An 87-year-old woman underwent implantation of Vigilant X4 CRT-D for primary prevention of sudden cardiac death on February 20th, 2018.

During the Covid-19 pandemic the center decided to activate HeartLogic™ index in heart failure patients in order to ensure continuous monitoring even in the lockdown period. The HeartLogic™ index was finally activated on March 29th, 2020 (red line) and the physician became aware that an HeartLogic™ alert was in place from some weeks. The physician immediately contacted by phone the patient and she reported a worsening in heart failure signs and symptoms in the last period. She reported weight increase, peripheral edemas, fatigue, activity reduction and she reported to be able to sleep only using two pillows (orthopnea), but she didn’t identify any specific cause or change in her daily life.

According to the information retrieved by phone and due to the impossibility to perform in-office visit because of lockdown period, the physician decided to increase remotely the diuretic therapy (green line). Just few days after drug increase, the HeartLogic™ index showed a marked decrease and in two weeks the HeartLogic™ index dropped below the recovery threshold. At telephone contact the patient reported an improvement in decompensation signs and symptoms and the HeartLogic™ index reached the zero value.

This case highlights the potential efficacy of HeartLogic™ for remote management of heart failure also during the lockdown period, as suggested by the ESC and HRS recommendations. Thanks to the alert, the physician became aware of worsening of heart failure and he was able to remotely manage the condition, avoiding any in-office visit or hospitalization.

The analysis of sensor trends showed that HeartLogic™ alert was driven by an increase in third heart sound and respiratory rate and by a concomitant decrease in thoracic impedance. The signs and symptoms reported by phone were consistent with the sensor trends and with a fluid overload condition.

*Blue line is a Latitude pointer. It doesn't refer to any clinical action or HF event.
As a matter of fact, the increase in diuretic dosage resulted in an immediate HeartLogic™ index decrease and sensor trends restoration.

The HeartLogic™ index has proven to be a useful tool to maintain a continuous remote monitoring of heart failure patients even in a period of emergency and hospital access restrictions.

*Courtesy of Policlinico Umberto I – Rome (Italy)*

Results from case studies are not necessarily predictive of results in other cases. Results in other cases may vary.

CAUTION: The law restricts these devices to sale by or on the order of a physician. Indications, contraindications, warnings and instructions for use can be found in the product labelling supplied with each device. Information for use only in countries with applicable health authority registrations. This material not intended for use in France. 2020 Copyright © Boston Scientific Corporation or its affiliates. All rights reserved.