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 five patients needed 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.

**REFERENCES:**


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**POS0050**

**ARE PATIENTS WITH IMMUNE MEDIANATED INFLAMMATORY DISEASES (IMID) MORE LIKELY TO RECEIVE COVID-19 TESTS AND TESTING 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-CoV-2 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-CoV-2, 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-CoV-2 (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-CoV-2 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, 1.0)). 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.

**Disclosure of Interests:** None declared.

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

<table>
<thead>
<tr>
<th>Variable</th>
<th>OR</th>
<th>CI 95%</th>
</tr>
</thead>
<tbody>
<tr>
<td>IMID vs. Non-IMID</td>
<td>0.97</td>
<td>0.93, 1.00</td>
</tr>
<tr>
<td>Age (10-year increase)</td>
<td>0.89</td>
<td>0.89, 0.90</td>
</tr>
<tr>
<td>Sex: Female vs. Males</td>
<td>0.95</td>
<td>0.93, 0.97</td>
</tr>
<tr>
<td>LTC</td>
<td>18.64</td>
<td>173, 19.42</td>
</tr>
</tbody>
</table>

**ADG** - Aggregated Diagnosis Groups; **IMID** – Immune mediated inflammatory disease; **LTC** – Long term care.

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Background: The COVID-19 pandemic has disrupted healthcare delivery and education of physicians, including rheumatology trainees. 

Objectives: To assess the impact of the COVID-19 pandemic on the clinical experiences, research opportunities, and well-being of rheumatology trainees.

Methods: A voluntary, anonymous, web-based survey was administered in English, Spanish, or French from 19/08/2020 to 05/10/2020. Adult and paediatric rheumatology trainees worldwide in training in 2020 were invited to participate via social media and email. Using multiple choice questions, Likert scales, and free text answers, we assessed trainee patient care activities, redeployment, research, and well-being.

Results: The 302 respondents were from 33 countries, with most (83%, 252/302) in adult rheumatology training. Many trainees (45%, 135/300) reported changes in research experiences during the pandemic; 39% (110/285) reported that COVID-19 negatively affected their ability to continue their pre-pandemic research and 50% (142/285) reported difficulty maintaining research goals (Figure 1).

Some rheumatology trainees reported having health condition(s) putting them at high risk for COVID-19 (10%, 30/302) and 14% of trainees (41/302) reported having had COVID-19 (Table 1). Only 53% (160/302) reported feeling physically safe in the workplace while 25% (76/302) reported not feeling physically safe; reasons included lack of training about COVID-19, lack of comfort in the clinical setting, insufficient personal protective equipment, immunocompromised state, and pregnancy. Half (151/302) reported burnout and 68% (204/302) an increase in stress from work during the pandemic (Figure 1), whilst 25% (75/302) reported changes to their training programme negatively impacted their physical health.

Conclusion: The COVID-19 pandemic has negatively impacted the experience of rheumatology training as well as the well-being of trainees globally. Our data highlight concerns for rheumatology trainees including research opportunities and clinical care which should be a focus for curriculum planning.

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