

significant difference in RV free wall strain between hospitalized patients and control ($-14.6 \pm 2.8\%$ vs. $-22 \pm 0.7\%$; P -value 0.03) and between hospitalized and home-treated patients ($-14.6 \pm 2.8\%$ vs. $-19.8 \pm 0.9\%$; P -value 0.03), the difference was not significant between control and home-treated patients ($-22 \pm 0.7\%$ vs. $-19.8 \pm 0.8\%$; P -value 0.09). Between hospitalized and not hospitalized group there was a significant reduction in FAC ($38.5 \pm 3.2\%$ vs. $44.7 \pm 1.3\%$; P -value 0.03) with an increase of RV end diastolic area ($19.9 \pm 1.3 \text{ cm}^2$ vs. $16.8 \pm 0.7 \text{ cm}^2$; P -value 0.037) and also of end systolic right atrium area ($18.2 \pm 1.3 \text{ cm}^2$ vs. $15.4 \pm 0.5 \text{ cm}^2$; P -value 0.01). No difference was observed between hospitalized and home-treated patients in TAPSE ($22.38 \pm 1.26 \text{ mm}$ vs. $23.02 \pm 0.68 \text{ mm}$; P -value 0.6) and PAPS ($24.3 \pm 1.6 \text{ mmHg}$ vs. $20.2 \pm 1.4 \text{ mmHg}$; P -value 0.07) but there was a borderline significant decrease in right ventricular coupling evaluated with TAPSE/PAPS ratio ($0.97 \pm 0.08 \text{ mm/mmHg}$ vs. $1.29 \pm 0.10 \text{ mm/mmHg}$; P -value 0.056) and a significant increase in RV thickness in hospitalized patients ($5.32 \pm 0.45 \text{ mm}$ vs. $3.69 \pm 0.24 \text{ mm}$; P -value 0.0014). No significant differences were found between hospitalized and not hospitalized group in left ventricular EF ($57.8 \pm 1.9\%$ vs. $59.9 \pm 1.0\%$; P -value 0.3) and left ventricular GLS ($-15.2 \pm 0.6\%$ vs. $-16.4 \pm 0.4\%$; P -value 0.1).

Conclusions: Patients hospitalized for COVID-19 showed a dysfunction in RV parameters at 6 months follow-up compared to non-hospitalized patients. No difference in RV function was found between home treated patients and healthy volunteers. No significant differences in LV function were found among the three groups. These preliminary data confirm a decrease in RV function in more severe COVID-19 infection requiring hospital admission, possibly related to increased pulmonary afterload.

761 Echocardiographic evaluation in patients recovered from COVID-19

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Aims: COVID-19 has a wide spectrum of clinical presentation, from severe forms that require hospitalization to less severe forms that can be managed at home. An acute myocardial involvement was demonstrated in a large proportion of patients admitted for COVID-19 and may persist in the long term. We evaluated the possible cardiac involvement using echocardiography, comprehensive of right and left ventricular strain, in patients who recovered from SARS-CoV-2 infection (hospitalized or home-treated) comparing them with a population of healthy volunteers.

Methods and results: Forty-one patients with COVID-19, of which fifteen hospitalized, with no prior heart disease, were compared with 13 healthy volunteers. COVID-19 diagnosis was made by a positive molecular swab. Patients with history of pre-existing heart disease were excluded. The median time from infection to outpatient follow-up was 5.9 months. Numerous echocardiographic parameters were compared by unpaired t-test including left ventricular EF, left ventricular GLS, RV free wall strain, FAC, TAPSE, PAPS, TAPSE/PAPS ratio, RA area, and RV thickness. There was a