People with Gout and COVID-19

This study confirmed high rates of death and requirement for ventilatory support in a large proportion of people with gout hospitalized for COVID-19 in the C19-GRA registry but could not confirm whether there was a statistically significant association between gout and poor COVID-19 outcomes, owing to the small sample size.

Gout is an inflammatory joint disease most associated with the male gender, advanced age, and many health comorbidities (e.g., hypertension, cardiovascular disease, diabetes mellitus, chronic kidney disease, or obesity).

To help understand how gout can affect COVID-19 clinical outcomes, this study investigated the characteristics of gout patients hospitalized due to COVID-19 infection. Patient data was taken from the COVID-19 Global Rheumatology Alliance (C19-GRA) registry on patients hospitalized for COVID-19 between March 12, 2020, and October 25, 2021.

Data from 163 patients with gout that were hospitalized due to COVID-19 infection were analyzed. These patients were shown to have several risk factors for poor outcomes, such as older age (average 63 years) and multiple health comorbidities. The research group identified nearly half of the patients (46%) had two or more health comorbidities such as hypertension or cardiovascular disease. Most patients (68%) required supplemental oxygen treatment or ventilatory support during hospitalization. A small population (13%) of patients required invasive ventilatory support, which is comparable to general hospitalized COVID-19 populations (13%-14%). COVID-19-related death was reported in 16% of patients, with the majority (73%) of the deceased patients having two or more health comorbidities.

The study's strengths are its inclusion of gout patients with multiple diverse populations and physician confirmation of gout diagnosis. The C19-GRA registry was created due to concerns that people with rheumatic diseases may have a higher risk of COVID-19 transmission or worse clinical outcomes. Therefore, the C19-GRA registry is not specific for gout and did not include gout-specific variables (e.g., tophus, gout flare, serum urate levels) or COVID-19 immunization status. In addition, the C19-GRA registry was dominated by data from people with rheumatoid arthritis and other immune connective tissue diseases, which yields a much smaller sample size that met the criteria for this gout study.

The study authors advocate for more research into COVID-19 guidelines and recommendations for people with gout. They propose that future research explore possible connections between gout with multiple comorbidities and COVID-19 diagnosis and outcomes. A better understanding would allow clinicians to make more informed decisions when managing patients with gout during the ongoing COVID-19 pandemic.

Thank you to all patient participants, clinicians, and researchers for their part in advancing the understanding of the interplay between COVID-19 and gout.

Study Title: Characteristics and Outcomes of People With Gout Hospitalized Due to COVID-19: Data From the COVID-19 Global Rheumatology Alliance Physician-Reported Registry

Link to original paper https://onlinelibrary.wiley.com/doi/10.1002/acr2.11495

Date original paper published: November 2022

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Tracking

Date	Task (please don't change this)	Name
3/21/23	Draft Completed By	Joseph Stenberg
3/28/23	First Editor/Reviewer	Mike Supancich
3/31/23	Second Editor/Reviewer	Richard Howard
	Review by Original Study Author	
	Posted in Comms for graphics	
	Request to post on GRA website	
	Training or Additional Review	

Details for Graphics

What are the 3 main take-a-ways for infographics? Provide brief statements of most importance for the Comms team to create infographics.

Out of 163 gout patients that were hospitalized for COVID-19, 46% had multiple health comorbidities, 68% required respiratory support, and 16% died.
19 out of the 26 (73%) patients that died had 2 or more health comorbidities.
More research is required to uncover possible connections between gout with multiple health comorbidities and COVID-19 diagnosis and outcomes.