RELATION BETWEEN FLU-LIKE SYMPTOMS IN IMMUNE-MEDIATED RHEUMATIC DISEASE (IMRD) PATIENTS USING IMMUNOSUPPRESSIVE DRUGS DURING COVID-19 PANDEMIC

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BACKGROUND

The SARS-CoV-2 virus, responsible for the COVID-19 pandemic, can cause many symptoms and may trigger acute respiratory failure. The clinical manifestations have a wide range and, in general, immunocompromised patients are at increased risk of severe respiratory complications when contracting viral agents. Thus, the study focused on comparing flu-like symptoms in patients with immune-mediated rheumatic diseases (IMRDs) with different treatments and those without rheumatic diseases (RDs), as a result of the current pandemic.

METHODS

A cohort study, as a part of Mario Pinotti's study, with patients and controls in the Federal District in the first semester of 2020, in which self-reported flu-like symptoms in telephonic interviews. Data were analyzed using descriptive statistics. In evaluating the effects of demographic and clinical characteristics on the number of flu or viral symptoms, the negative binomial regression model was used.

RESULTS

A total of 638 individuals were selected, 58.5% (373 cases) had RD and most of them were female (91.7% versus 39.2%). Patients aged between 18–88, average of 45.5 years old. Table 1 presents an analysis of the frequency of symptoms in individuals with and without RD, disaggregating the group of patients with rheumatic disease by type of medication in use. Remained significant in the model, only the group with RD using only immunosuppressants. This group had a frequency of symptoms 2.3 times higher than the group without RD. There were no differences in frequency of symptoms and flu between other subgroups of RD and the group without disease.

Table 1. Initial and final negative binomial model estimates, RD group disaggregated by type of drug use.

	Initial model		Final model	
	RR adjusted	p	RR adjusted	p
Group (without RD)		0.003		< 0.001
RD without use of immunosuppressants and corticosteroids	0.95 (0.61–1.48)	0.831	1.00 (0.68–1.48)	0.995
RD using only immunosuppressants	2.05 (1.34–3.12)	0.001	2.28 (1.60–3.25)	< 0.001
RD using only corticosteroids	1.21 (0.67–2.18)	0.522	1.34 (0.78–2.28)	0.286
RD with the use of immunosuppressants and corticosteroids	1.38 (0.81–2.36)	0.238	1.46 (0.89–2.38)	0.133

RR: Risk reasons confidence interval of 95%.

CONCLUSION

Our data showed that people with IMRDs, who use immunosuppressive drugs, have a considerable increase in the frequency of flu-like symptoms in COVID-19 pandemic when compared to people who do not have the same type of disease and do not use the same type of medication.

KEYWORDS

Rheumatic diseases, COVID-19, Immunosuppressants, Respiratory complications.