



SOCIETATEA ROMÂNĂ
DE CARDIOLOGIE

SARS-CoV-2 Related Heart Failure

#HeartFailure
AwarenessDays2022

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1. Background

Patients hospitalized for COVID-19 may develop both acute decompensation of chronic HF **or acute de-novo** HF, as a consequence of **viral** myocardial injury.

**We will not let failure
get to your heart!**



3. Diagnosis

- Complete history and physical examination
- Natriuretic peptides**
- 12 lead electrocardiogram
- Echocardiogram
- Cardiac MRI

5. New therapeutic strategies

A new therapeutic paradigm consisting of immunomodulatory drugs is studied in COVID-19, in order to reduce mortality and long-term cardiovascular sequelae.

2. SARS-CoV-2 related HF pathogenesis

- Direct virus induced myocardial damage
- Pro-inflammatory cytokines exerting a cardiotoxic effect
- Endothelial inflammation leading to micro-thrombosis and myocardial injury

4. Prognosis

Pre-existing heart failure is an independent predictor of in-hospital **mortality** in COVID-19 patients.

**6. Prevention is the key:
Get vaccinated! Wear a mask!**

Reference: 1. Kubica J, Ostrowska M, Stolarek W, Kasprzak M, Grzelakowska K, Kryś J, Kubica A. Impact of COVID-19 pandemic on acute heart failure admissions and mortality: a multicentre study (COV-HF-SIRIO 6 study). *ESC Heart Fail.* 2022;9(1):721-728.