results: There were 61 (95% Poisson distribution confidence interval [CI] 47 – 78) probable or definite GCA diagnoses made in 2020 compared to 28 (CI 19 – 40) in 2019 (Figure 1). This is an excess of 33 cases in 2020, or an increase in 118%. Given that 41% of the hospital's catchment population is over 50, this

equates to an annual incidence rate of 13.7 per 100,000 in 2019 and 29.8 per 100,000 in 2020. This compares to a previously estimated regional incidence rate of 21.6 per 100,000 for the South West of the UK [4].

Figure 1. Prevalence of hospital COVID-19 and incidence of GCA (2019 – 2021). Graph showing the number of hospital beds occupied by COVID-19-positive patients in 2020 – 2021 (blue circles), number of daily GCA diagnoses in 2020 – 2021 (red circles), and previous GCA diagnoses in 2019 (green circles). The broken lines represent moving averages with a period of 7 days for COVID-19 cases and 28 days for GCA diagnoses.

A peak in COVID-19-positive inpatients was seen on 10th April 2020 with a corresponding peak of GCA diagnoses on 29th May 2020, giving a lag period of approximately 6 weeks between these peaks (Figure 1).

Conclusion: The incidence of GCA in Bath was significantly increased in 2020 compared to 2019. This may be the result of the widespread infection of the local population with the COVID-19 virus as a precipitating factor. Possible mechanisms include, but are not limited to, endothelial disruption by the virus, immune system priming towards T helper cell type 1 (Th1) cellular immunity and/or activation of the monocyte-macrophage system. More work is currently underway to assess the causal relationship between the two diseases.

There was a lag period of 6 weeks between the peak during the first wave of the pandemic and the rise in GCA cases. We shall be closely monitoring the number of referrals that follow the current wave of the pandemic.

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OP0282

RITUXIMAB ASSOCIATED WITH SEVERE COVID-19 AMONG PATIENTS WITH INFLAMMATORY ARTHRITIDES: A 1-YEAR MULTICENTER STUDY IN 1116 SUCCESSIVE PATIENTS RECEIVING BIOLOGIC AGENTS

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