level. SARS-CoV-2 infection was confirmed in 84 patients (96.5%). The diagnosis was confirmed by RT-PCR in 74 patients and by antibody test in 10. 18 patients met the clinical criteria and diagnosed with MIS-C. Nine of them had also hypotension and seven patients admitted the intensive care unit because of shock and severe end-organ illness. COVID-19 outbreak also caused exacerbation of systemic disease in 56 children due to a discontinue of medication, postponed drug switch, or viral infection triggered.

Conclusion: In conclusion, children with rheumatic disease do not appear to present a higher risk of severe COVID-19. Whether these patients receive biological treatment does not affect the severity of the disease, but it is still not true to say that these drugs are protective. The immunosuppressive treatments can be adjusted in case of infection, otherwise it is not recommended interrupt the treatments. Physicians should be cautious about the hyperinflammatory syndrome associated with COVID-19 in rheumatic children, which may be severe in this group of patients and may be confused with primary diseases.

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POS0050

ARE PATIENTS WITH IMMUNE MEDIATED INFLAMMATORY DISEASES (IMID) MORE LIKELY TO RECEIVE COVID-19 TESTS AND TEST POSITIVE FOR SARS-COV-2? A MATCHED POPULATION-BASED STUDY

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Background: Population-based data about the COVID-19 risk in patients with IMID remain scarce.

Objectives: To investigate the cumulative incidence and risk factors for laboratory-confirmed COVID-19 infection and SARS-CoV2 testing in patients with IMID compared with matched non-IMID patients from the general population.

Methods: A population-based, matched cohort study was conducted using health administrative data from adults living in Ontario, Canada from January to December 2020. Cohorts for each of the following IMID were assembled: rheumatoid arthritis (RA), psoriasis, psoriatic arthritis, ankylosing spondylitis, systemic autoimmune rheumatic diseases (including lupus, systemic sclerosis, Sjogren's, inflammatory myositis), multiple sclerosis (MS), iritis, inflammatory bowel disease (IBD), polymyalgia rheumatica (PMR) and vasculitis. Each patient was matched with 5 non-IMID comparators based on age, sex, area of residence and living in long term care (LTC). Standardized cumulative rates of testing for SARS-CoV2, and for receiving a positive test between IMID and non-IMID were compared between IMID and non-IMID patients. Multivariable logistic regression analyses assessed sociodemographic factors associated with COVID-19 testing and positivity.

Results: A total of 493,499 IMID patients and 2,466,946 non-IMID comparators were assessed. Significantly more IMID patients versus non-IMID were tested for SARS-CoV2 (27.4% vs. 22.7%), while the proportions of those positive for COVID-19 were identical (0.9% of all patients in both groups). Overall, IMID patients were more likely to undergo SARS-CoV2 testing (odds ratio (OR) 1.28, 95% CI 1.27, 1.29), but their overall risk of laboratory-confirmed COVID-19 was not elevated (OR 0.97 (95% CI 0.93, 1)). However, the risk of laboratory-confirmed COVID-19 infection was lower in IBD (OR 0.75), MS (OR 0.77) and psoriasis (OR 0.94) and marginally higher in RA (OR 1.07) and iritis (OR 1.13) compared with non-IMID comparators (Figure 1A). The highest standardized rates of COVID-19 infection were found in vasculitis (115 per 10,000 patients) and iritis (109 per 10,000 patients) (Figure 1B). Risk factors for COVID-19 infection included younger age, living in LTC, multimorbidity, urban living and lower income (Table 1).

Conclusion: Patients across all IMID were more likely to be tested for COVID-19 versus non-IMID patients. IMID patients were not at higher risk for testing positive for COVID-19 as an overall group, yet risk varied across disease subgroups.

Figure 1 – Laboratory confirmed COVID-19 Risk in IMID vs. Non-IMID by multivariable regression analysis (1A) and standardized cumulative incidence (1B)

Table 1. Factors associated with COVID-19 infection in IMID vs. Non-IMID – Multivariable Logistic Regression

Variable	OR	CI 95%
IMID vs. Non-IMID	0.97	0.93, 1.00
Age (10-year increase)	0.89	0.89, 0.90
Sex: Female vs. Males	0.95	0.93, 0.97
LTC	18.64	17.9, 19.42
ADG score:		
•5-9 vs. 0-4	1.40	1.35, 1.45
•10-14 vs. 0-4	1.73	1.67, 1.80
•15+ vs. 0-4	1.18	1.13, 1.23
Urban vs. Rural	3.49	3.26, 3.72
Income quintile		
•Quintile 2 vs. 1	0.92	0.89, 0.96
•Quintile 3 vs. 1	0.90	0.86, 0.93
•Quintile 4 vs. 1	0.73	0.70, 0.76
•Quintile 5 vs. 1	0.60	0.58, 0.63

ADG - Aggregated Diagnosis Groups; IMIDs - Immune mediated inflammatory disease; LTC - long term care

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POS0051

THE IMPACT OF COVID-19 ON RHEUMATOLOGY TRAINING: RESULTS FROM THE COVID-19 GLOBAL RHEUMATOLOGY ALLIANCE TRAINEE SURVEY

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