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Outcome of COVID-19 in Patients With Autoimmune Hepatitis: An International Multicenter Study

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Erratum in

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[Hepatology](#). 2022 Mar;75(3):774. doi: 10.1002/hep.32263. Epub 2021 Dec 8.PMID: 34877700 [Free PMC article](#). No abstract available.

Abstract

Background and aims: Data regarding outcome of COVID-19 in patients with autoimmune hepatitis (AIH) are lacking.

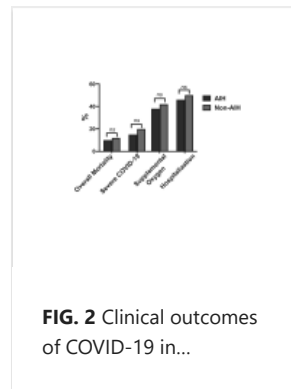
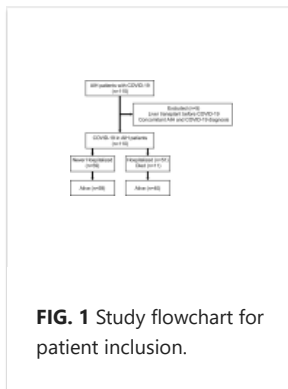
Approach and results: We performed a retrospective study on patients with AIH and COVID-19 from 34 centers in Europe and the Americas. We analyzed factors associated with severe COVID-19 outcomes, defined as the need for mechanical ventilation, intensive care admission, and/or death. The outcomes of patients with AIH were compared to a propensity score-matched cohort of patients without AIH but with chronic liver diseases (CLD) and COVID-19. The frequency and clinical significance of new-onset liver injury (alanine aminotransferase $> 2 \times$ the upper limit of normal) during COVID-19 was also evaluated. We included 110 patients with AIH (80% female) with a median age of 49 (range, 18-85) years at COVID-19 diagnosis. New-onset liver injury was observed in 37.1% (33/89) of the patients. Use of antivirals was associated with liver injury ($P = 0.041$; OR, 3.36; 95% CI, 1.05-10.78), while continued immunosuppression during COVID-19 was associated with a lower rate of liver injury ($P = 0.009$; OR, 0.26; 95% CI, 0.09-0.71). The rates of severe COVID-19 (15.5% versus 20.2%, $P = 0.231$) and all-cause mortality (10% versus 11.5%, $P = 0.852$) were not different between AIH and non-AIH CLD. Cirrhosis was an independent predictor of severe COVID-19 in patients with AIH ($P < 0.001$; OR, 17.46; 95% CI, 4.22-72.13). Continuation of immunosuppression or presence of liver injury during COVID-19 was not associated with severe COVID-19.

Conclusions: This international, multicenter study reveals that patients with AIH were not at risk for worse outcomes with COVID-19 than other causes of CLD. Cirrhosis was the strongest predictor for severe COVID-19 in patients with AIH. Maintenance of immunosuppression during COVID-19 was not associated with increased risk for severe COVID-19 but did lower the risk for new-onset liver injury during COVID-19.

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Figures



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