

Cardiovascular findings in Echocardiography in post Covid-19 mild infection population in Argentina

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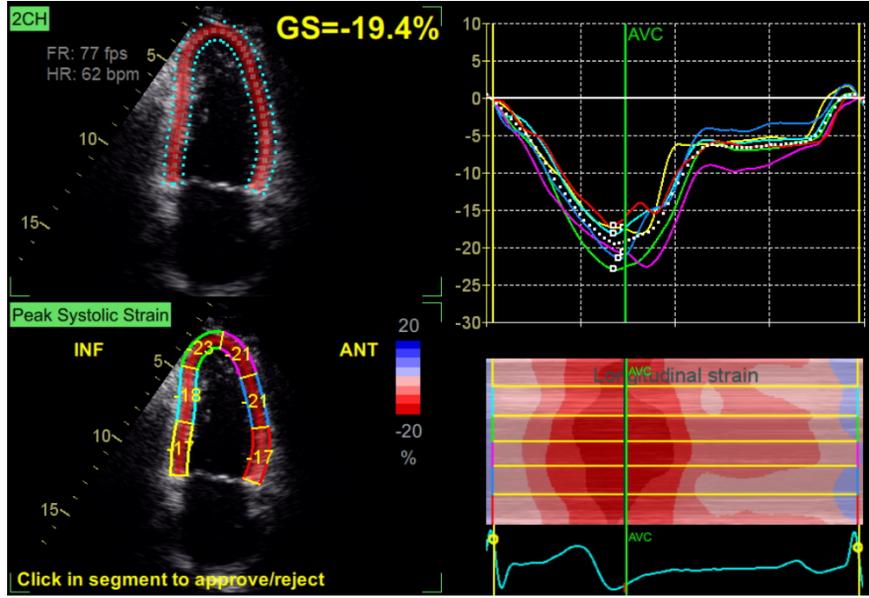
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Abstract

Objectives: The aim of this study was to assess differences in echocardiographic findings between a normal adult and a post Covid-19 population. **Background:** Coronavirus disease (Covid-19) is known to produce a systemic inflammatory syndrome, with pulmonary and cardiac involvement. However, the cardiovascular impact in patients with mild clinical forms of the disease is uncertain. There is small evidence supporting the finding of global ventricular longitudinal strain (GLS) alterations in these patients. **Methods:** One hundred and five consecutive patients admitted to an ambulatory care center, underwent a conventional transthoracic echocardiographic (TTE) study with acquisition of GLS. Patients were included if they underwent a positive diagnostic reverse transcriptase polymerase chain reaction (PCR) test, having no relevant preexisting conditions, with exception of obesity. Demographic and clinical data were prospectively obtained. For this purpose, we considered a normal cut off point of -17,09%, based on previous studies. Echocardiographic findings were compared with those of 67 healthy individuals. **Results:** Out of 172 patients, 105 correspond to Covid-19 group, and 67 to healthy individuals. There were no significant differences in GLS regarding age, left ventricular mass index (LVMI) and E/e' ratio. The multivariate analysis showed that the percentage of patients with pathological GLS values was significantly higher within the Covid-19 and male groups (OR 6.02 IC 1.88-22.57; p 0.004 and OR 3.17 IC 1.03-10.50; p 0.05, respectively). **Conclusion:** These data support that Covid-19 infection could affect ventricular GLS and encourage the use of conventional TTE with GLS measurements in patients with non-significant forms of the disease.

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Echo in post Covid-19.pdf available at <https://authorea.com/users/408004/articles/518156-cardiovascular-findings-in-echocardiography-in-post-covid-19-mild-infection-population-in-argentina>



Variable	N	Odds ratio	p
RelE.e	172	1.11 (0.86, 1.43)	0.425
Obesity	172	2.16 (0.71, 6.98)	0.183
Male	172	3.17 (1.03, 10.50)	0.050
Covid	172	6.02 (1.88, 22.57)	0.004

