Determining the frequency and severity of covid 19 in patients with collagen vascular disorders referred to Imam Khomeini hospital from March 2020 till March 2021

Abstract

Background: Rheumatologic patients have been among the patients with high anxiety and stress regarding their disease from the beginning of the COVID-19 pandemy.Due to the use of immune-modifying drugs these patients may have a different pathogenesis upon getting infected with COVID-19 and may be more susceptible to the infection.

Aim: Determining the frequency and intensity of COVID-19 in patients with collagen vascular disorders.

Materials and Methods: This longitudinal study, evaluated the collagen vascular disorder patient's wich had a positive history of COVID-19 disease referred to the Imam khomeini hospital of Ardabil. All of these patients diagnosed for the collagen vascular disorders by a rheumatologist either as outpatient or inpatient, enrolled in this study and followed up for intensity of COVID-19 disease, outcome of getting COVID-19, and pulmonary opacifications.

Results: Due to the results, the intensity of COVID-19 increased by increasing age group of the patients. In patients with 20 to 30 year's of age 85.7 percent of the cases were treated as outpatients whereas in patients older than 70, outpatient treatment rate decreased to 37.5 percent. 6 patients died in wich included 1 rheumatoid arthritis , 1 polymyositis , 1 scleroderma ,and 2 psoriatic arthritis patients. The percentage frequency of mortality were 1.8, 25, 20, and 50 percent respectively and there was a significant relationship between the collagen vascular disease type and outcome of getting COVID-19.

Conclusion: Increased age, immunocompromised status of collagen vascular diseases, and treatment with immunosuppressive drugs contribute to the intensity of COVID-19 in these patients but due to the limited number of patients in this study, further studies are required.

Key words: collagen vascular disease- lupus- rheumatoid arthrithis-scleroderma- covid19