



Dysautonomia

Overview, Causes, Symptoms,
Diagnosis, and Management

Syncope

ECG

Cases

DAVID BELLO, MD

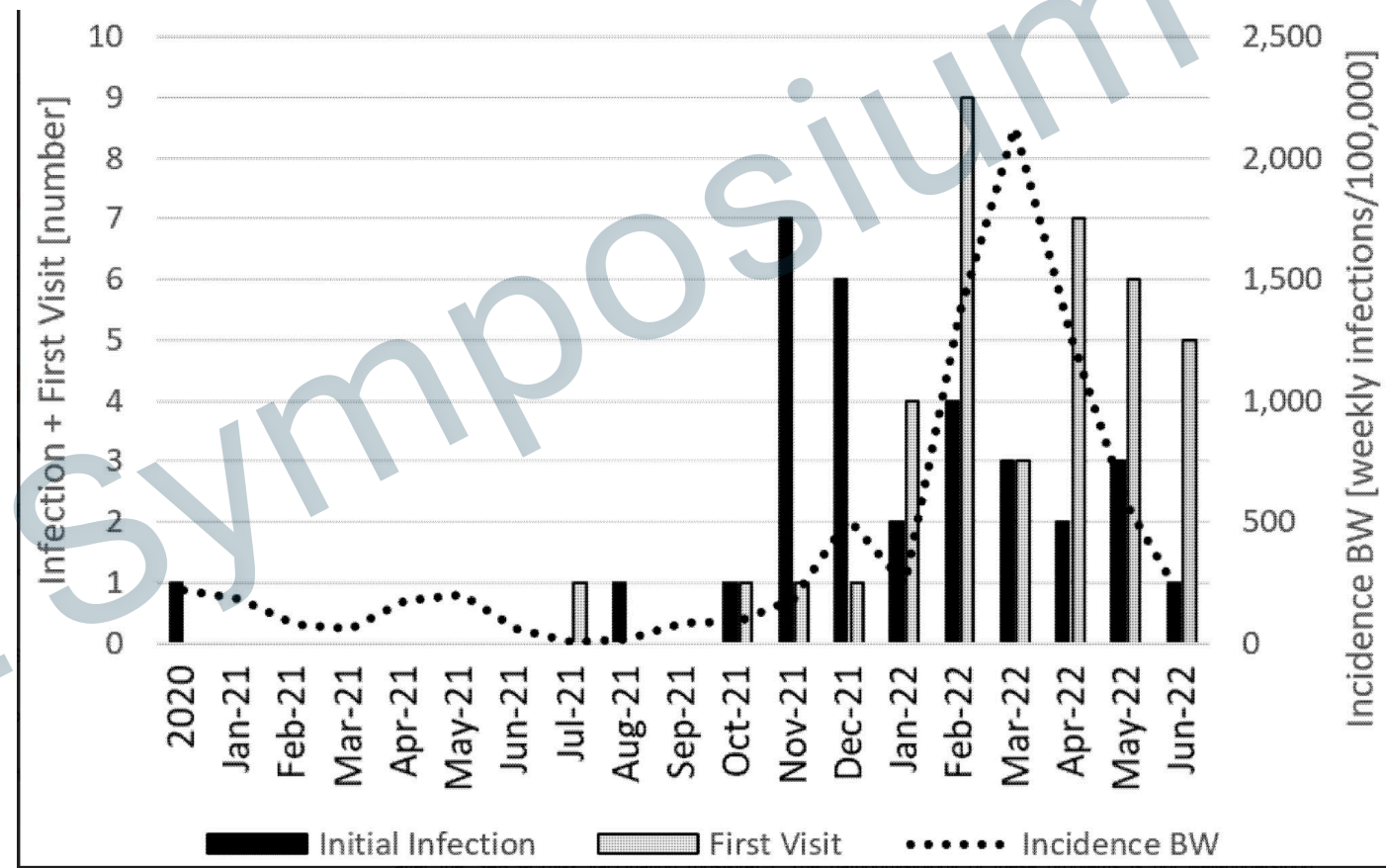


What is Dysautonomia?

1. • Dysautonomia refers to a group of disorders affecting the autonomic nervous system (ANS).
2. • The ANS controls involuntary body functions such as heart rate, blood pressure, digestion, and temperature regulation.
3. • Imbalance can cause a wide range of symptoms.



COVID DYSAUTON OMIA



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Types of Dysautonomia



- Postural Orthostatic Tachycardia Syndrome (POTS)
- Neurocardiogenic Syncope (NCS)
- Inappropriate Sinus Tachycardia (IST)
- Pure Autonomic Failure (PAF)
- Secondary dysautonomia (e.g., diabetes, Parkinson's disease)
- Multiple System Atrophy (MSA)

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GENETIC: EDS
ENDOCRINE
AUTOIMMUNE
MAST CELL ACT
CHRONIC DZ

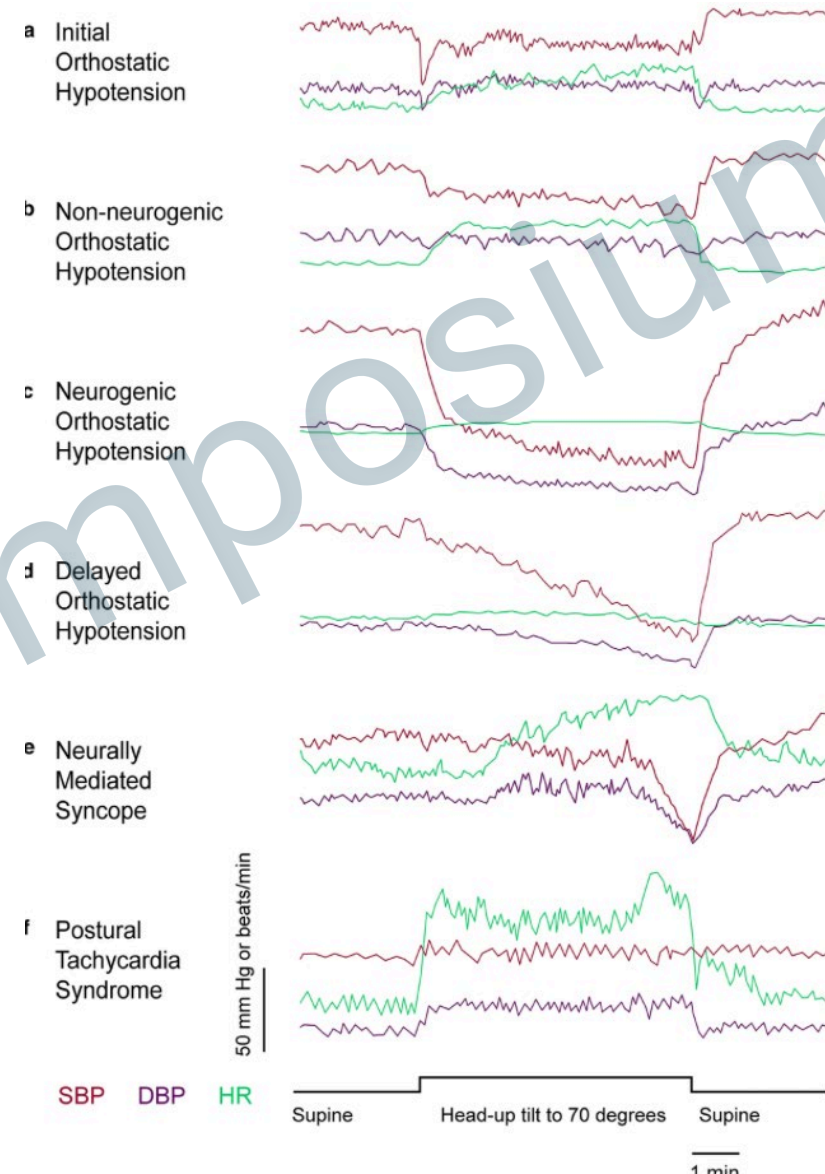
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TILT TABLE TEST



TILT TABLE TEST



TILT TABLE TEST

Table 1. Positive responses on tilt-table testing using the VASIS classifications.²¹

Type	Response
Type 1: mixed	<ul style="list-style-type: none">• Fall in blood pressure before fall in heart rate.• Fall in heart rate at time of syncope but no less than 40 beats/min• If a heart rate less than 40 beats/min but lasts less than 10 s with or without asystole of less than 3 s.
Type 2: cardioinhibitory	<ul style="list-style-type: none">• Cardioinhibition without asystole. Heart rate falls to less than 40 beats/min for more than 10 s without asystole for 3 s or more. Blood pressure falls before fall in blood pressure.• Cardioinhibition with asystole. Asystole for more than 3 s. Blood pressure falls before or with fall in heart rate.
Type 3: vasodepressor	<ul style="list-style-type: none">• Blood pressure falls to less than 80 mmHg. Heart rate does not fall more than 10% of peak to syncope.

POTS TREATMENT

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IV Therapy: The Game-Changer for POTS Symptoms!

by Cory Courneya in Nutrition / IV Therapy Posted on 04/06/2024 23:41



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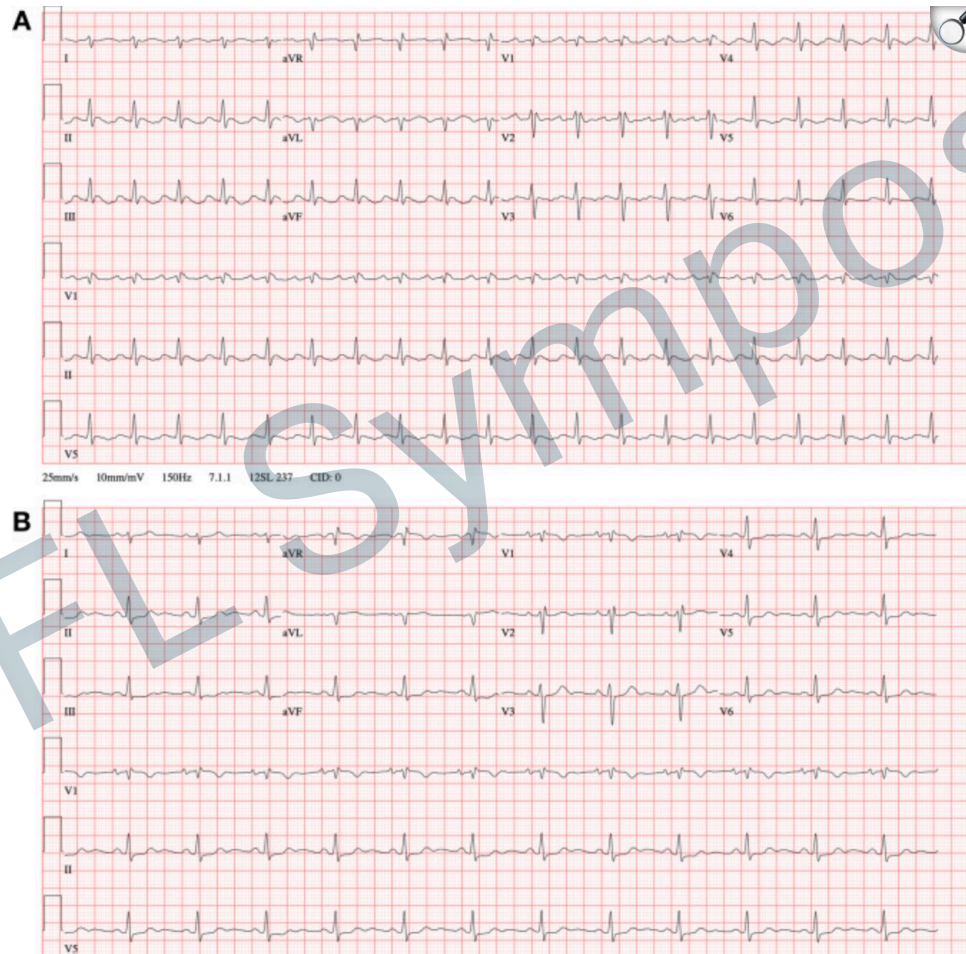
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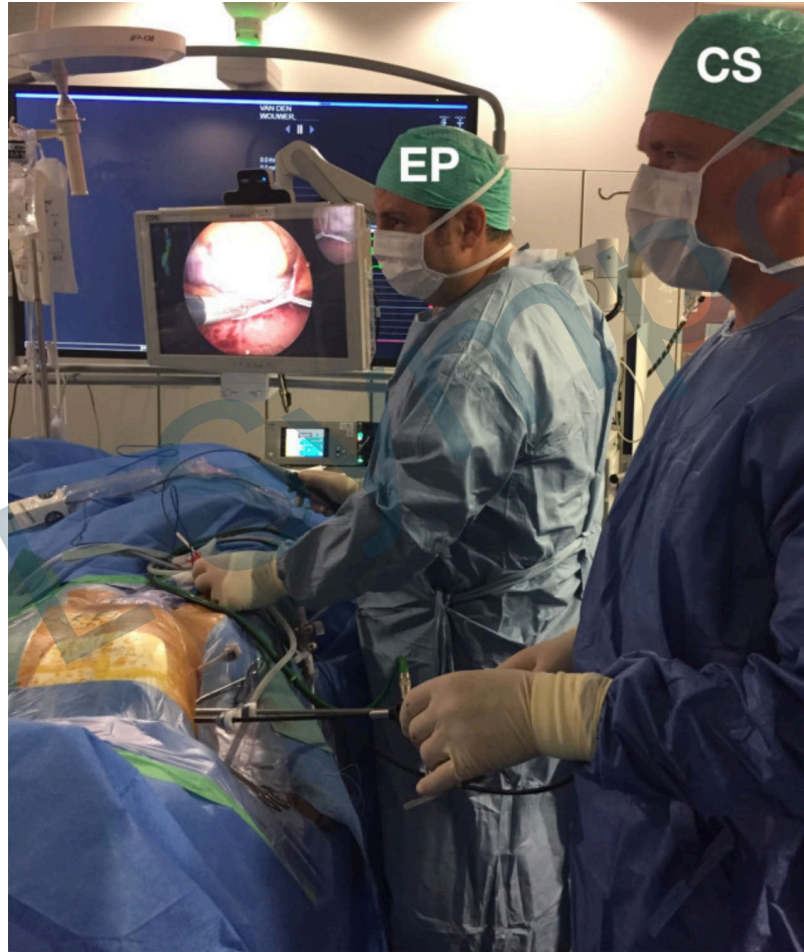
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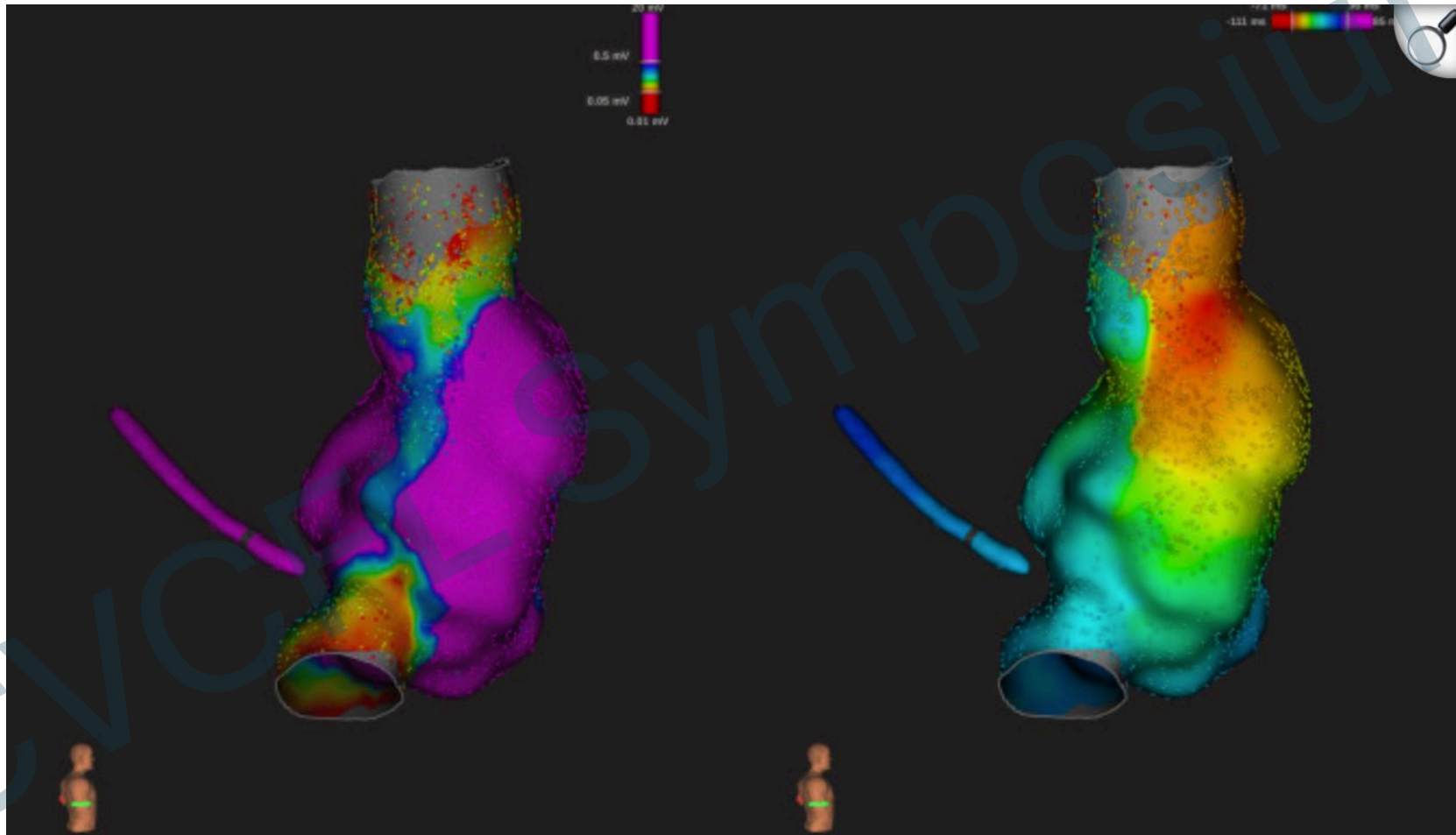
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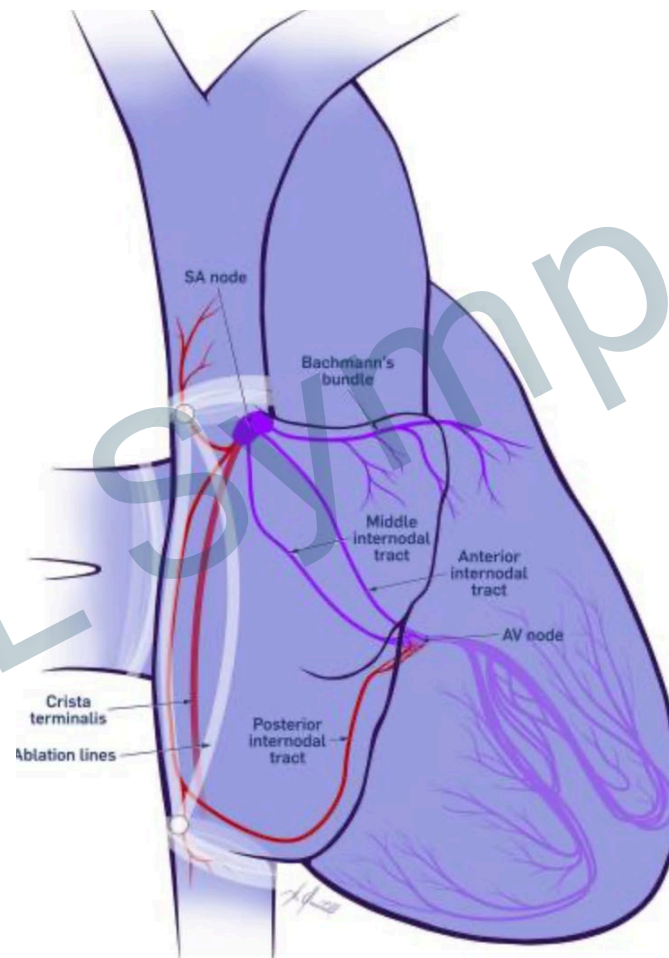
Sinus node sparing novel hybrid approach for treatment of inappropriate sinus tachycardia/postural sinus tachycardia: multicenter experience

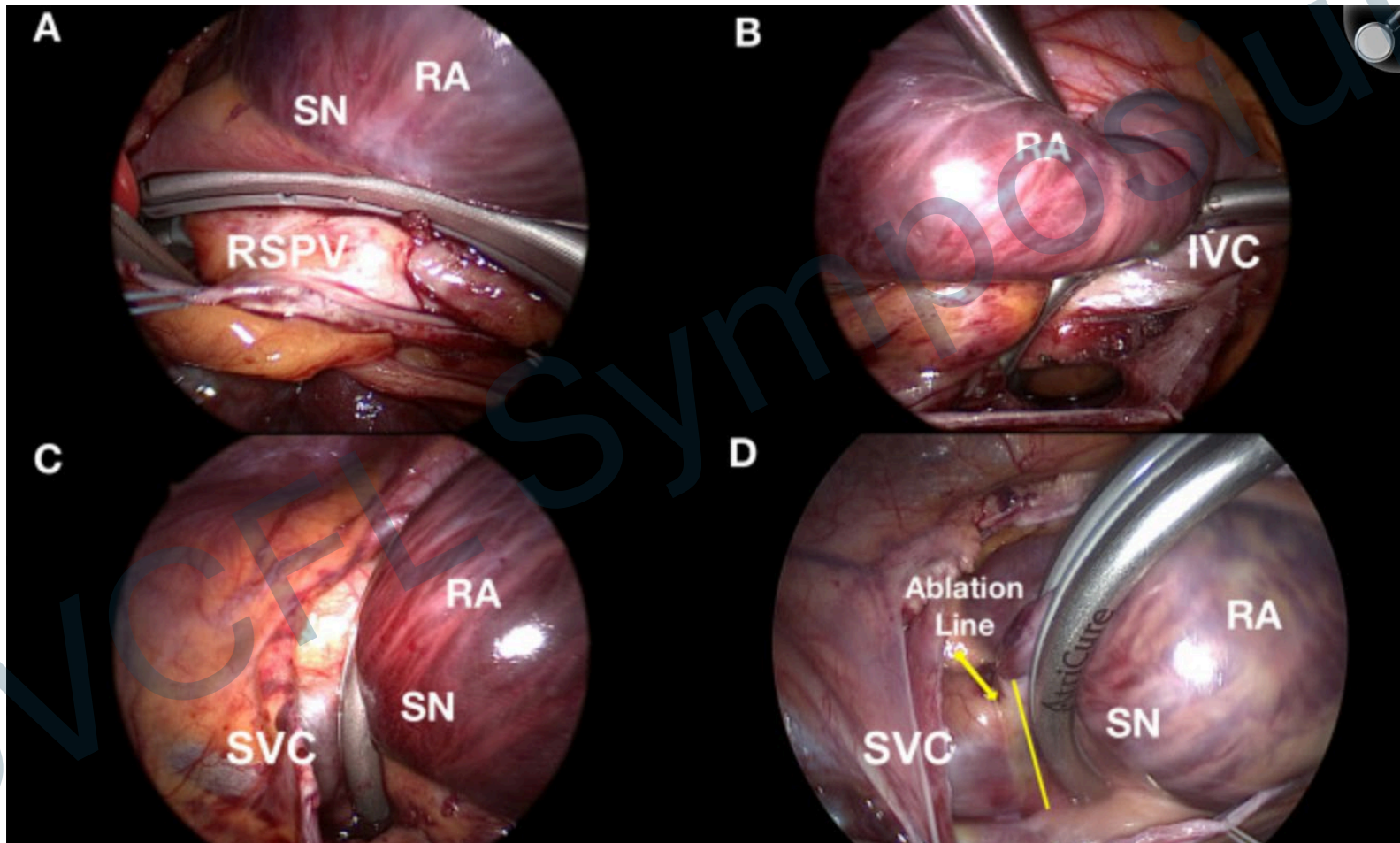
[Carlo de Asmundis](#)^{1,11,✉}, [Gian-Battista Chierchia](#)¹, [Dhanunjaya Lakkireddy](#)², [Ahmed Romeya](#)², [Eric Okum](#)³,
[Gaurang Gandhi](#)³, [Juan Sieira](#)¹, [Margot Vloka](#)⁴, [Stephen D Jones](#)⁴, [Hemal Shah](#)³, [Marshall Winner](#)³, [Dilesh Patel](#)³,
[S Patrick Whalen](#)⁵, [Elijah H Beaty](#)⁵, [Edward Hal Kincaid](#)⁵, [Anson Lee](#)⁶, [Chad Brodt](#)⁶, [Benadict J Taylor](#)⁴, [Ilyas Colombowala](#)⁴,
[Matthew Romano](#)⁷, [Fred Morady](#)⁷, [Erwin Ströker](#)¹, [Ingrid Overeinder](#)¹, [Gezim Bala](#)¹, [Justin Van Meeteren](#)⁸,
[Yoaav Krauthammer](#)⁸, [Scott Koerber](#)⁸, [Christian Shults](#)⁸, [Athanasios Thomaides](#)⁸, [Nitish Badhwar](#)⁶,
[Rakesh Gopinathannair](#)⁸, [Alap Shah](#)², [Rangarao Tummala](#)⁸, [David Bello](#)⁹, [Steve Hoff](#)⁹, [Alexandre Almorad](#)¹,
[Kenneth Frazier](#)¹, [Pedro Brugada](#)¹, [Mark La Meir](#)¹⁰











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CARDIOLOGY
NEUROLOGY
RHEUMATOLOGY
GENETICS
CARDIAC REHABILITATION
IV INFUSION CENTER
ENDOCRINE
CT SURGERY



The screenshot shows the website for The Cardiovascular Center of Florida. At the top, the logo is on the left, and navigation links (ABOUT US, FIND CARE, TREATMENTS, CONDITIONS, PATIENT RESOURCES) are in the center. A red 'Schedule Now' button is on the right. The main banner features the text 'SAME TEAM. NEW HOME.' and 'Transforming Cardiovascular Healthcare - One Patient at a Time' over an image of two doctors. Below this are three award seals: 'Orlando Finest Doctors 2023', 'Orlando Finest Doctors 2024', and 'Orlando Reader's Choice 2025'. A vertical scroll indicator on the left says 'SCROLL TO DISCOVER'. A chat bubble at the bottom right says 'Any questions? We can help!'.

THE CARDIOVASCULAR CENTER
OF FLORIDA

ABOUT US ▾ FIND CARE ▾ TREATMENTS ▾ CONDITIONS ▾ PATIENT RESOURCES ▾

Schedule Now >

SCROLL TO DISCOVER

SAME TEAM. NEW HOME.

**Transforming
Cardiovascular
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Orlando
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2025

Any questions? We can help!



Common Symptoms

- Lightheadedness and fainting
- Rapid heart rate or palpitations
- Blood pressure fluctuations
- Fatigue and exercise intolerance
- Gastrointestinal disturbances
- Heat intolerance and abnormal sweating

Syncope

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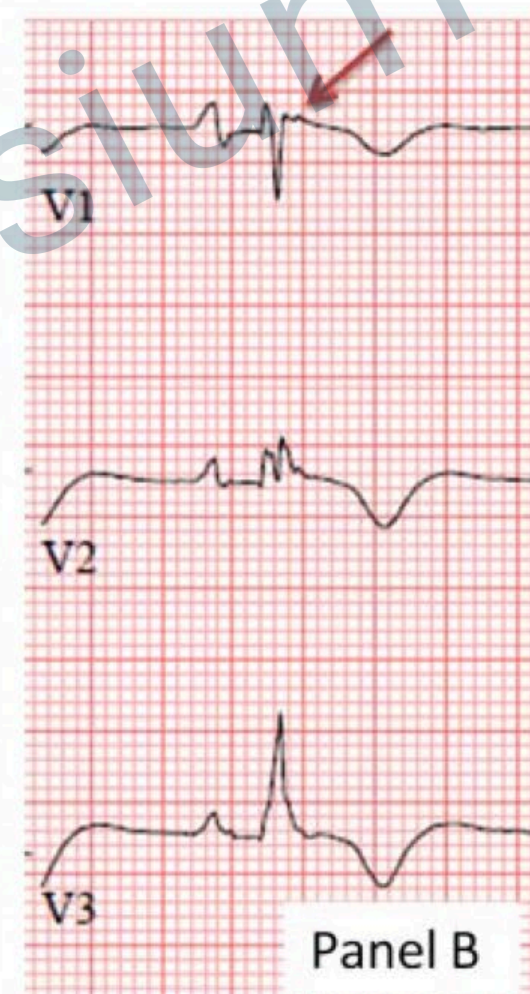
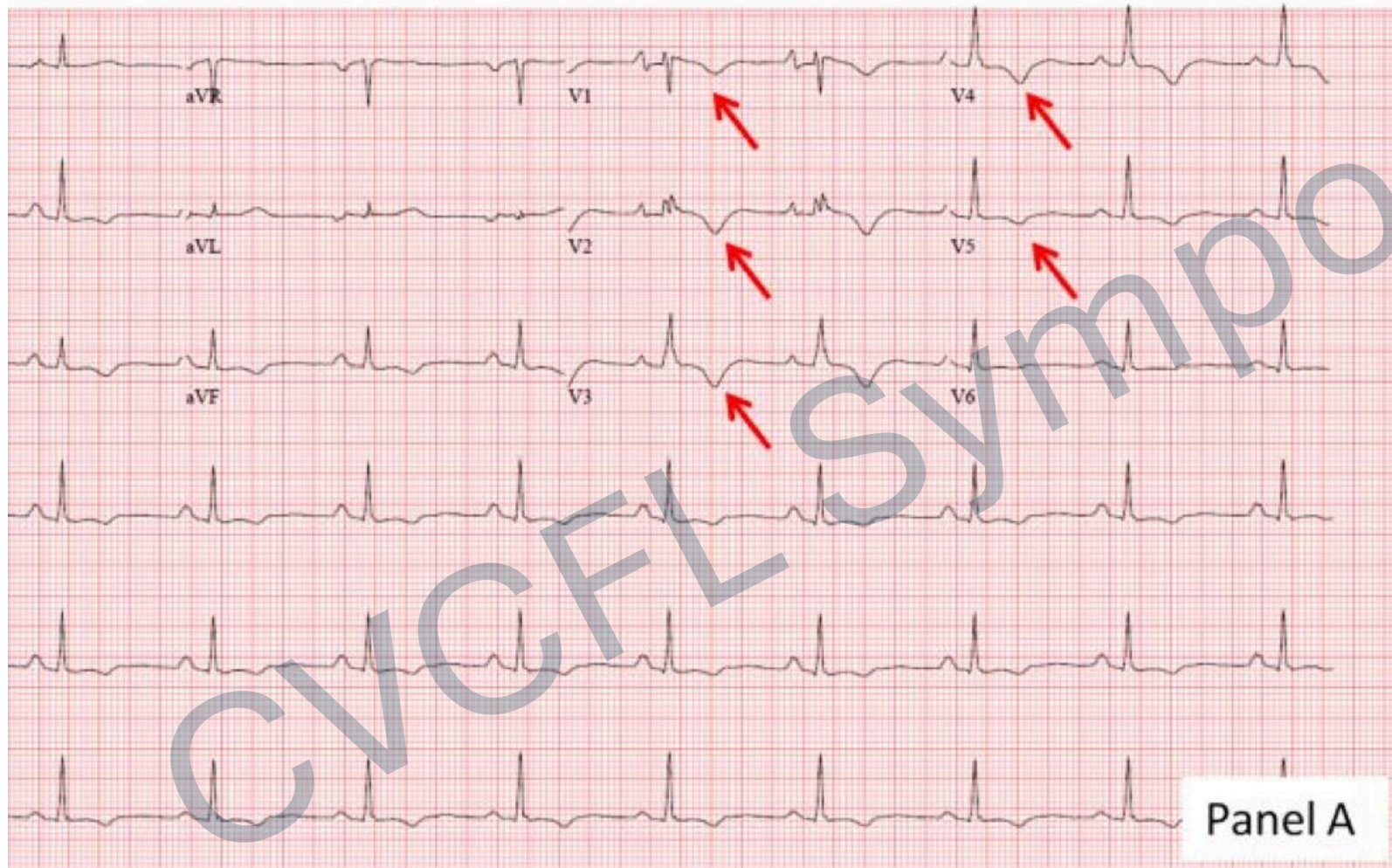
ECG OF DEATH

◆ AI Overview

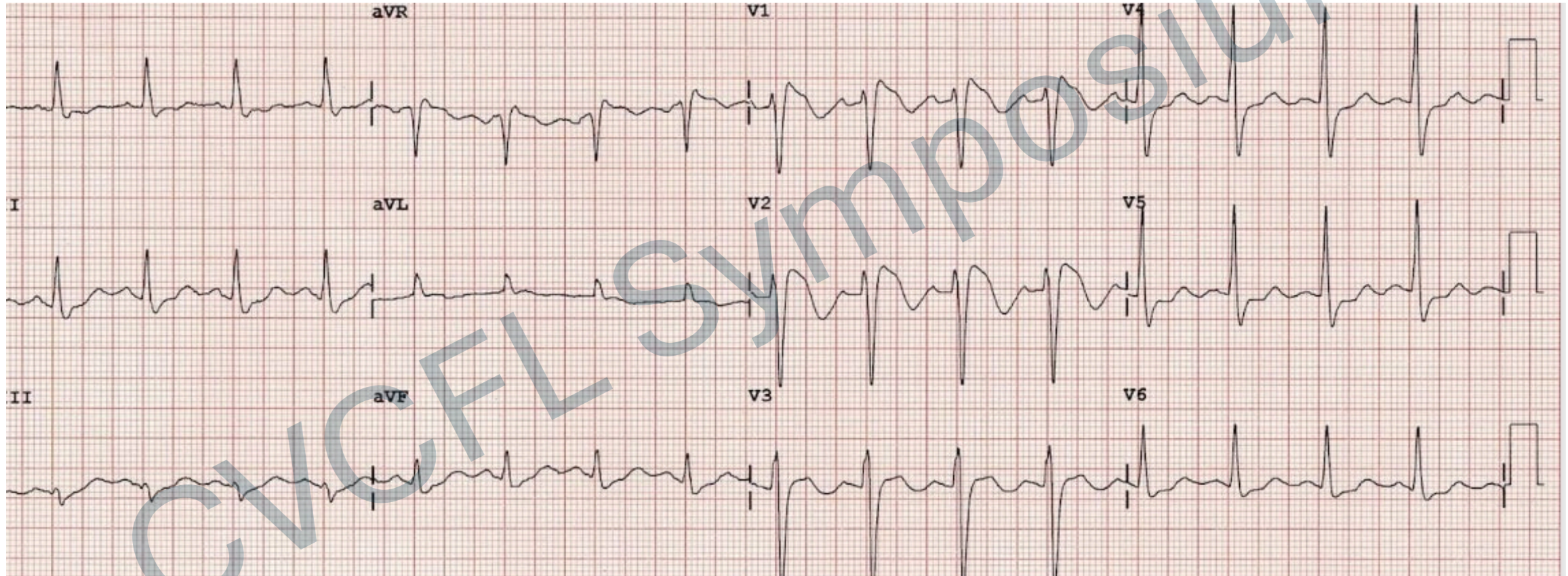
The quote, "Those who are subject to frequent and severe fainting attacks without obvious cause die suddenly," is attributed to Hippocrates and is considered the earliest description of sudden cardiac death. It describes how individuals who experience recurrent fainting spells without an apparent reason are at risk of dying suddenly, a phenomenon now linked to certain heart conditions like long QT syndrome, hypertrophic cardiomyopathy, and arrhythmogenic right ventricular dysplasia, which can lead to a fatal arrhythmia. [🔗](#)

- **Attribution:** Hippocrates, the "father of medicine," wrote this in his Aphorisms in the 4th century BC.

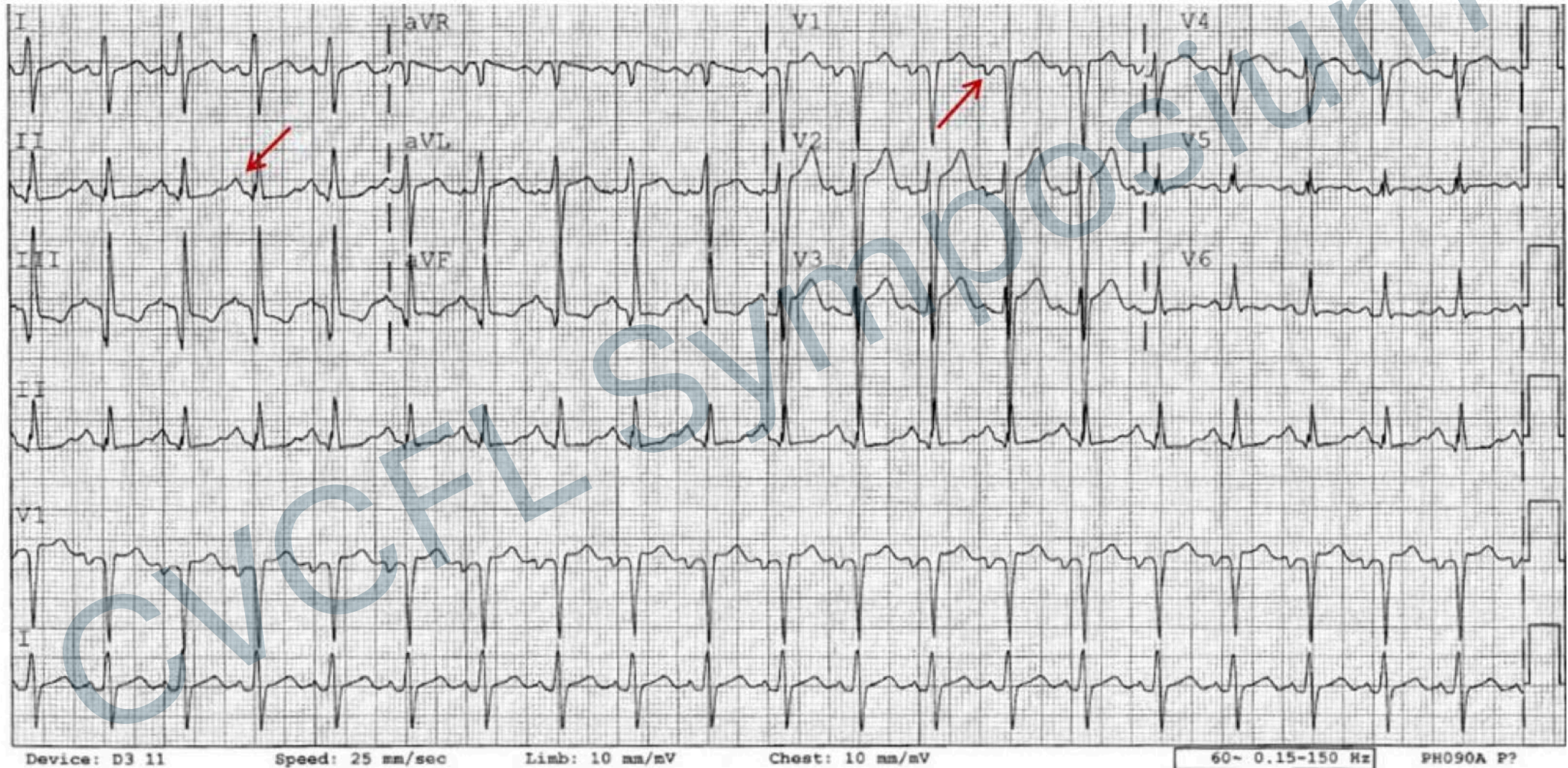
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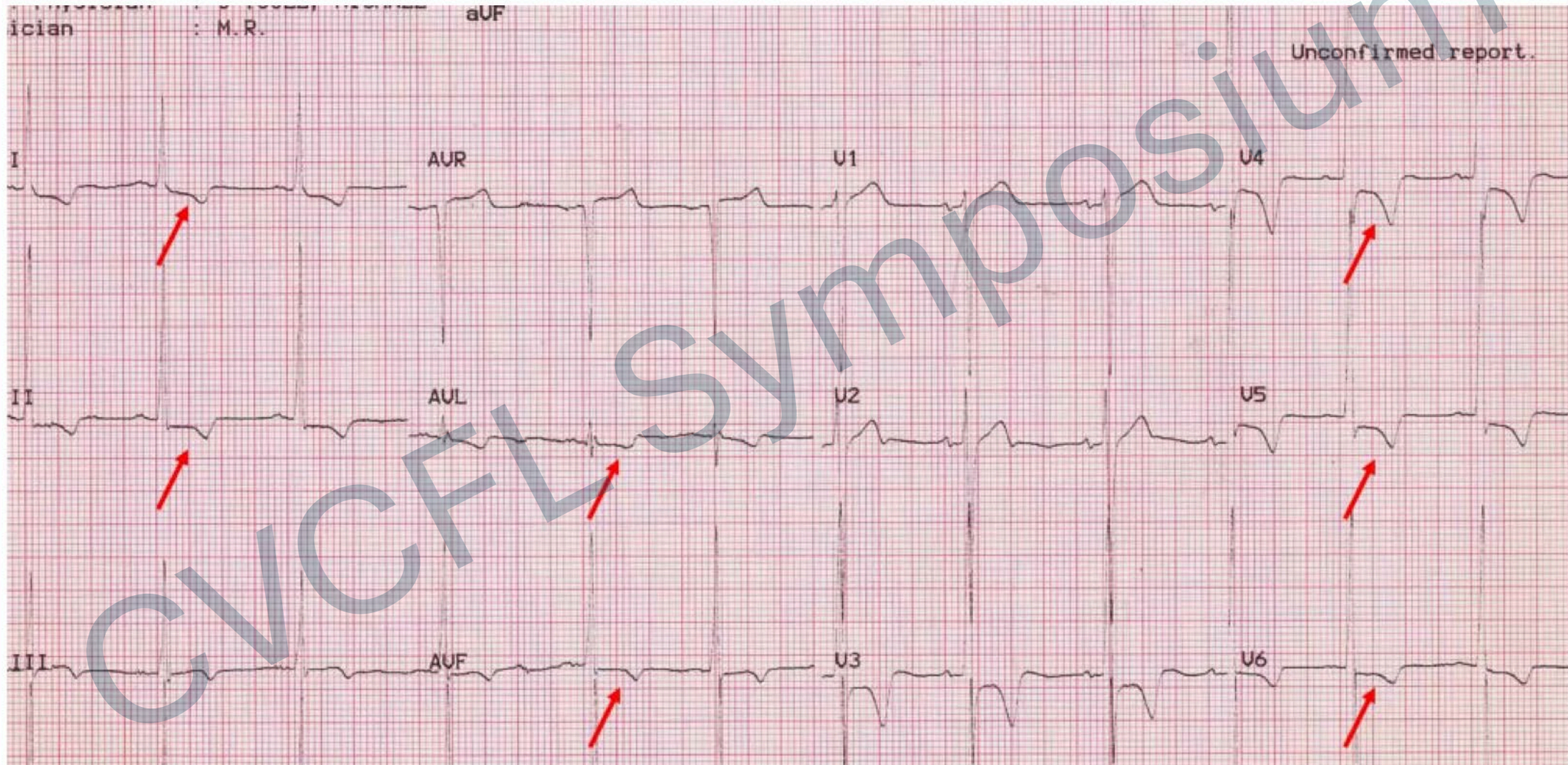
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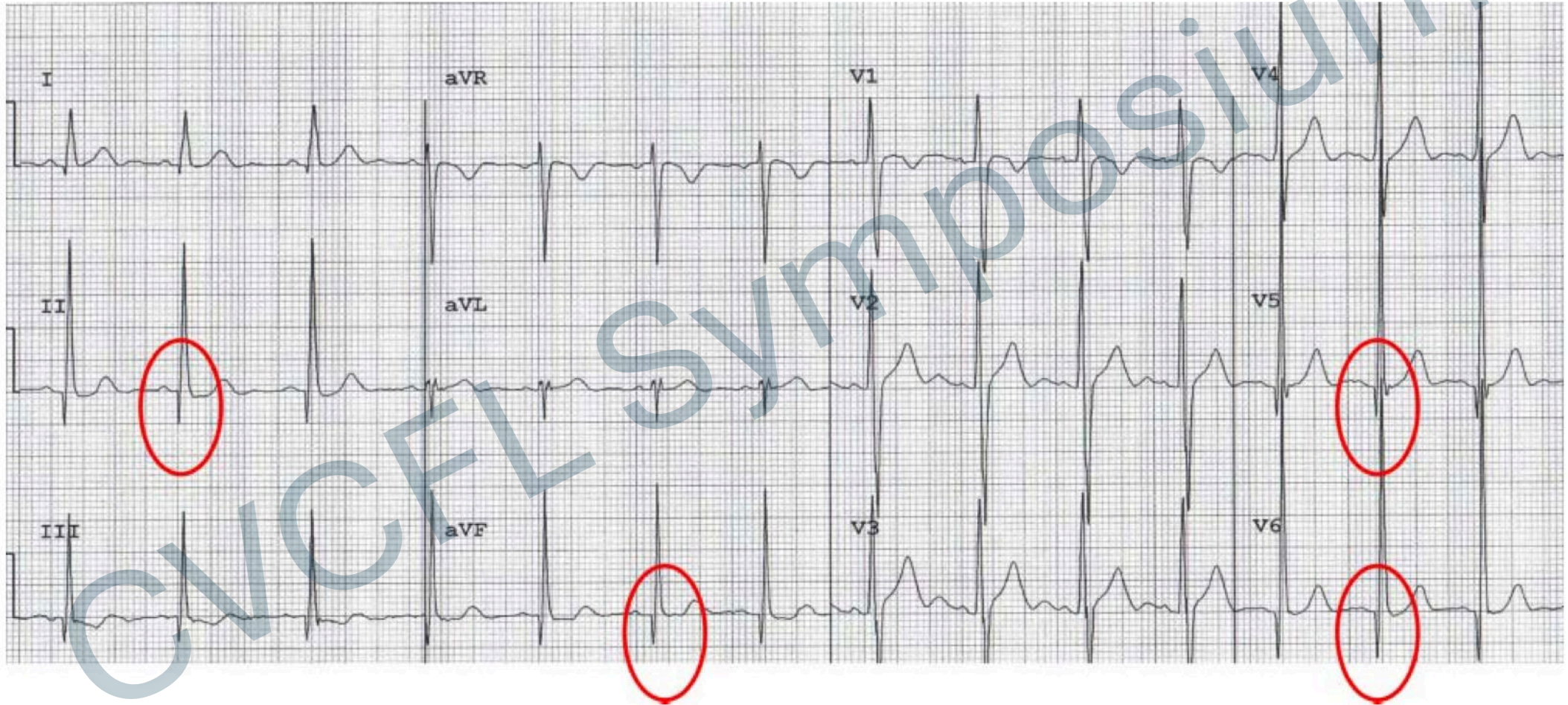
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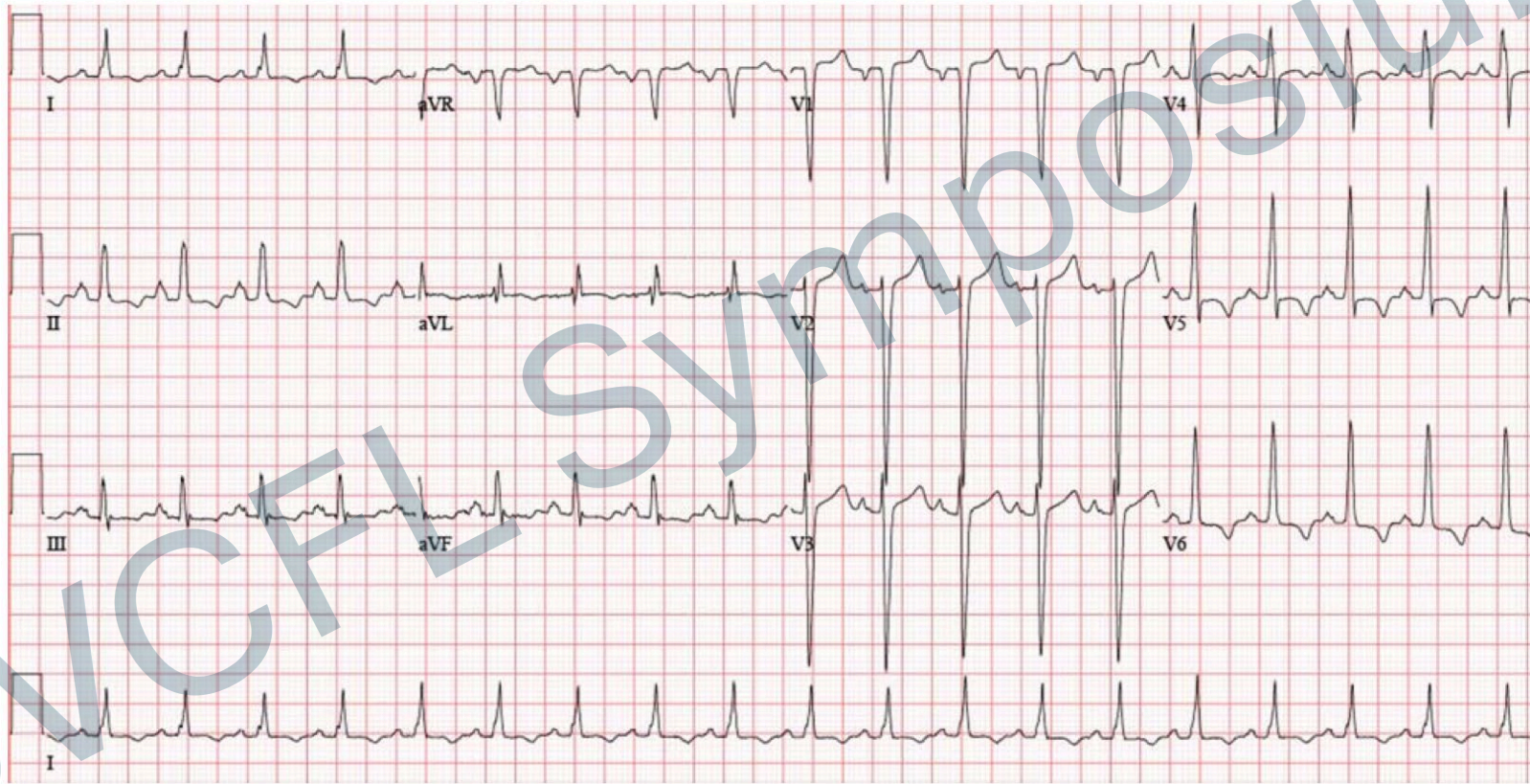
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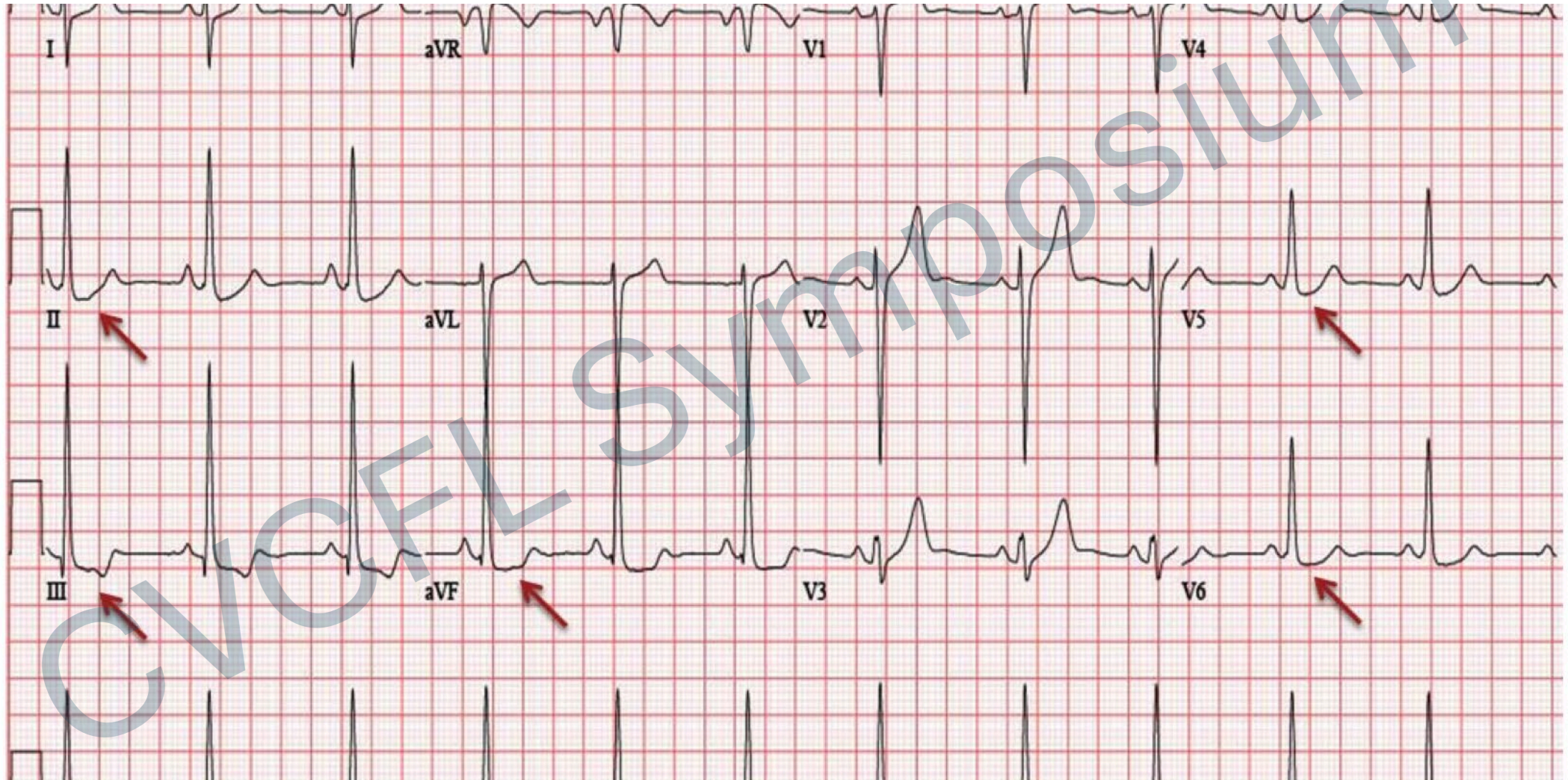
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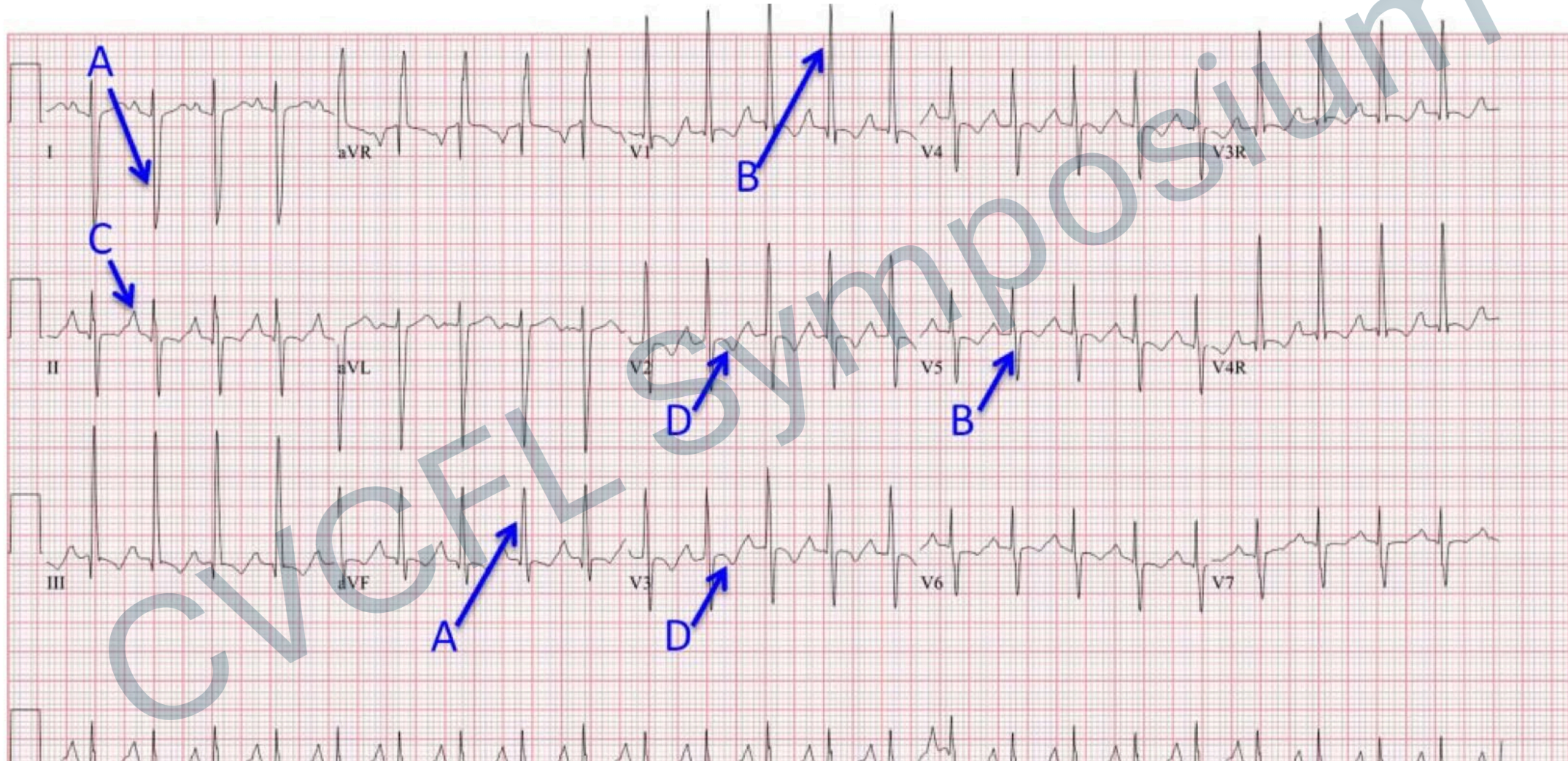
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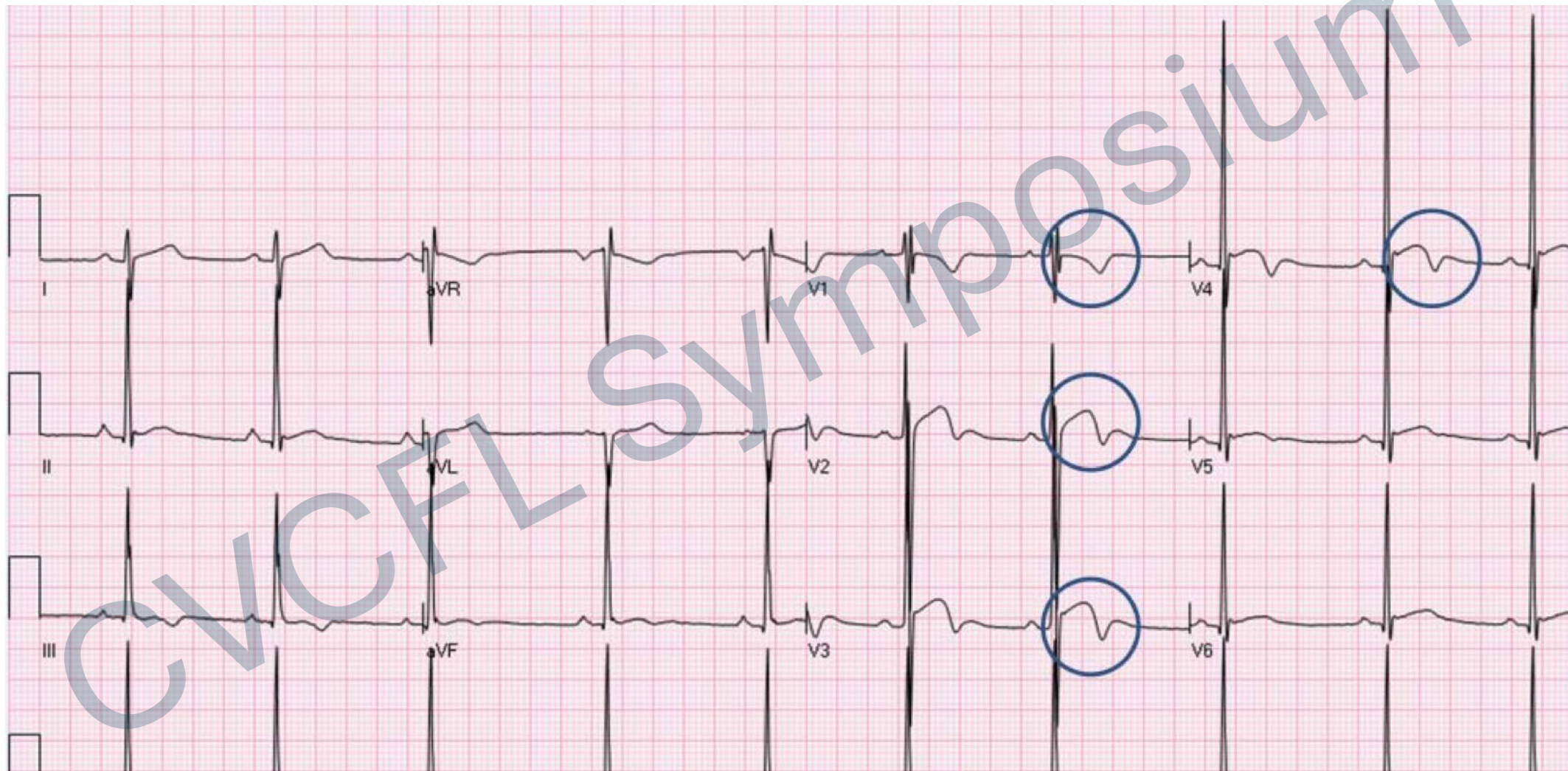
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Case 1a

- A 46-year-old woman w fibromyalgia presents to the clinic reporting an episode of syncope. She had been standing at an outdoor concert on a hot evening when started to feel lightheadedness and diaphoretic. She slumped to the ground and recovered a few months later, with no evidence of incontinence or confusion. The last episode happened while waiting in a long line at the DMV. No other symptoms. Her only medication is duloxetine. PE: unremarkable

ECG: NSR

Which one of the following is the most appropriate treatment for her?

- A. Prescribing recumbent exercise
- B. Fludrocortisone
- C. Ivabradine (Corlanor)
- D. Teaching her Valsalva maneuver
- E. Teaching her hand-grip maneuver

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THANK YOU!

