

Caso di studio in Medicina Digitale

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Anamnesi

Maschio, 74 anni

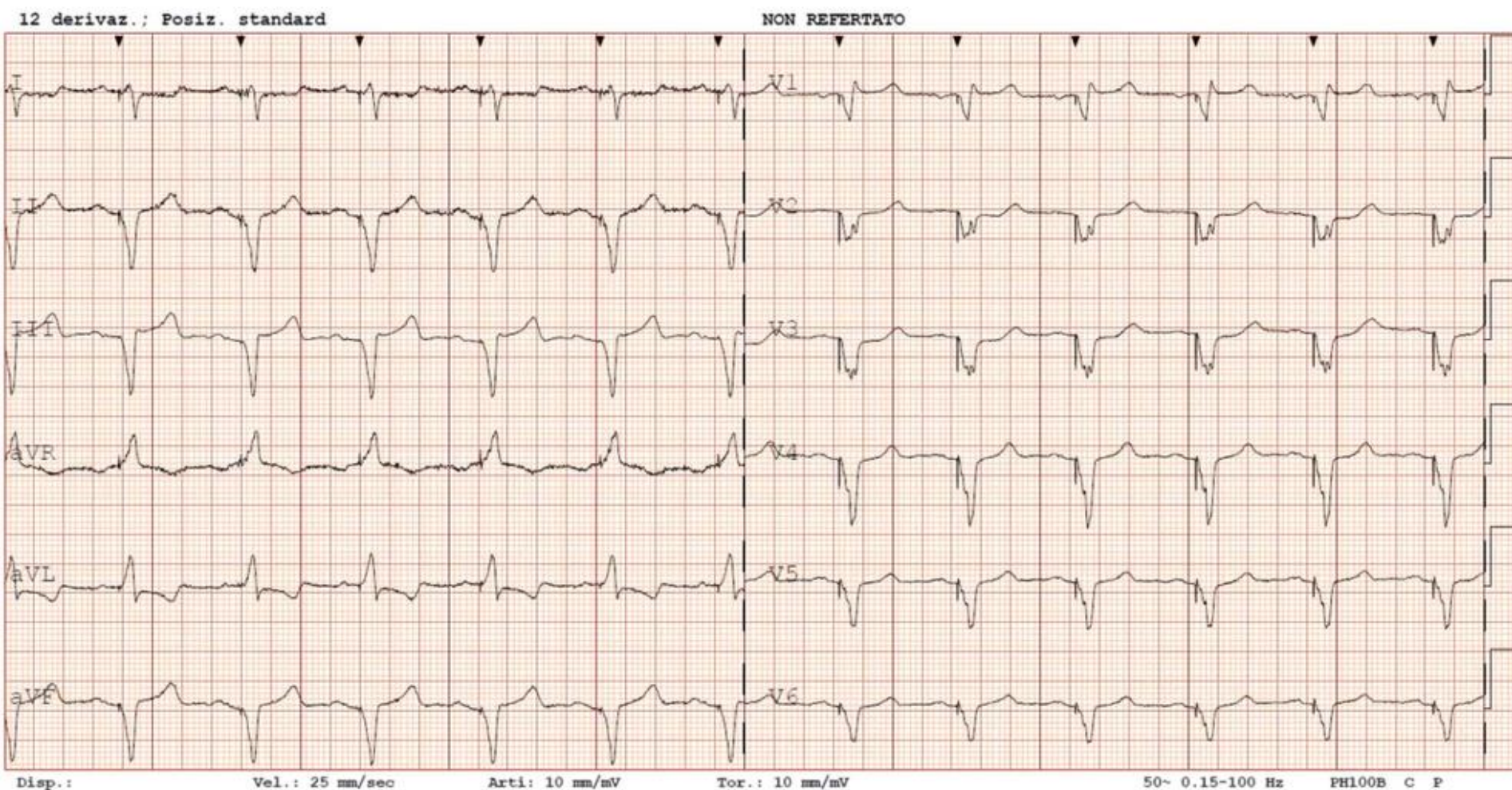
Fattori di rischio cardiovascolare:

Ipertensione arteriosa sistemica, dislipidemia, diabete mellito di tipo 2, pregressa abitudine tabagica, pregresso sovrappeso

Anamnesi patologica remota:

- Cardiomiopatia ipocinetico-dilatativa su base valvolare (protesi biologica aortica)
- Blocco di branca sinistra
- Impianto di CRT-D ad Agosto 2017
- FA persistente anamnestic

ECG



Frequenza

- 75 bpm

Ritmo

- Sequenziale

Asse

- Deviazione destra estrema

Intervalli

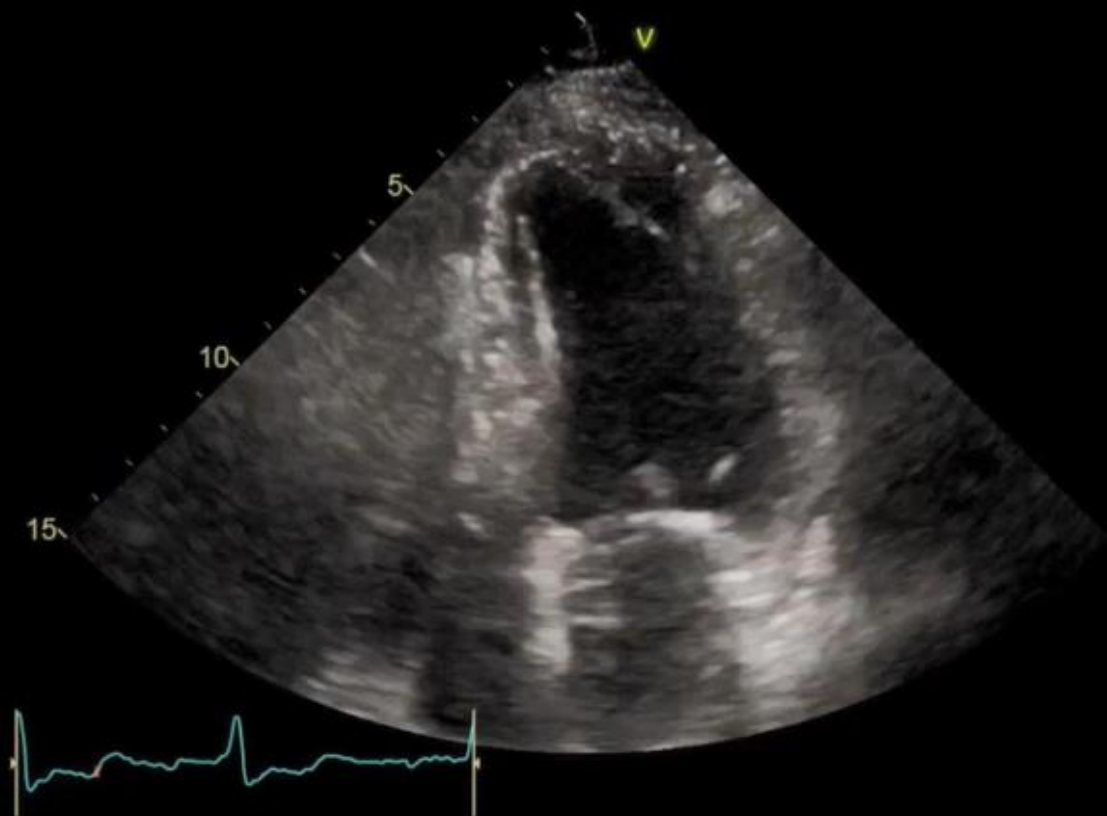
- QRS > 120 ms

Ripolarizzazione

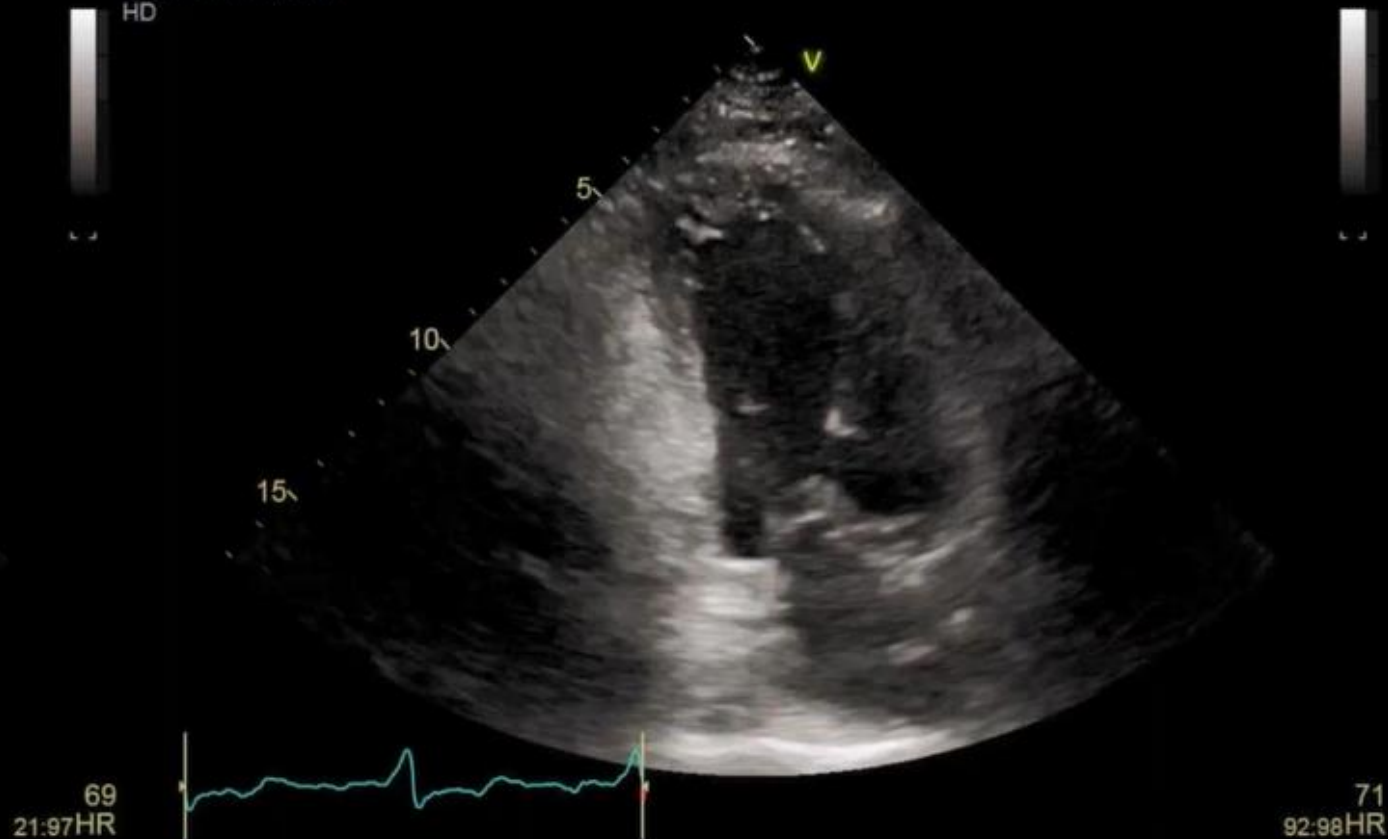
- Alterazioni diffuse

Ecocardiogramma

06/03/2018 15:25:17
HD



06/03/2018 15:26:33
HD



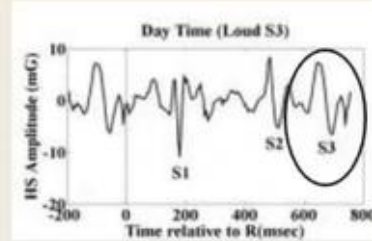
Terapia all'ultimo controllo

- Lansoprazolo 30 mg - 1 compressa al mattino a digiuno
- Nebivololo 5 mg – 1 compressa ore 8
- Warfarin 5 mg - secondo INR ore 17
- Furosemide 25 mg - 1 compressa x2 ore 8-16
- Spironolattone 50 mg - 1 compressa ore 8
- Amlodipina 5 mg - 1 compressa ore 20
- Insulina glargine – 20 UI ore 22
- Simvastatina/ezetimibe 10 mg/10 mg - 1 compressa ore 22

Heart Logic

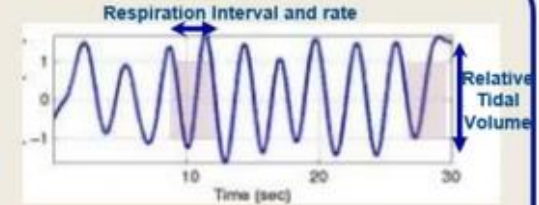
Heart Sounds

Signs of elevated filling pressure (S3)



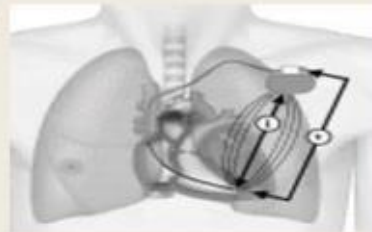
Respiration

Rapid breathing and reduced tidal volume – shortness of breath



Thoracic Impedance

Fluid accumulation and pulmonary edema



Sleep Elevation

Increased night elevation angle as indicator of Orthopnea or PND



Activity

Activity level reflects global patient status and fatigue

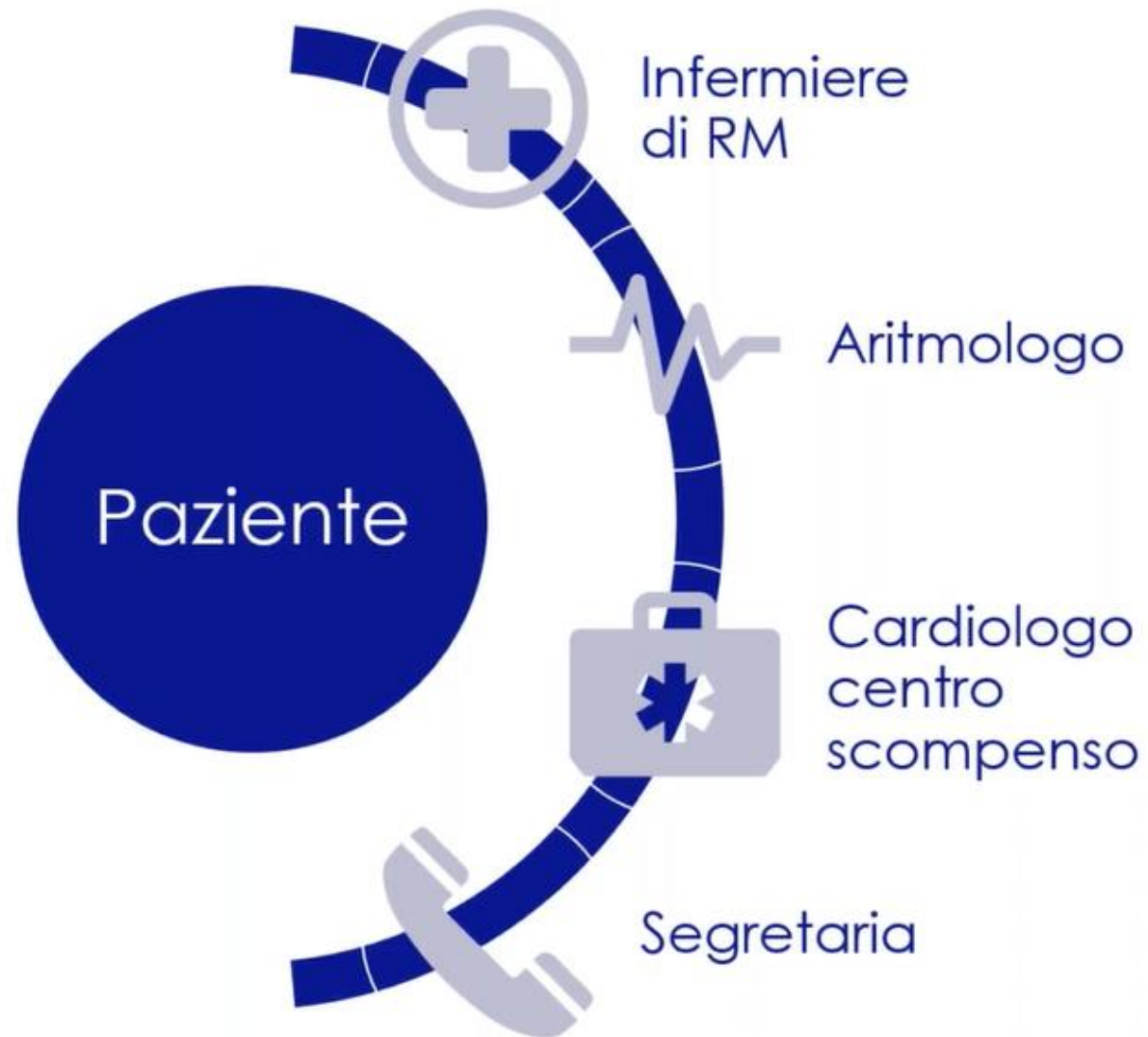


Heart Rate and Arrhythmias

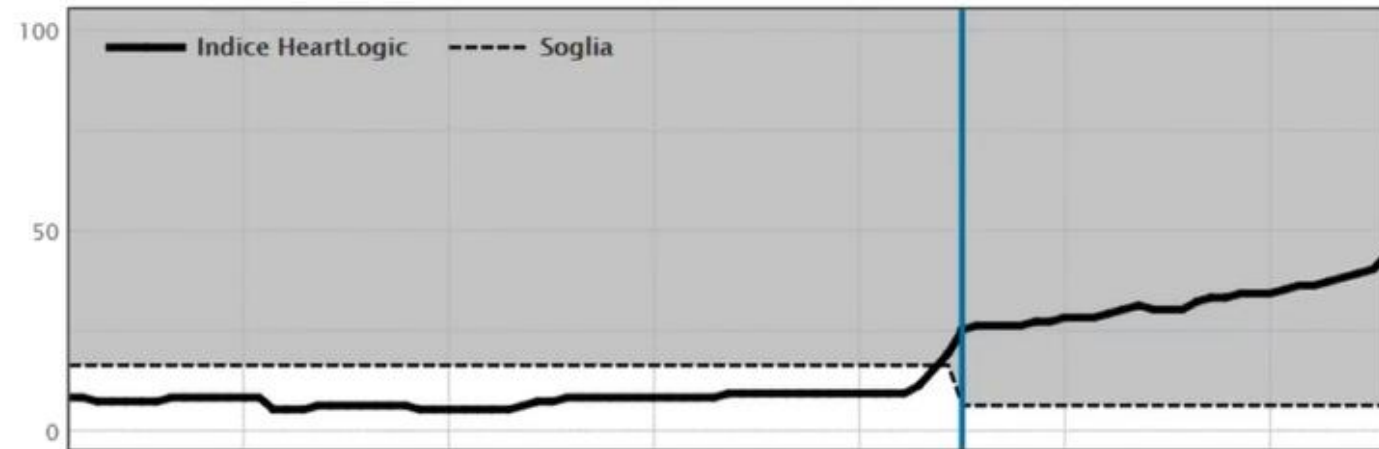
Heart rates as indicator of cardiac status; atrial arrhythmias related to HF status



Attori



Heart Logic



Tendenze contribut.



Contatto telefonico (HL 27)

- Peggioramento della dispnea da sforzo (NYHA III). Aumento della furosemide a 25 mg 2 cp ore 8 + 1 cp ore 16. Spironolattone invariato a 50 mg/die.



Heart Logic

S3

29 mar 2021

1,16

mG

S1

29 mar 2021

1,69

mG

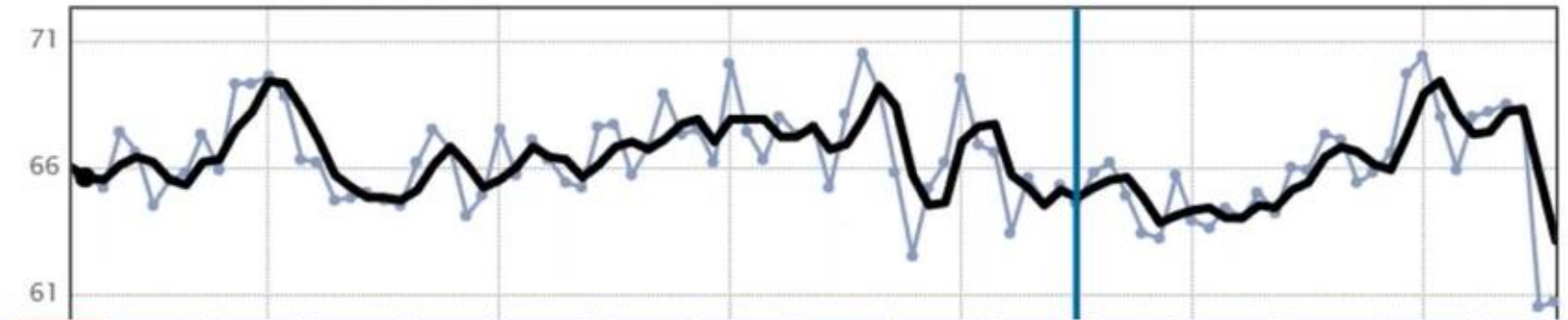
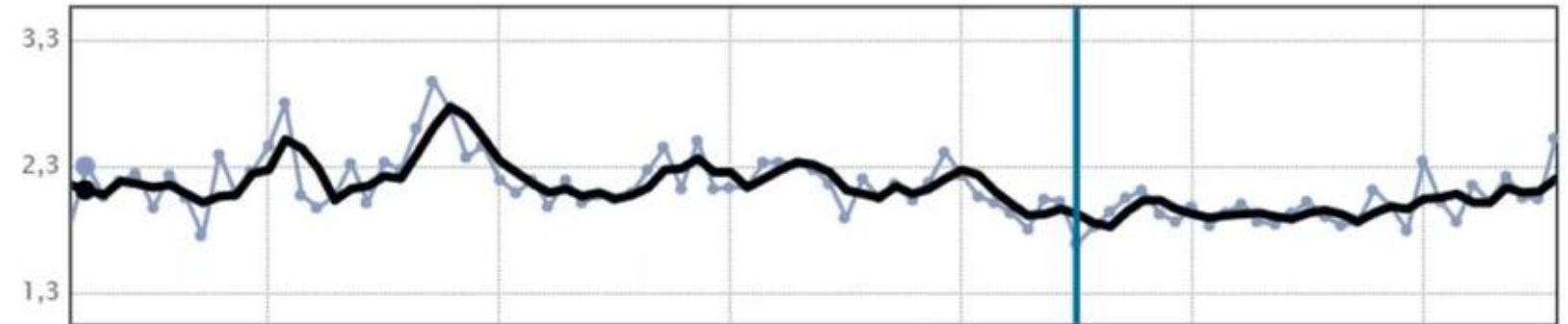
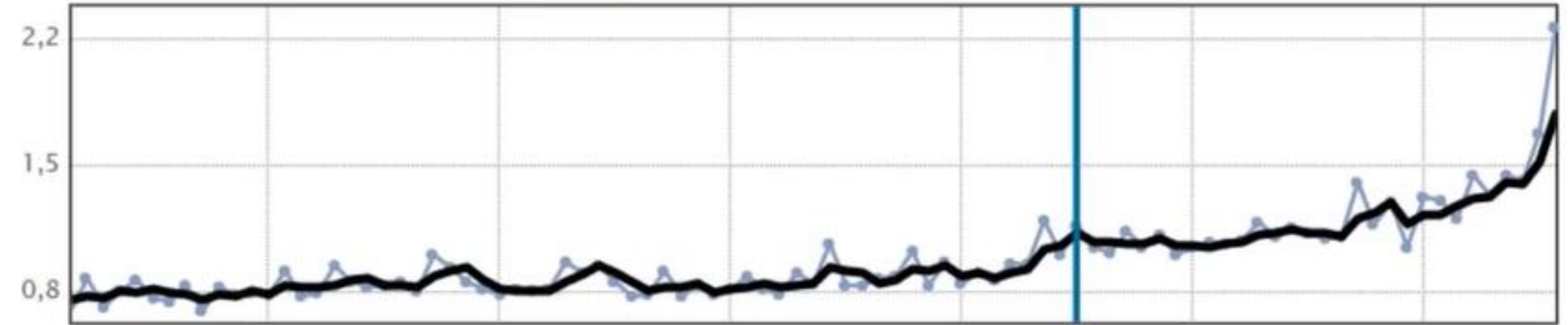
Δ

Impedenza toracica

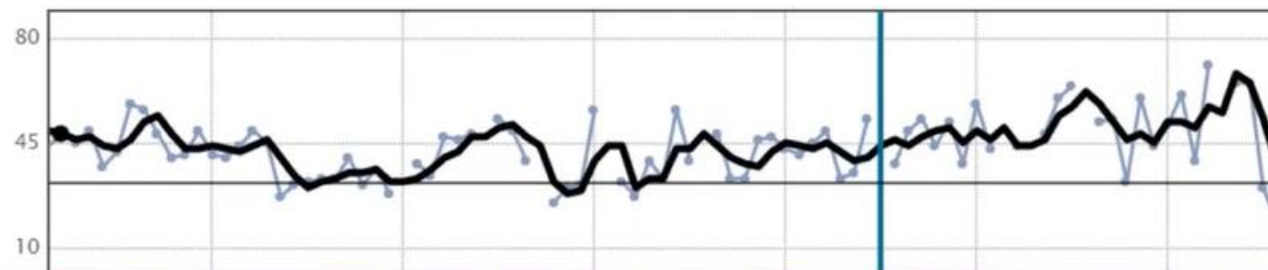
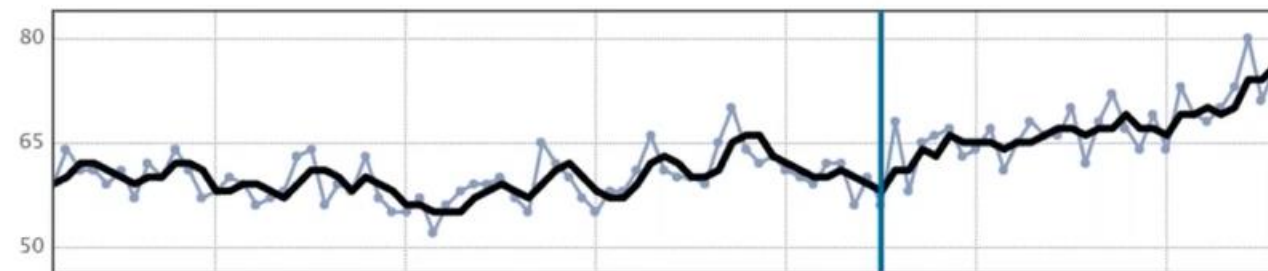
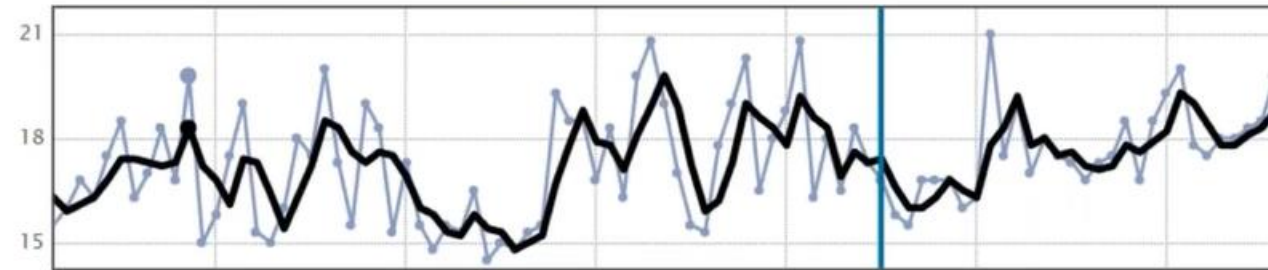
29 mar 2021

64,6

Ω



Heart Logic



Contatto telefonico (HL 40)

- Incremento della dispnea da sforzo (NYHA IVa), astenia. Non riferisce episodi di dispnea parossistica notturna. Nega episodi sincopali o angor.
 - Riferisce peggioramento della sintomatologia dopo vaccinazione COVID Pfizer il 19/04.
- Riferisce mancata assunzione di Lasix nelle ultime 48 ore e inizio eparina sodica 4000 U.I 1/die (ultimo valore di INR 2,6).

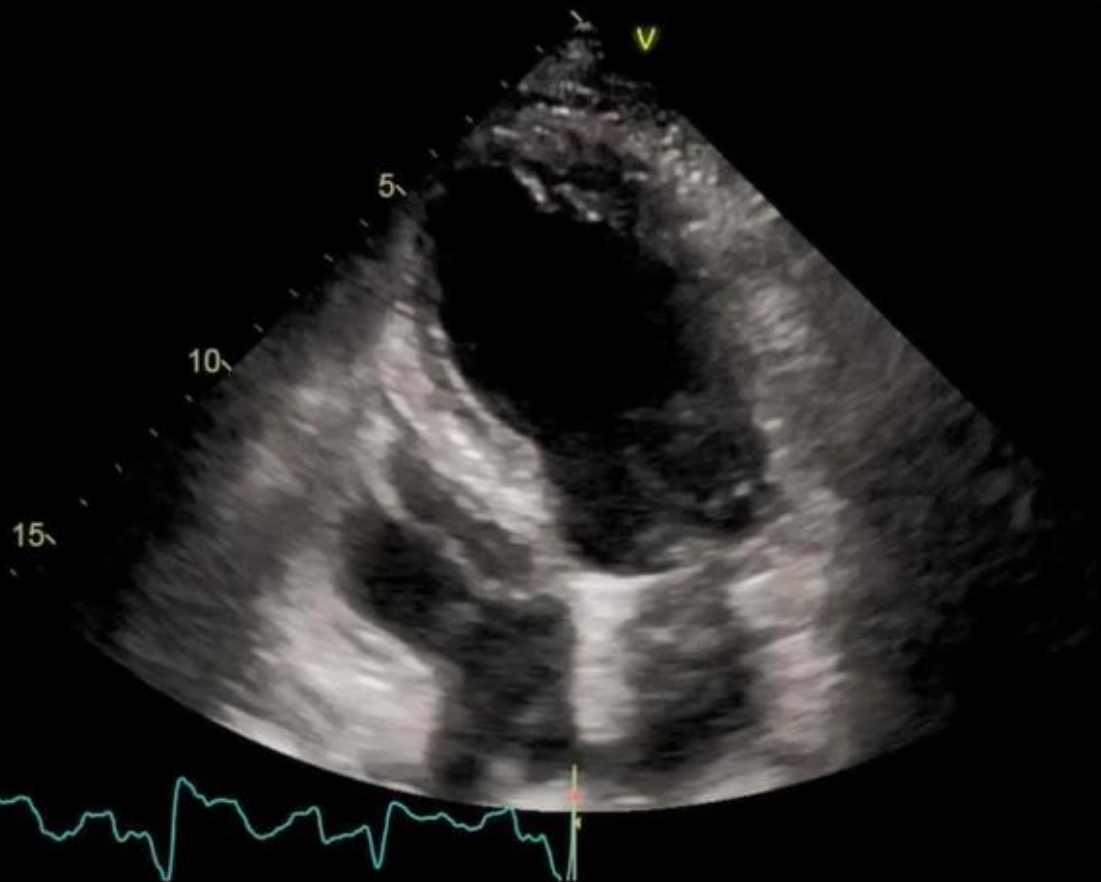


Visita ambulatoriale

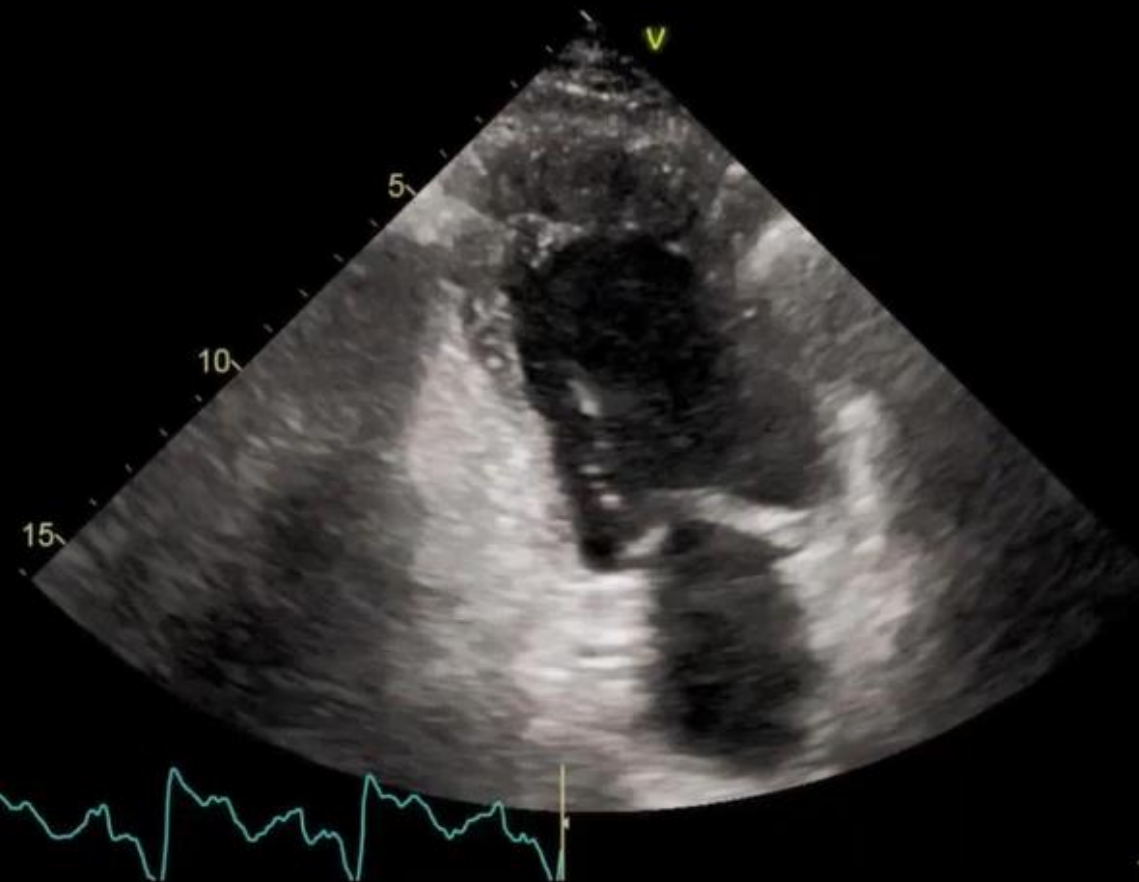
Dispnea in paziente recentemente sottoposto a vaccinazione per COVID, reperti di broncostenosi e iniziali segni di scompenso cardiaco acuto in paziente con scompenso cardiaco cronico in cardiopatia ipocinetico-dilatativa su base valvolare

Ecocardiogramma (+24 gg)

7/04/2021 15:55:38
ID



27/04/2021 15:59:12
HD



89
101:103HR

Terapia

- Lansoprazolo 30 mg - 1 compressa al mattino a digiuno
- Nebivololo 5 mg – 1 compressa ore 8
- Warfarin 5 mg - secondo INR ore 17
- furosemide 25 mg - 2 compresse x2 ore 8-16
- Spironolattone 100 mg - 1 compressa ore 8
- Amlodipina 5 mg - 1 compressa ore 20
- Insulina glargine – 20 UI ore 22
- Simvastatina/ezetimibe 10 mg/10 mg - 1 compressa ore 22

Rx torace (+25 gg)



Take-home messages

- Remote monitoring was able to predict HF worsening, but a delay in medical response rendered the information useless.
- The present case highlight two current issues:
 - A dedicated clinical pathway is mandatory for the prompt management of these alert.
 - Sharing data between all the team supporting HF patients should be our first priority.



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Thank you for your attention