ELECTRA & RHYTHM

18-21 MAY 2022

Golden Tulip Villa Massalia
Marseille, France

Case Report

Beatriz Tose Costa Paiva

Coburg, Germany


NO CONFLICT OF INTEREST
TO DECLARE

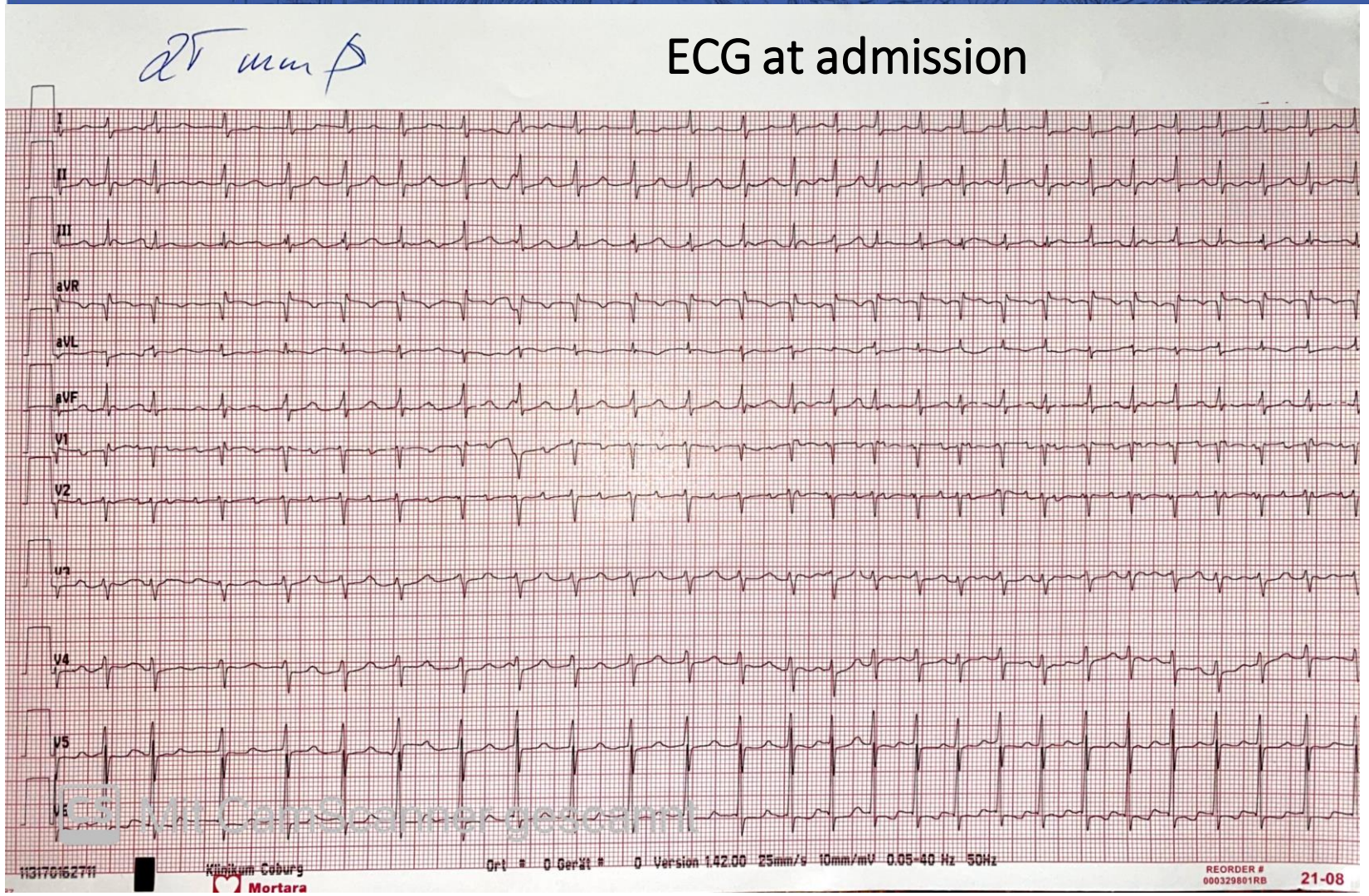
Case 1

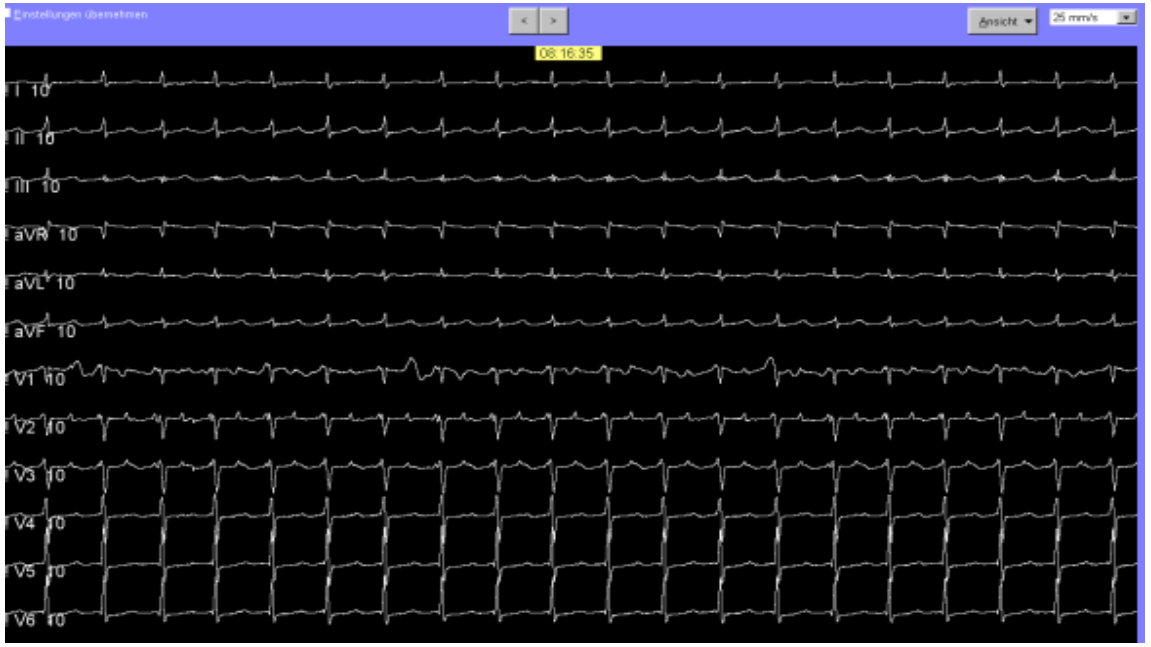
- 83-year-old female: BMI 29,3 Kg/m2
- Admitted due to symptomatic AT
- History of Atrial Fibrillation (2019)
- Submitted to CV in February 2022 with recurrence
- CHADSVASC-Score 4 (Age, gender, arterial blood pressure)
- LVEF 42% during AT (Tachycardia-induced cardiomyopathy)
- LA 54mm/37cm2; RA 58 mm/42cm2
- Previous LVEF 65% (2021)
- No significant CAD (Coronary angiography from 2021)

ELECTRA & RHYTHM

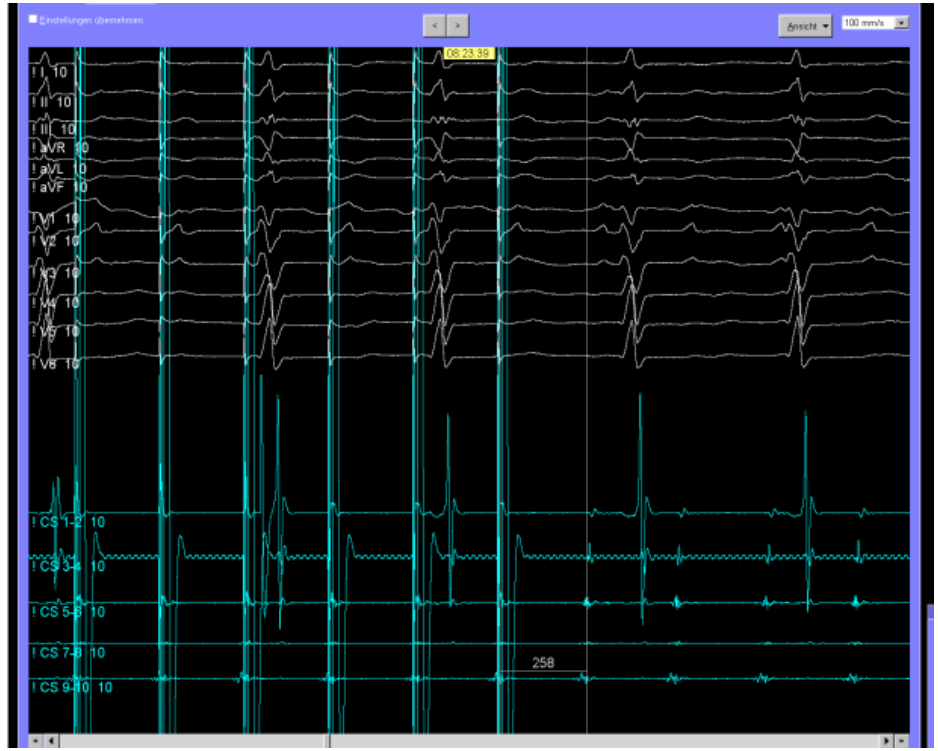
18-21 MAY 2022

ECG at admission

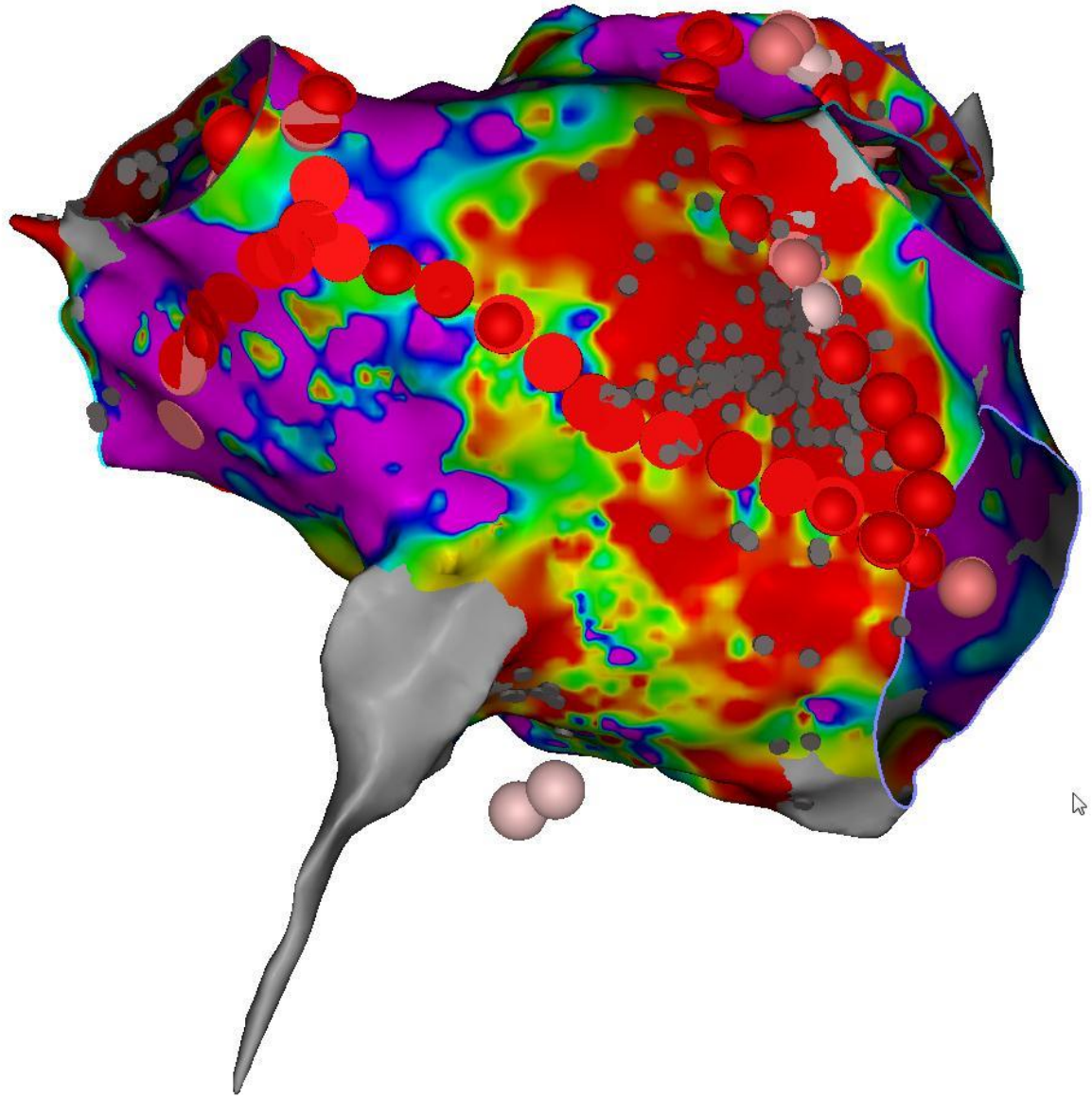


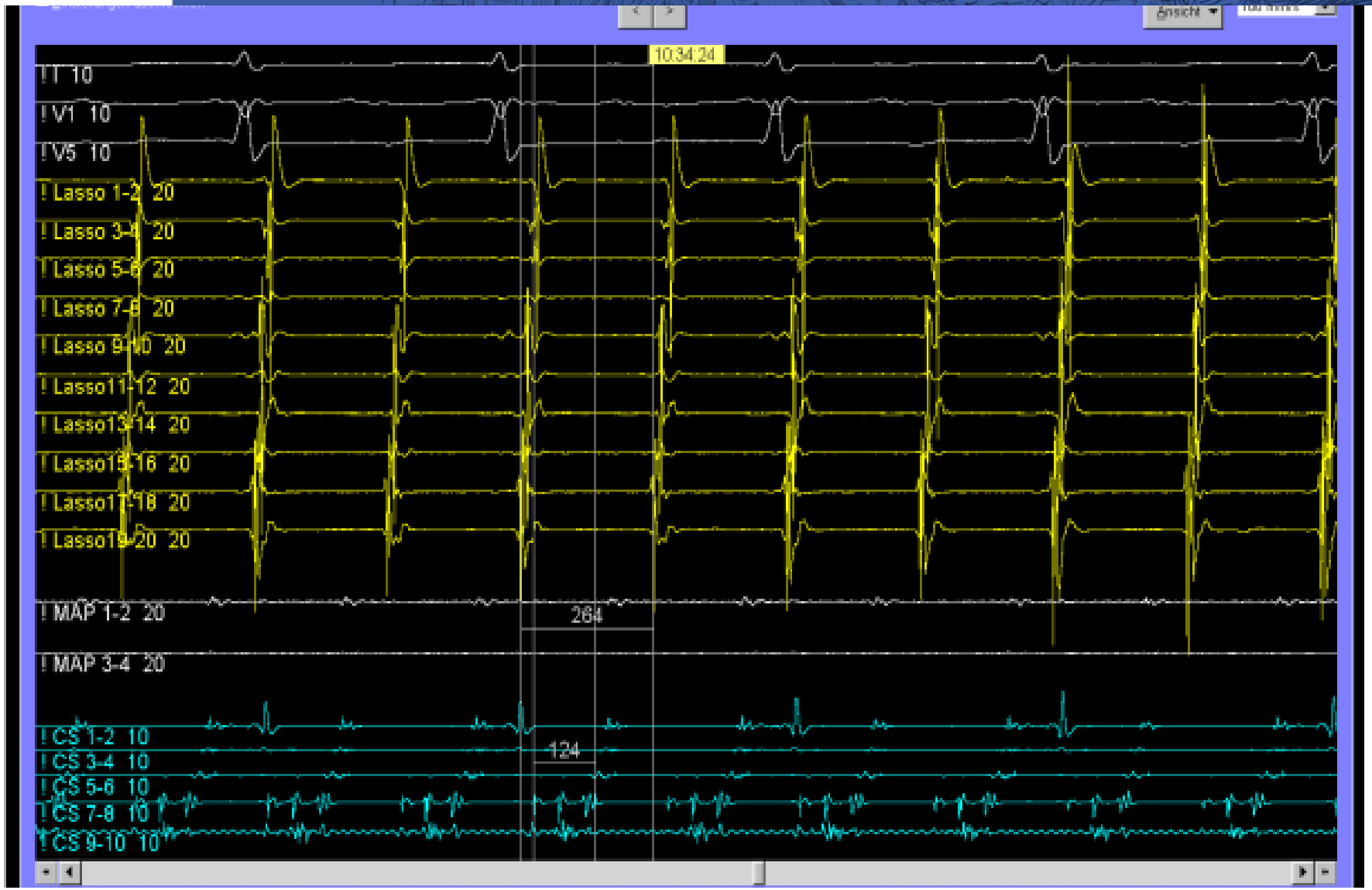


CS-Entrainment



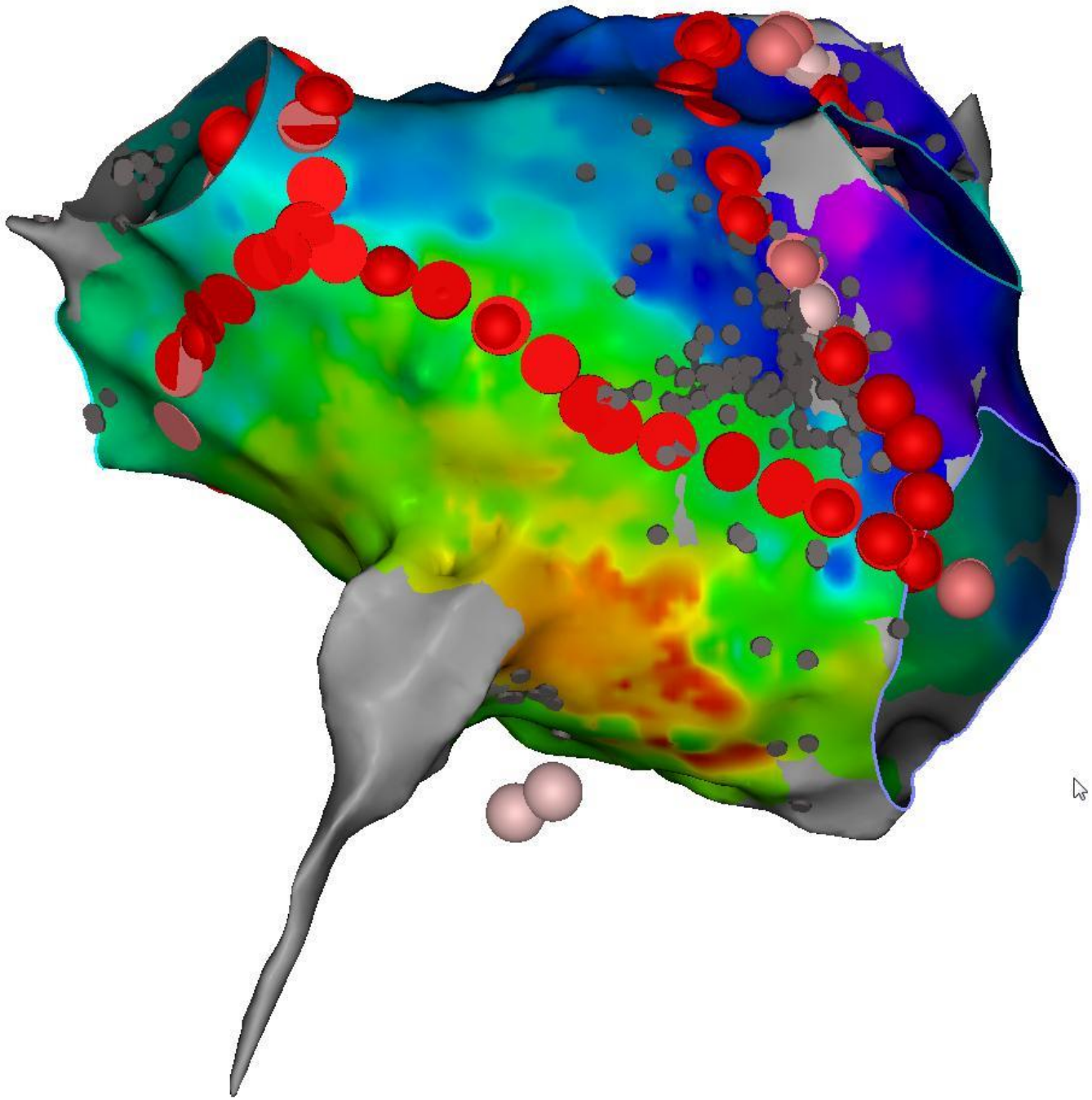
Substrate Mapping



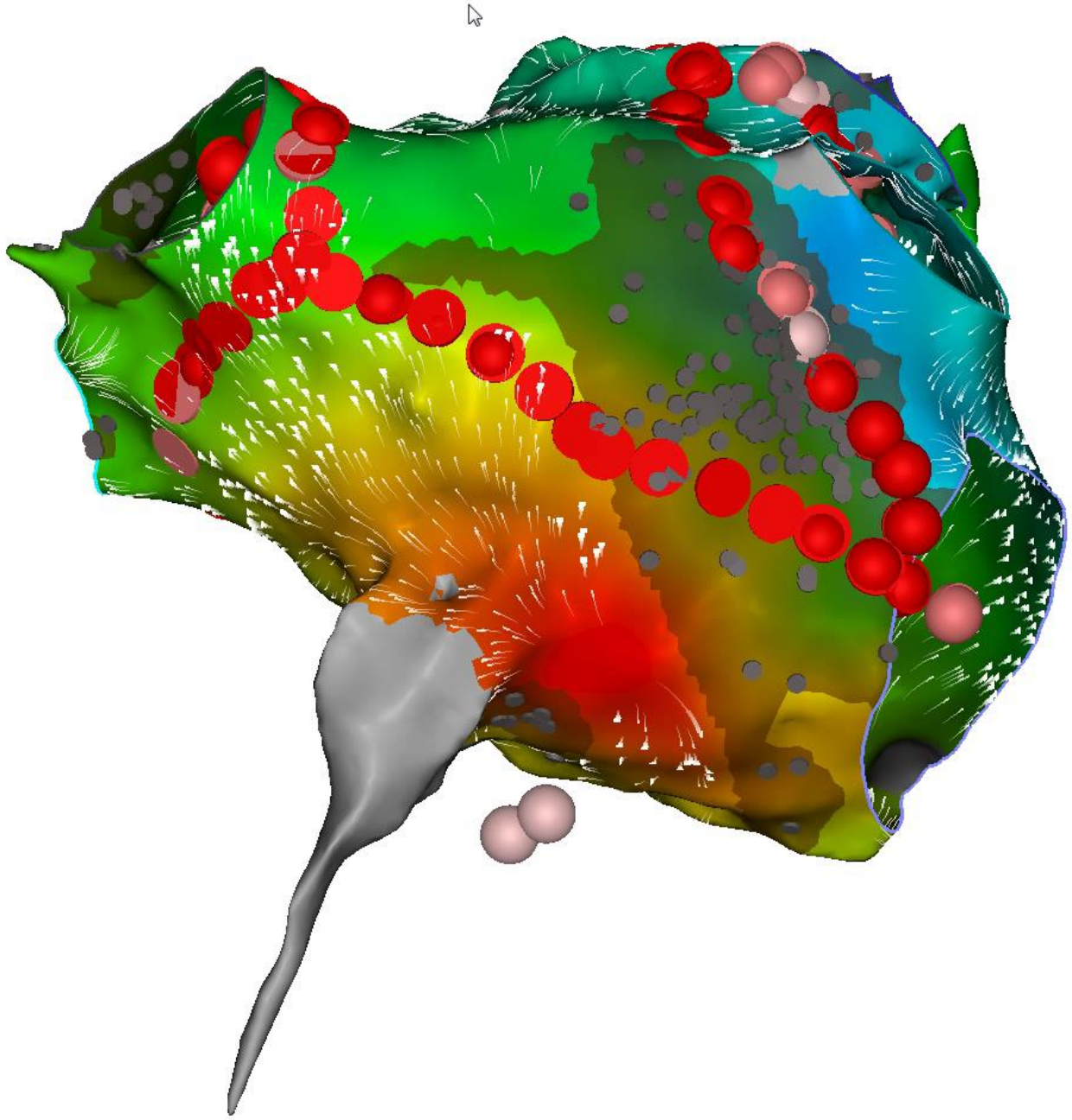

Ansicht
10:34:2d
I 10
V1 10
V5 10
Lasso 1-2 20
Lasso 3-4 20
Lasso 5-6 20
Lasso 7-8 20
Lasso 9-10 20
Lasso11-12 20
Lasso13-14 20
Lasso15-16 20
Lasso17-18 20
Lasso19-20 20
MAP 1-2 20
264
MAP 3-4 20
CS 1-2 10
124
CS 3-4 10
CS 5-6 10
CS 7-8 10
CS 9-10 10

Entrainment
CS-proximal
PPI=TCL

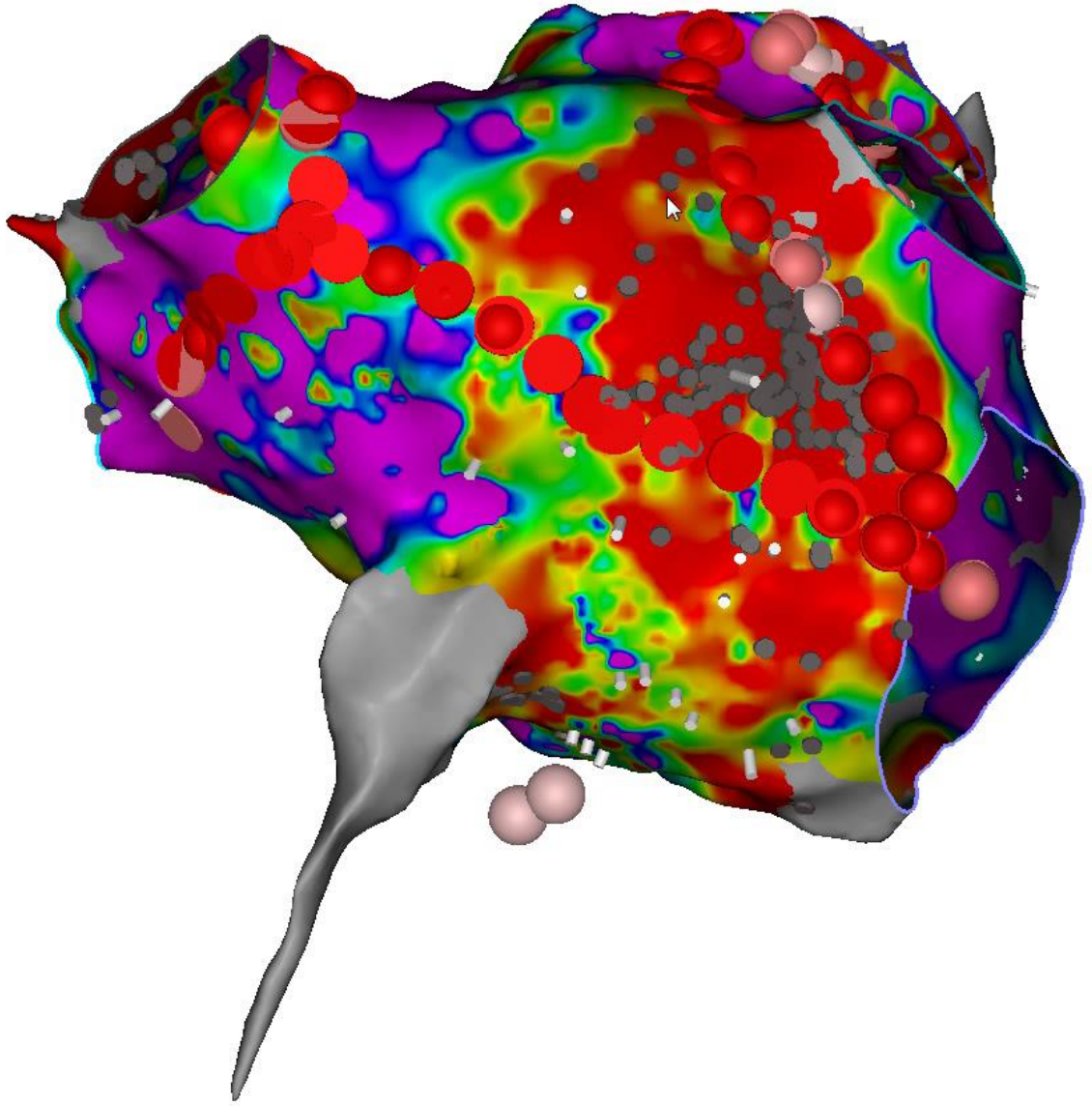
Activation Mapping



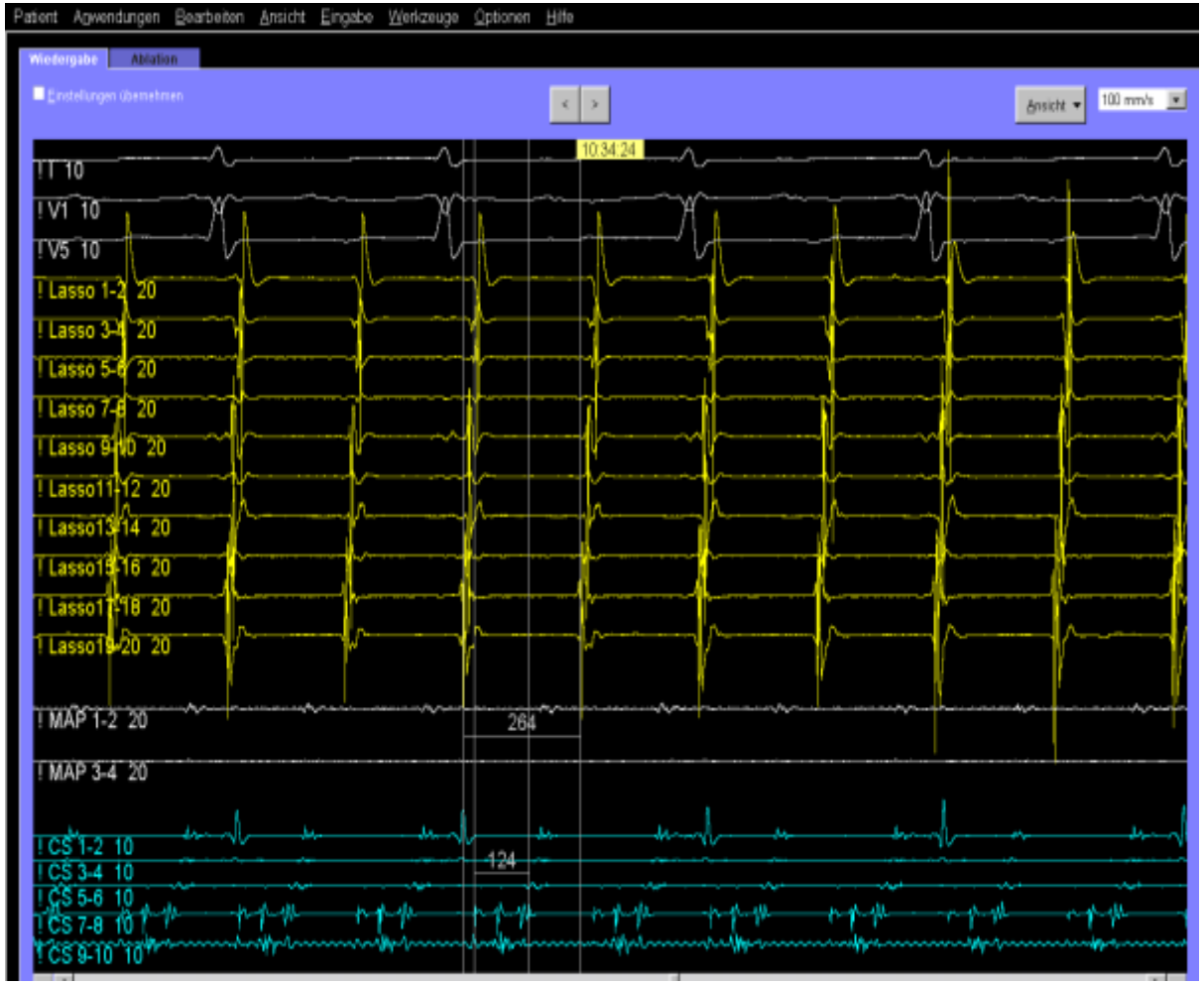
Coherent Mapping



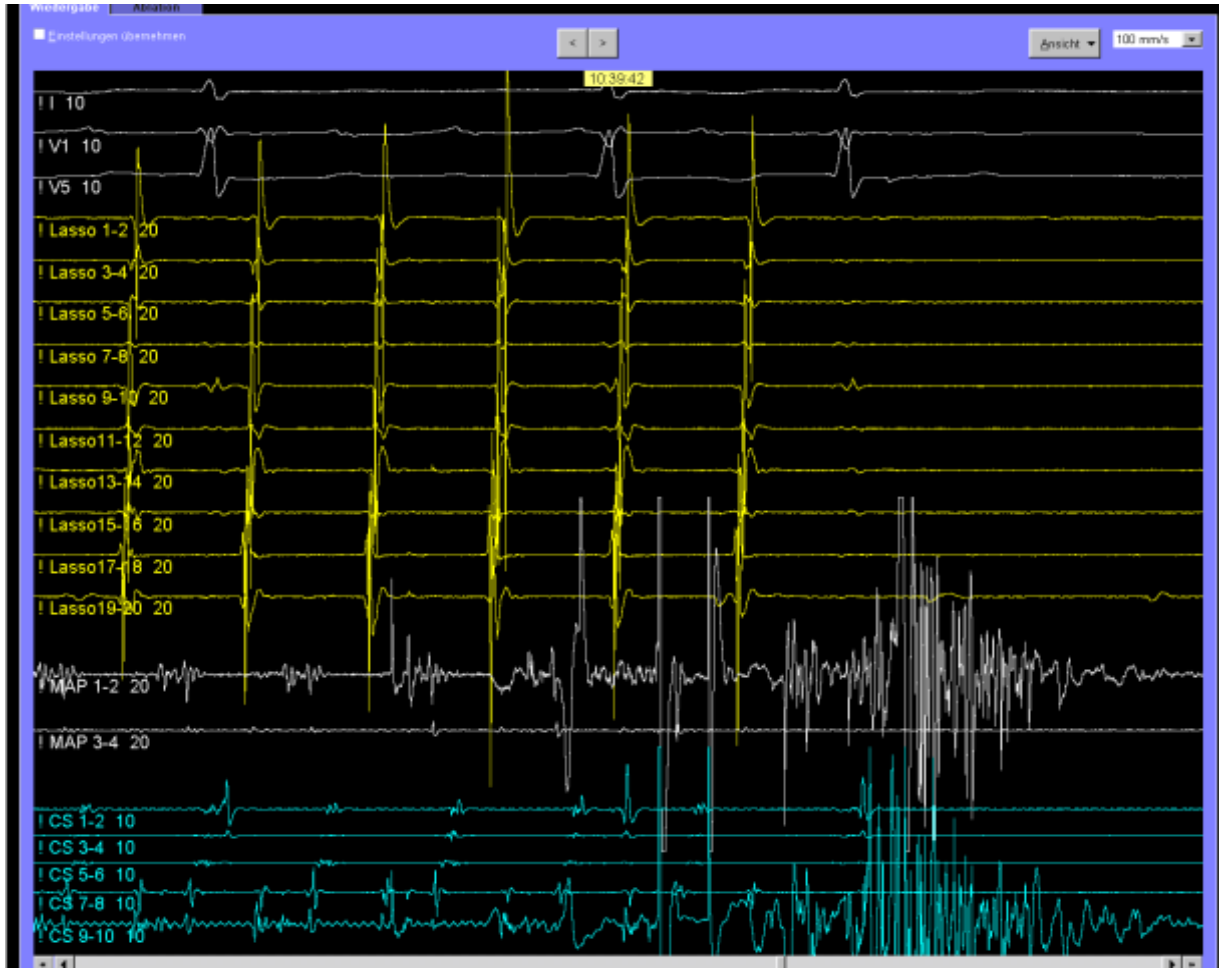
Ripple-Mapping

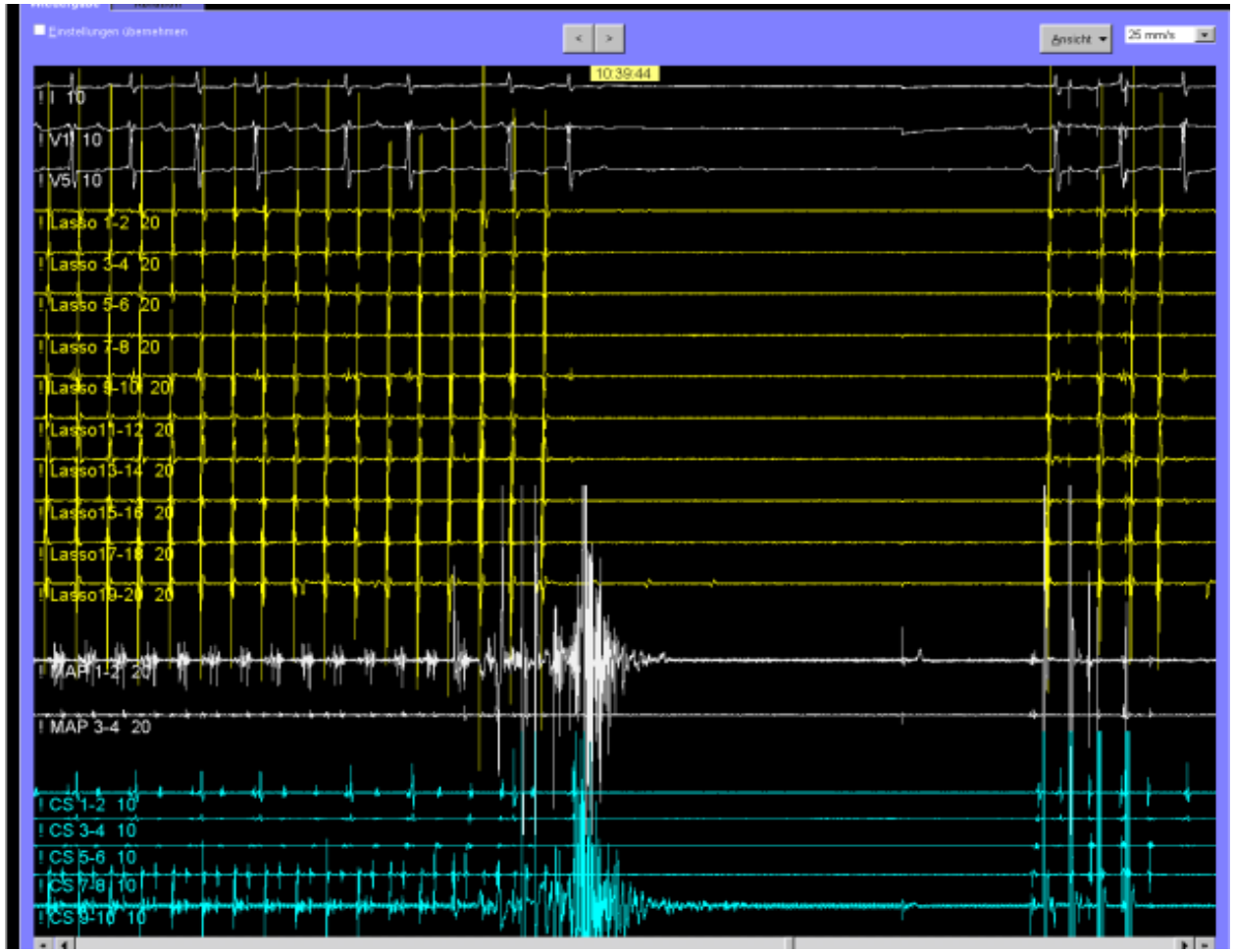


Signal preceeding Ablation

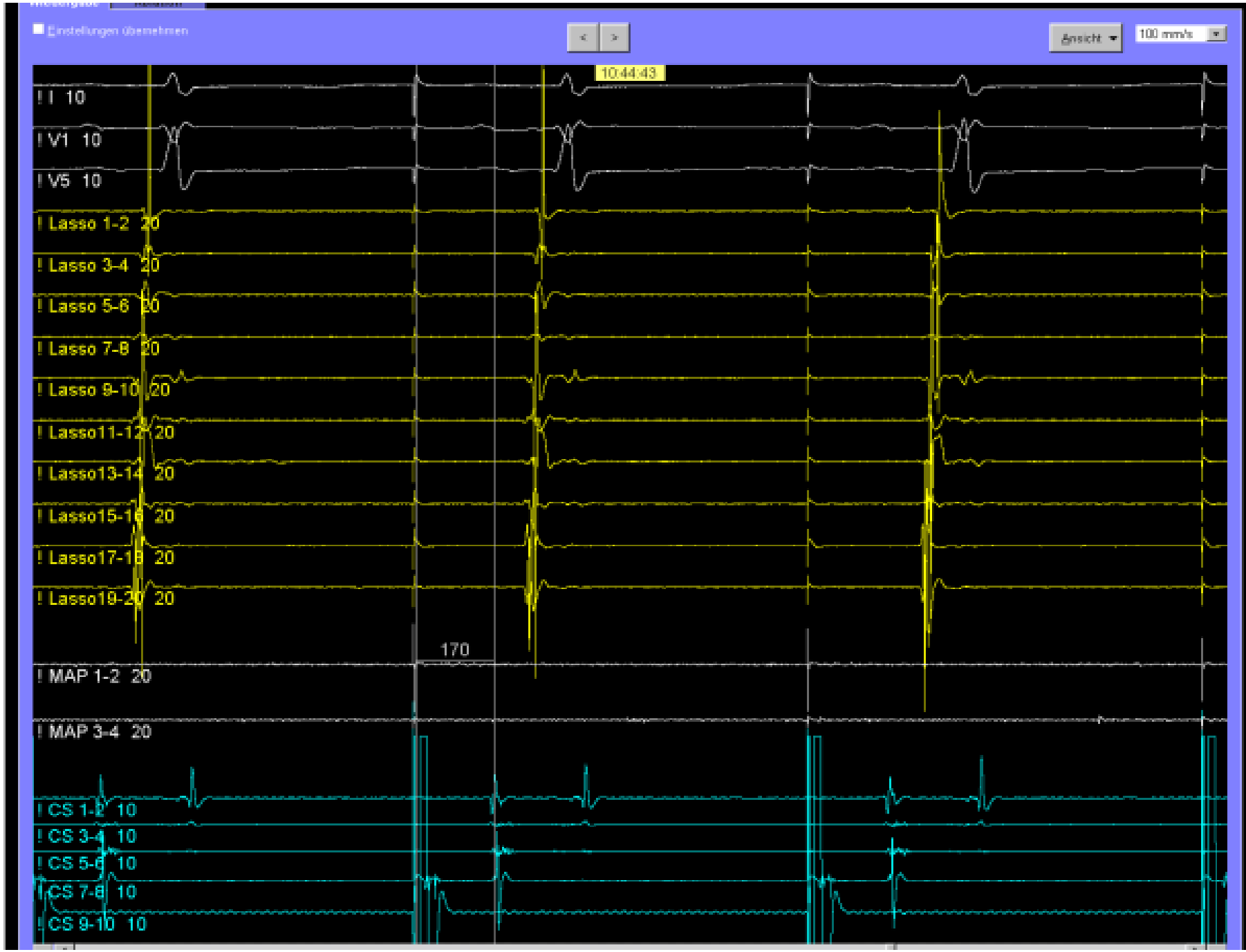


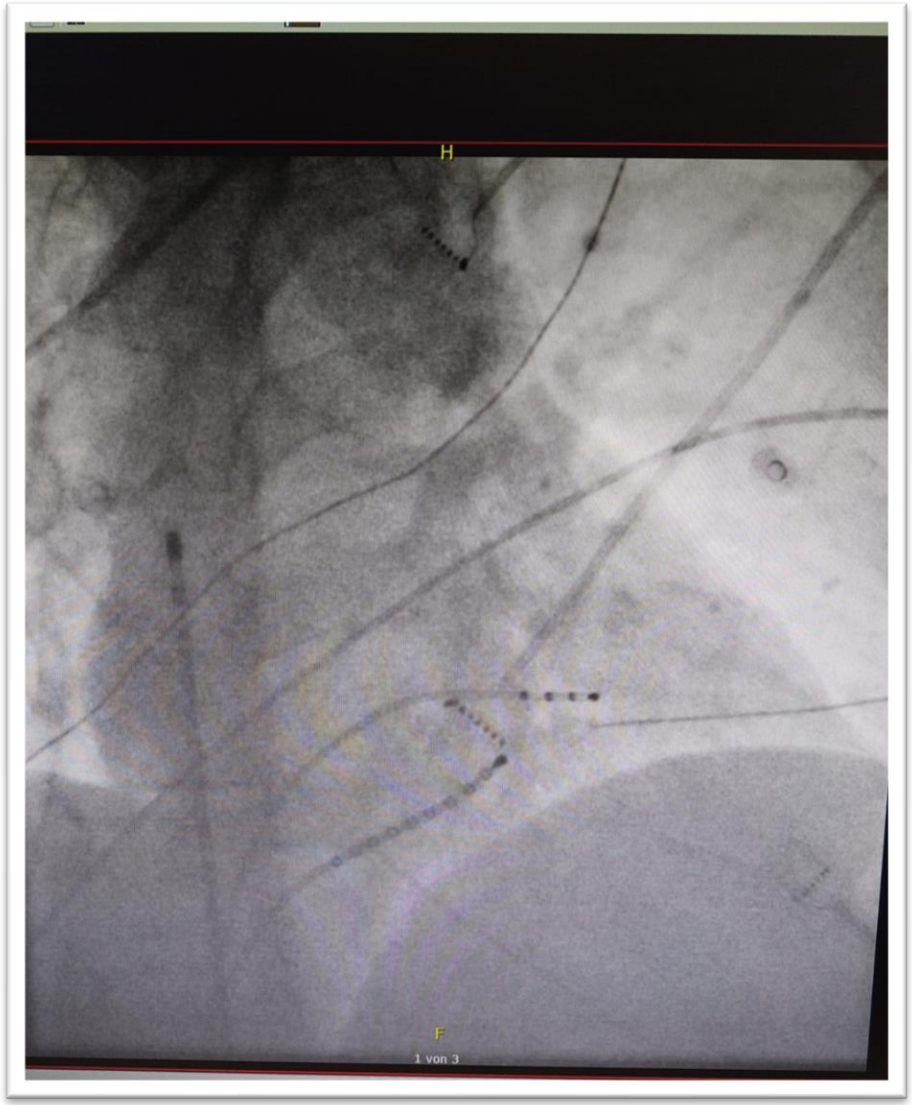
Termination after Ablation

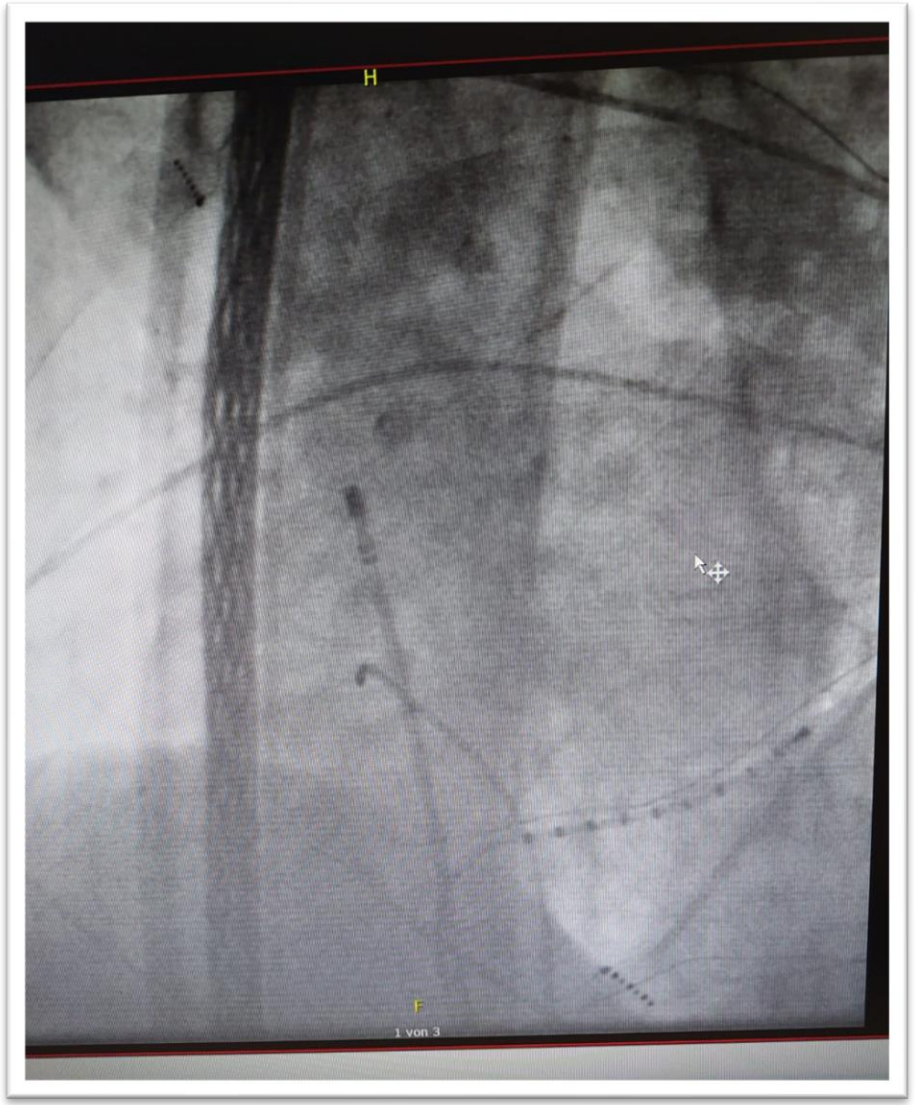




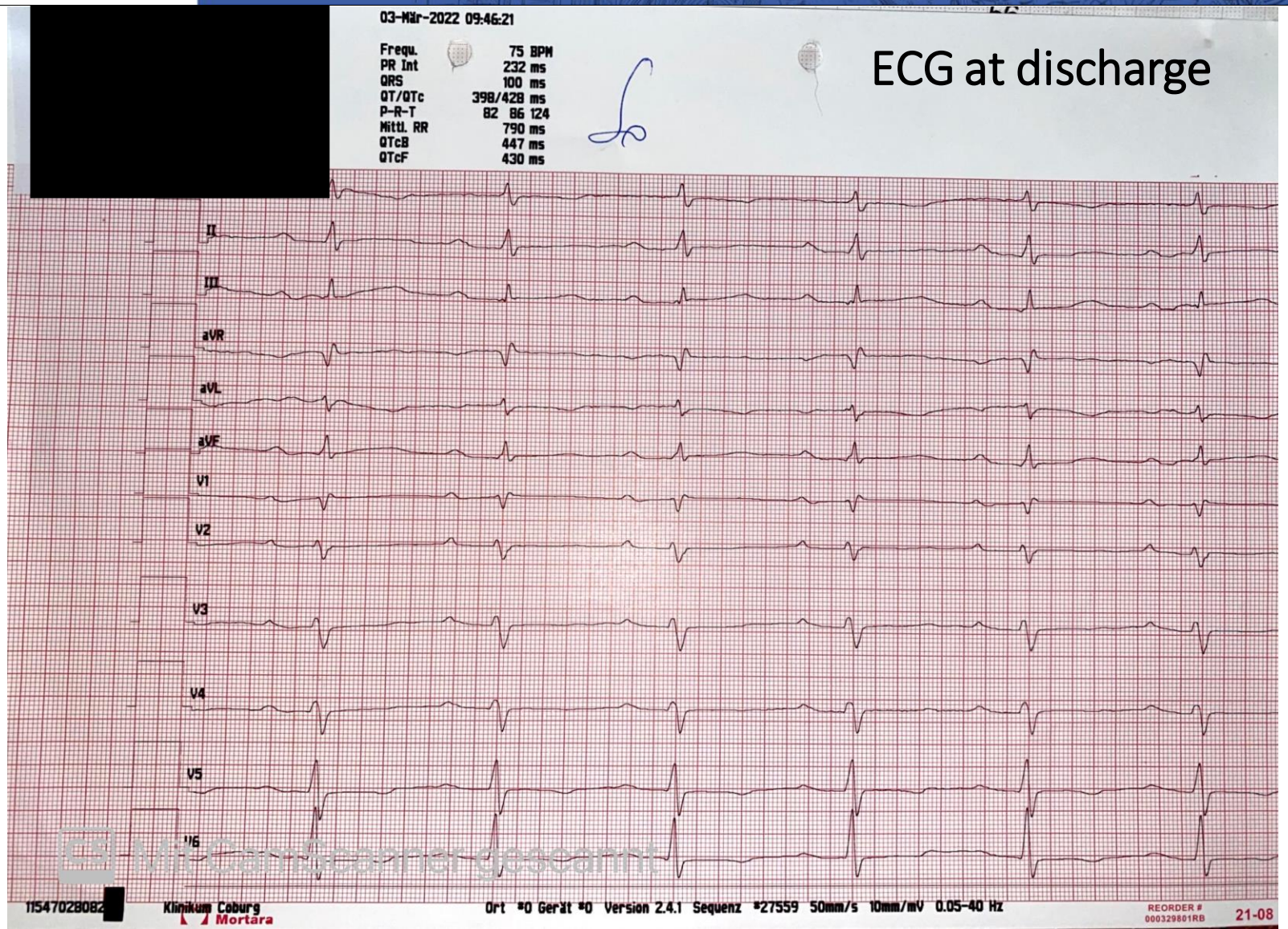
SR


Einstellungen übernehmen
Ansicht
100 mm/s
10:44:43
! I 10
! V1 10
! V5 10
! Lasso 1-2 20
! Lasso 3-4 20
! Lasso 5-6 20
! Lasso 7-8 20
! Lasso 9-10 20
! Lasso11-12 20
! Lasso13-14 20
! Lasso15-16 20
! Lasso17-18 20
! Lasso19-20 20
170
! MAP 1-2 20
! MAP 3-4 20
! CS 1-2 10
! CS 3-4 10
! CS 5-6 10
! CS 7-8 10
! CS 9-10 10


H
F
1 von 3


H
F
1 von 3

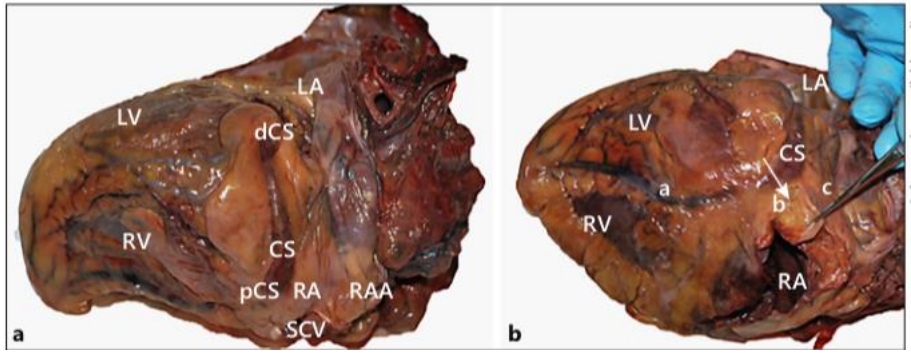
ECG at discharge



- Thank you for your attention!

- Merci pour votre Attention!

Discussion:



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Atrial Tachycardia Arising From the Coronary Sinus Musculature

Electrophysiological Characteristics and Long-Term Outcomes of Radiofrequency Ablation

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Paul B. Sparks, MBBS, PHD,† Peter M. Kistler, MBBS,† Mehran Attari, MD,‡
Marcie Berger, MD, FACC,‡ Randall J. Lee, MD, PHD, FACC,* Jasbir Sra, MD, FACC,‡
Melvin M. Scheinman, MD, FACC*

San Francisco, California; Melbourne, Australia; and Milwaukee, Wisconsin

OBJECTIVES We sought to describe the electrophysiological features and long-term outcome after radiofrequency catheter ablation (RFCA) of atrial tachycardia (AT) arising from the coronary sinus (CS) musculature.

BACKGROUND Atrial tachycardia requiring RFCA deep within the CS has been described in isolated case reports. However, the mechanism and exact site of origin of this tachycardia have not been well elucidated.

METHODS The study included 8 patients (5 men) of a consecutive series of 283 patients undergoing RFCA for focal AT.

RESULTS In sinus rhythm, a discrete potential (P) was noted after the CS atrial electrogram and during tachycardia, the CS (P) preceded the surface P-wave by 30 to 50 ms. The CS (P) always preceded the earliest electrogram in the left atrium (LA). Three-dimensional electroanatomical mapping was available in four patients, and in one case it showed earliest activation in the CS with rapid spread to the proximal CS and then to the LA. Ablation of the AT initially attempted from the earliest site in the LA in three patients was unsuccessful. In all patients the tachycardia was safely and successfully ablated at a site 3.6 cm within the CS. There has been no recurrence over a follow-up of 37 ± 13 months.

CONCLUSIONS Focal AT emanating deep within the CS musculature can be recognized by a discrete potential associated with the CS atrial signal both during sinus rhythm and tachycardia. Long-term success without complications can be accomplished by ablating within the CS in close proximity to the CS (P). (J Am Coll Cardiol 2005;46:1921–30) © 2005 by the American College of Cardiology Foundation

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Coronary Sinus Ablation Is a Key Player Substrate in Recurrence of Persistent Atrial Fibrillation

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Giulio Molon[b]

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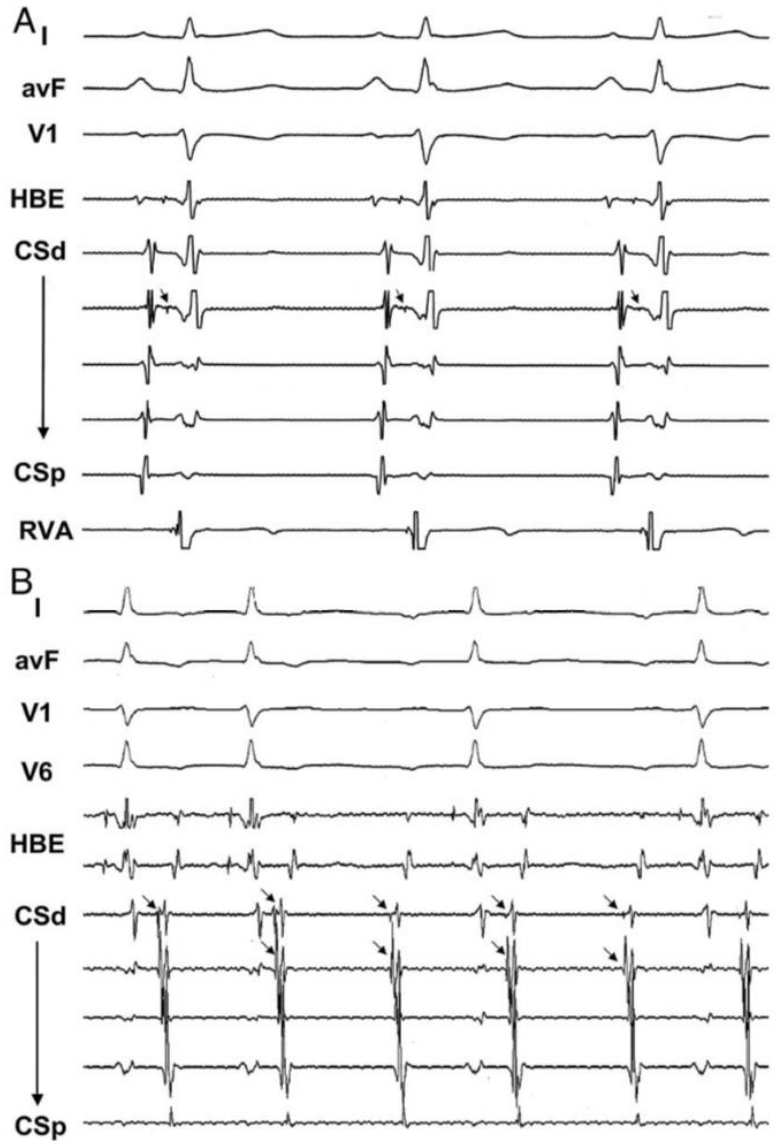

Figure 2. (A) Intracardiac recording during sinus rhythm in a patient showing a characteristic potential (P) following the coronary sinus (CS) atrial electrogram (A) **(arrows)**. **(B)** Intracardiac recording during tachycardia showing the CS (P) now preceding the CS (A) **(arrows)**.