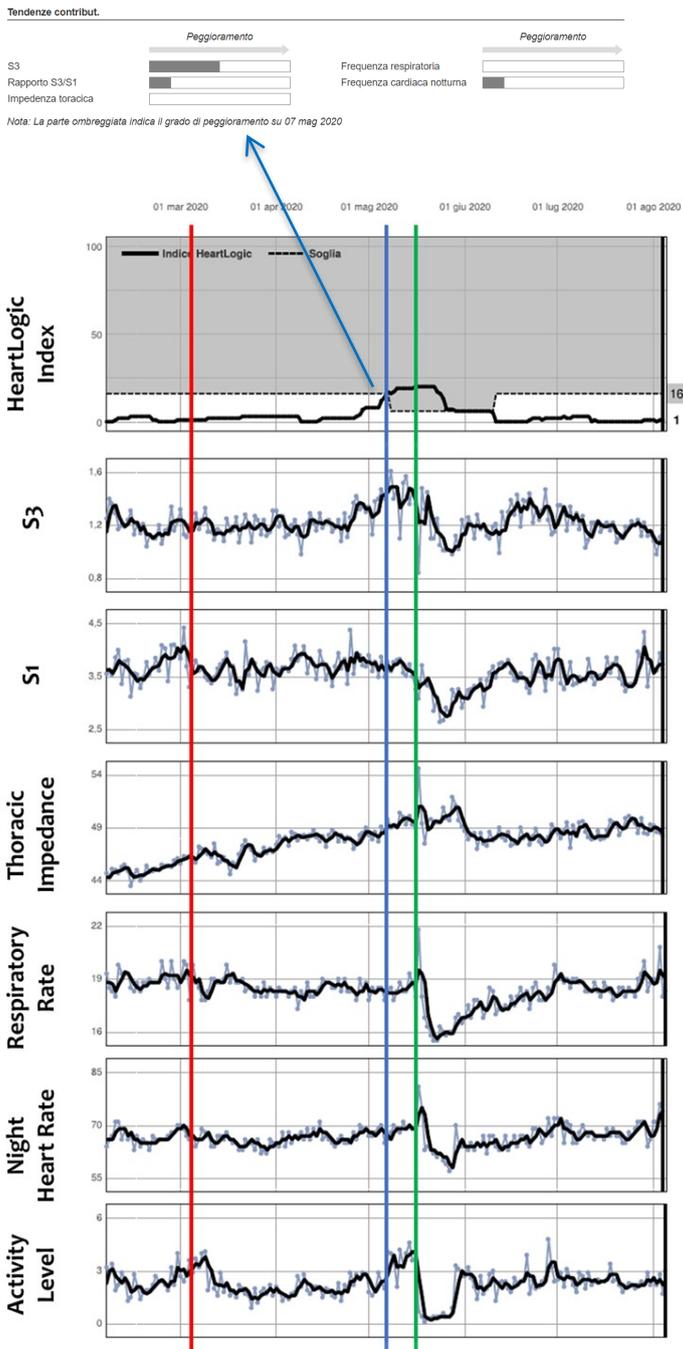


Case Of The Month #2 2021

On October 2019, a 58 years-old man with dilated cardiomyopathy and 34% LVEF underwent implantation of Vigilant X4 CRT-D. The patient was enrolled in Latitude Remote Monitoring system and HeartLogic feature was activated.



On March 3rd, 2020 (red line), at the beginning of COVID-19 pandemic in Italy, a loss in biventricular pacing was detected (LV pacing: 8%), and the reason was ascribed to the oversensing of atrial signal.

The patient was called to schedule an in-office visit to adjust device programming, but he refused to go to the hospital because he was afraid of possible virus infection.

On May 7th an HeartLogic alert was notified (blue line) to the center, but on phone contact, the patient reported no HF signs or symptoms.

Ten days after the alert, on May 16th, the patient accessed the ER department with dyspnea at rest. The contributing sensors snapshot showed that the HeartLogic alert was mainly driven by heart sounds and, to a lesser extent, night heart rate changes.

The physician decided to initiate intravenous diuretic therapy (Lasix 250 ml), monitoring the diuresis state. At the same time the device sensing configuration was modified (Tip1 → RV) in order to solve the atrial oversensing and to restore a LV pacing (green line).

A decrease in respiratory rate and activity level were seen during hospital stay.

Few days after these interventions the HeartLogic index started to decrease and, on June 10th, the alert was solved.

The analysis of trends highlights the ability of HeartLogic to early detect worsening heart failure, days before symptoms appearance.

Loss in biventricular pacing is a common cause of possible heart failure deterioration. Device counters and diagnostics help monitoring therapy delivery and guide the operator for effectively restoring it.

Continuous monitoring of physiologic parameters allows to assess the efficacy of interventions. Indeed, the sharp decrease in third heart sound and in night heart rate followed the restoration of biventricular pacing and the intravenous diuretic therapy administration.

Remote monitoring in association with device diagnostics and HeartLogic provided all the information necessary to manage the event and potentially to prevent its consequences. The lack of adherence to the indications provided by the center and the difficulties caused by the restrictions imposed during the pandemic did not allow the patient to fully benefit from a proactive management of the disease.

Courtesy of “G.B. Grassi” Hospital (Ostia – Rome, ITALY)

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

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