

# ACTIVITY LEVELS IN HEART FAILURE PATIENTS ASSESSED BY REMOTE MONITORING DURING COVID-19 OUTBREAK

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## Introduction

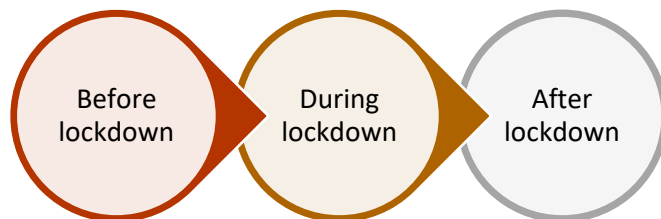
A decreasing trend in patients' activity (PA), as a result of lockdown measures during COVID-19 outbreak, has been pointed out as a concern about the potential effects on cardiovascular risk.

## Aims

To evaluate the impact of lockdown measures during COVID-19 pandemic in activity levels of P with HF submitted to cardiac resynchronization therapy (CRT), followed via RM using the TRIAGE-HF risk score.

## Methods

HF P carrying CRT devices with Heart Failure Risk Status (HFRFS) algorithm available, and regular RM transmissions during the follow-up period were included. Three periods were considered: before lockdown (from January to 17<sup>th</sup> March 2020), during lockdown (18<sup>th</sup> of March to 2<sup>nd</sup> of May 2020) and after lockdown (3<sup>rd</sup> May to 14<sup>th</sup> of June).



PA, measured by a single-axis accelerometer in the device, was analysed in all transmissions. HFRS algorithm which classifies the P as low, medium or high risk was analysed.

## Results

RM transmissions of 35P were assessed (71±10 years, 71.4% males, NYHA>II in 70%, left ventricular ejection fraction (LVEF) 28±7.8%). Post-CRT, LVEF was 52±7.21%, NT-proBNP 207±142 pg/mL, NYHA class>II in 46%P); the responder rate was 85%. PA during the lockdown period declined from 2.8 hours/day to 1.9 hours/day, increasing to 2.3 hours/day in the post-lockdown period (p<0.001). After lockdown, 16P (46%) showed a persistent lower level of activity, compared to the pre-lockdown period.

No significant differences were noted in the P HFRS during the 3 considered periods

## Conclusion

Data obtained from the RM HFRS algorithm in P with CRT revealed a significant decline in physical activity during the lockdown period related to COVID-19 pandemic. Moreover, some P did not recover to the pre-lockdown levels of exercise, which may prompt this population to future adverse HF outcomes.