

CORRESPONDENCE

Reduced Rate of Hospital Admissions for heart failure and pulmonary hypertension during Covid-19 infection. Monocentric experience

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To the Editor,

In some paper, the researchers have observed a reduction in admissions for Acute Coronary Syndrome (ACS) and in particular with ST-segment Elevation (STEMI), during the COVID-19 period. The decrease of the interventional procedures for ACS may be due to the fear of increased risk of infection. I would have some comment around this question.

ACS events may be caused by coronary heart disease (CHD) risk factors (1, 2), but rather results from an unfortunate confluence involving any of several stable underlying CHD vulnerability factors and the occurrence of any environmental events that acutely activate critical physiological processes (3).

Myocardial ischemia induced by mental stress (4, 5) has shown that half of patients with stable coronary artery disease, evidence myocardial ischemia on perfusion imaging, despite therapy (5-7).

This is also demonstrated in our patients with heart failure and pulmonary hypertension, in which outpatient access has been significantly reduced compared to the same period in 2019 (65%), where mortality in patients with Sars-Covid 19 was 100%, while the incidence of infection was very low (<1%). Conversely, hospitalization and mortality from heart failure are even reduced compared to the same period in 2019. Perhaps self-isolation could be a self-protection mechanism (Tab. 1).

Therefore, down-sizing these activities would expected to increase hospitalization for heart failure

and negatively impact on patient's outcome, this was not the case for PAH, as resulted from lower mortality rates compared with the same period of the previous year and even lower hospitalization rates for heart failure. Although some patients have died from ACS or HF without seeking medical attention, we can assume that the reduction of the work rates, behavioural and mental stress could be the cofactor responsible for reducing the onset of ACS during the COVID-19 period. Perhaps we must also rethink the way of life to take better care.

Abbreviation: ACS: Acute Coronary Syndrome; CHD: Coronary Heart Disease; STEMI: ST Elevation Myocardial Infarction; HF: Heart Failure; PAH: Pulmonary Artery Hypertension; RHC: Right Heart Catheterization

Table 1. Clinical Data

Pts with Pulmonary Hypertension	118
Pts	85 NYHA I-II
Pts	33 NYHA II-III
M/F	50/68
mean age	68
RHC	8
AHF	2
Death no Covid 19	0
Death Covid 19	1/1 100%

Conflicts of interest: Each author declares that he or she has no commercial associations (e.g. consultancies, stock ownership, equity interest, patent/licensing arrangement etc.) that might pose a conflict of interest in connection with the submitted article.

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