Keywords: Osteoarthritis, Non-pharmacological interventions

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Results: Based on OARSI-OMERACT response criteria, the influence of KD was evaluated as well, on group level defined as an increase of ≥15 points and 7 patients received arthroplasty (3 in the 1st year) and 8 patients were lost to follow-up in the 2nd year. The total WOMAC score showed a statistically and clinically significant improvement at 1 and 2 years (+26 and +24 points; Figure 1), as did all subscales (all p<0.001). After 1 year 72% of patients were clinical responders, at 2 years this was reduced to 55%. The minimum radiographic joint space width improved over 1 (+0.5 mm; p=0.015) and 2 (+0.4 mm; p=0.015) years (Figure 1), as did the physical SF-36 (+10 mm; p<0.001). The worst common adverse event was pin tract infection, experienced by 43 (66%) of patients, in the majority successfully treated with oral antibiotics. In 2 cases hospitalization and/or intravenous antibiotics were needed. 8 Patients experienced device-related complications. None of the complications influenced the 2-year outcomes. Before treatment, 42% of patients used pain medication, which had nearly been halved (23%; p=0.02) and 2 years post-treatment (29%; p=0.27) post-treatment. In total 12 (18%) patients had received an intra-articular injection before KD treatment, of whom 5 (8%) steroids and 3 (5%) hyaluronic acid. Both in the 1st and 2nd year after treatment, 1 patient (2%) received an injection.

Conclusion: Patients treated with the first device intended for KD treatment showed significant clinical and structural improvement after 1 and 2 years. Importantly, the effect was clinically relevant, as a majority of patients were clinical responders and pain medication use decreased. Long-term evaluation will show whether arthroplasty can be postponed successfully as well.

REFERENCE:

COVID 19: A pandemic with a long tail

Keywords: Epidemiology, COVID, Inflammatory arthritides

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Background: Studies on long-term consequences of COVID-19, commonly referred to as long-COVID, in patients with inflammatory rheumatic diseases (IRD) are still scarce, and available data are heterogeneous and largely inconclusive. In addition, it is unknown whether correctly classifying patients with IRD as long-COVID cases is complicated by increased background noise due to the occurrence of persistent symptoms that could be attributed to both long-COVID and IRD.
Objectives: The primary objective was to compare the risk of developing long-COVID after a SARS-CoV-2 infection with the Omicron variant between patients with iRD and age and sex matched healthy controls. A secondary objective was to compare the prevalence of the different persistent symptoms observed in long-COVID between patients with iRD and healthy controls with and without a history of COVID-19.

Methods: We collected data from participants enrolled in a Dutch prospective cohort study that was designed to compare the disease severity of COVID-19 between iRD patients and healthy controls from the start of the pandemic. Demographic and clinical data, including data on the occurrence of SARS-CoV-2 infections, were collected via online questionnaires. On March 10, 2022, all study participants were asked about the occurrence, onset, severity and duration of persistent symptoms during the first two years of the COVID-19 pandemic, independent of their history with COVID-19. Subsequently, we prospectively monitored a subset of the cohort, participants with a PCR or antigen confirmed SARS-CoV-2 Omicron infection, for COVID-19 sequelae. In line with WHO guidelines, long-COVID were defined as participants who reported persistent symptoms that lasted at least 8 weeks, started after the onset and within 3 months of a confirmed SARS-CoV-2 infection, and could not be explained by an alternative diagnosis. Descriptive statistics, logistic regression analyses and Kaplan Meier survival analyses were used for statistical analyses.

Results: A total of 1974 iRD patients and 733 healthy controls participated, of whom 468 (24%) patients and 216 (30%) controls had a SARS-CoV-2 Omicron infection. Of those, 361 (77%) patients and 172 (79%) controls completed COVID-19 sequelae questionnaires. More patients compared to controls fulfilled long-COVID criteria; 77 (21%) vs. 23 (13%) respectively (OR: 1.73, 95% CI: 1.04 – 2.87, P = 0.03; Table 1). However, the effect attenuated after adjusting for potential confounders (aOR: 1.49, 95% CI: 0.68 – 2.52, P = 0.14; Table 1). Post-hoc evaluation of covariates in the regression model showed that higher BMI and worse disease severity of the acute infection phase of SARS-CoV-2 were significantly associated with higher odds of developing long-COVID (Table 1). Fatigue and loss of fitness were the most frequently reported symptoms in both iRD patients and healthy controls with long-COVID, and recovery time from long-COVID was similar for patients and controls (P = 0.47). Lastly, persistent symptoms were reported more frequently by patients with a history of COVID-19 compared to those without a history of COVID-19; 43% of iRD patients vs. 33% of controls with a history of COVID-19, and 21% of iRD patients vs. 11% of controls without a history of COVID-19.

Conclusion: We found that 21% of iRD patients and 13% of healthy controls met WHO-criteria for long-COVID after a SARS-CoV-2 Omicron infection. However, confounding by BMI and severity of the acute infection phase of SARS-CoV-2 attenuated this difference, and the duration of long-COVID was similar between patients and controls. In addition, since more iRD patients than healthy controls also had a history of COVID-19 reported symptoms that are also observed in long-COVID we believe that the observed difference in long-COVID between patients with iRD and healthy controls with and without a history of COVID-19 compared to those without a history of COVID-19; 43% of iRD patients vs. 33% of controls with a history of COVID-19, and 21% of iRD patients vs. 11% of controls without a history of COVID-19.

Keywords: Descriptive Studies, COVID, Rheumatids

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OMICRON VARIANT INFECTION IN INFLAMMATORY RHEUMATOLOGICAL CONDITIONS - OUTCOMES FROM A COVID-19 NAÏVE POPULATION IN AOTEAROA NEW ZEALAND

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Background: Due to geographic isolation and border controls, Aotearoa New Zealand attained high levels of population coronavirus disease-19 (COVID-19) vaccination before widespread community transmission of Omicron variant COVID-19 in early 2022. This provides a unique opportunity to examine outcomes in people with rheumatic diseases immunologically naive to COVID-19.

Objective: This study describes the impact of Omicron variant COVID-19 infection in people with rheumatic diseases in Aotearoa New Zealand.

Methods: We conducted an observational study of people with inflammatory rheumatic disease and COVID-19 infection from centers in Aotearoa New Zealand between 1 February to 30 April 2022. Data were collected via the Global Rheumatology Alliance Registry, including demographic and rheumatic disease characteristics and COVID-19 vaccination and outcomes. Multivariable logistic regression was used to identify variables of demographic and clinical factors with COVID-19 hospitalisation and death.

Results: A total of 1599 cases were included, with 98% from three hospitals that systematically identified all patients from rheumatology clinics who had COVID-19 infection. At the time of COVID-19 infection, 1513 cases (94.6%) had received at least two COVID-19 vaccinations. Hospitalisation occurred for 104 (6.5%) cases, and 10 (0.6%) cases died. A lower frequency of COVID-19 infections were seen in cases who had received at least two vaccinations (5.9%), compared to cases who were unvaccinated (20.6%) or who received a single vaccine dose (10.7%). In multivariable adjusted models, people with gout (OR 2.2 95% CI 1.02, 4.77) or connective tissue diseases (CTD) (OR 2.78 CI 1.61, 4.80) had increased risk of the combined outcome of hospitalisation and death, compared to people with inflammatory arthritis. Glucocorticoid and rituximab use were associated with 3 to 6 times higher odds of hospitalization and/or death. All cases who died had three or more co-morbidities associated with a known higher risk of poor outcomes or were over 60 years old.

Conclusion: In this cohort of people with inflammatory rheumatic diseases with high vaccination rates, severe outcomes from Omicron variant COVID-19 were infrequent. The hospitalisation rate during COVID-19 infection was higher in people who had not completed the primary vaccination course, people with gout or CTD, and used glucocorticoids. These findings suggest that outcomes of Omicron variant COVID-19 infection among people with rheumatic disease who are vaccinated but immunologically naive to prior COVID-19 variant infections were favorable.

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