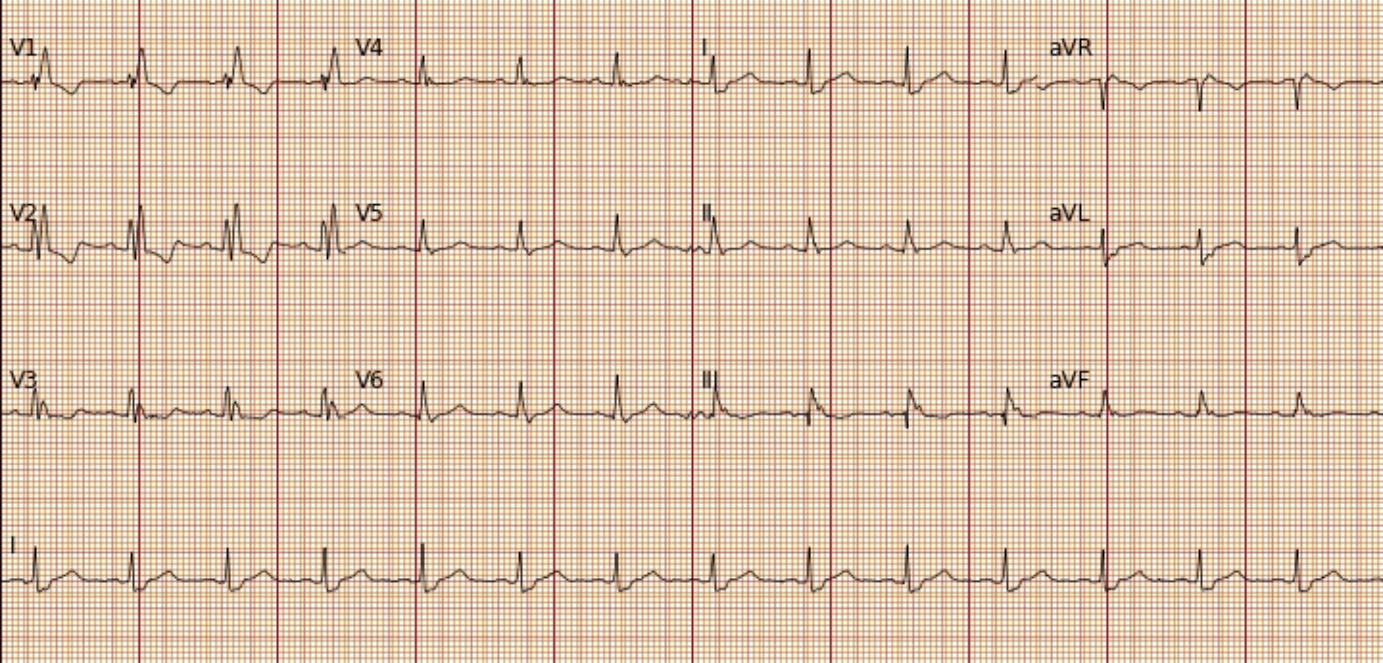
An Ensemble Deep Learning Algorithm for Structural Heart Disease Screening Using Electrocardiographic Images: PRESENT SHD

Online Supplement 2

Examples of electrocardiogram formats used for model development, evaluation to mimic real-world variation.

Contents.

Section 1. Random examples of the same electrocardiogram plotted in 50 different formats used during model development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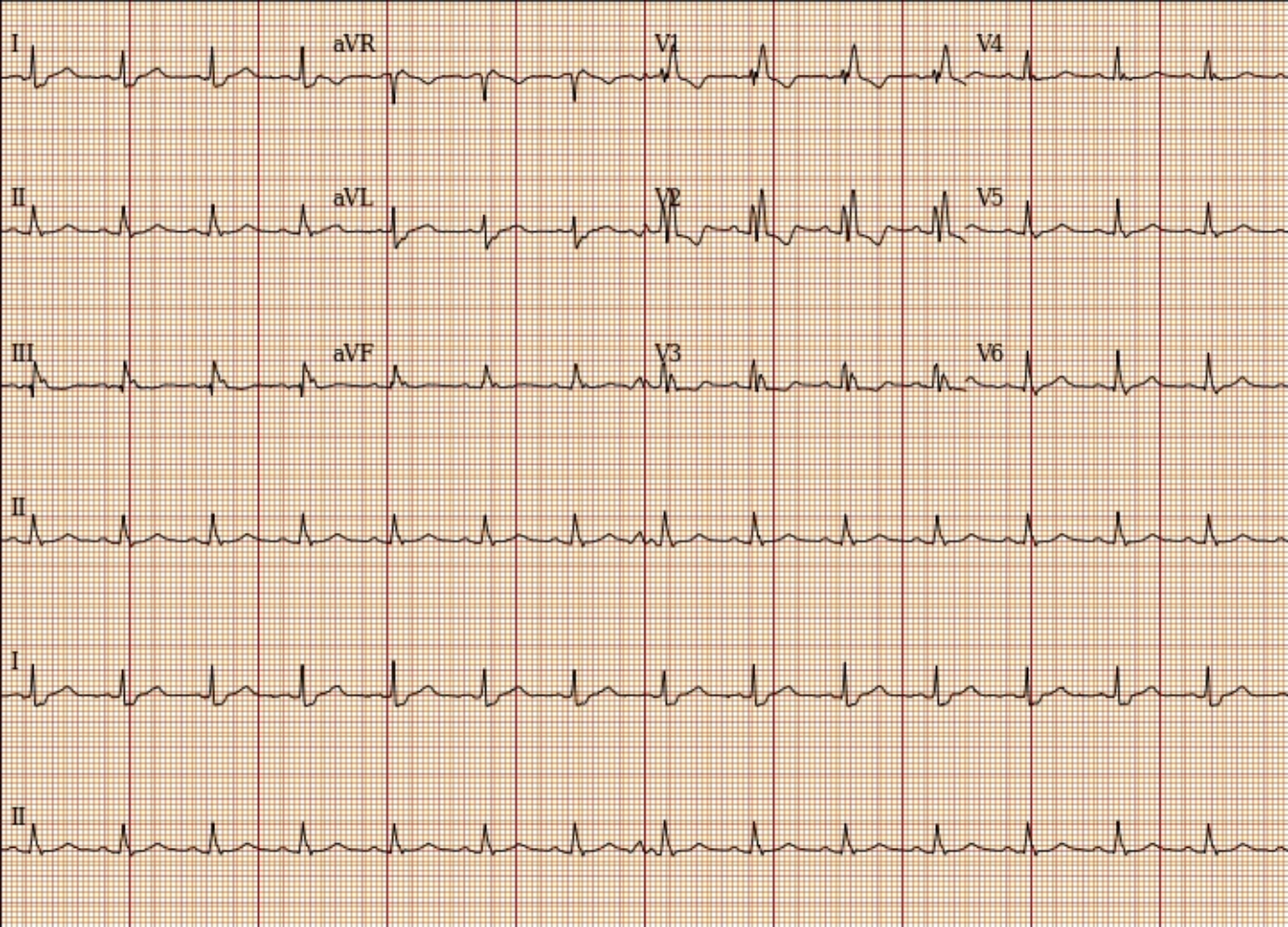
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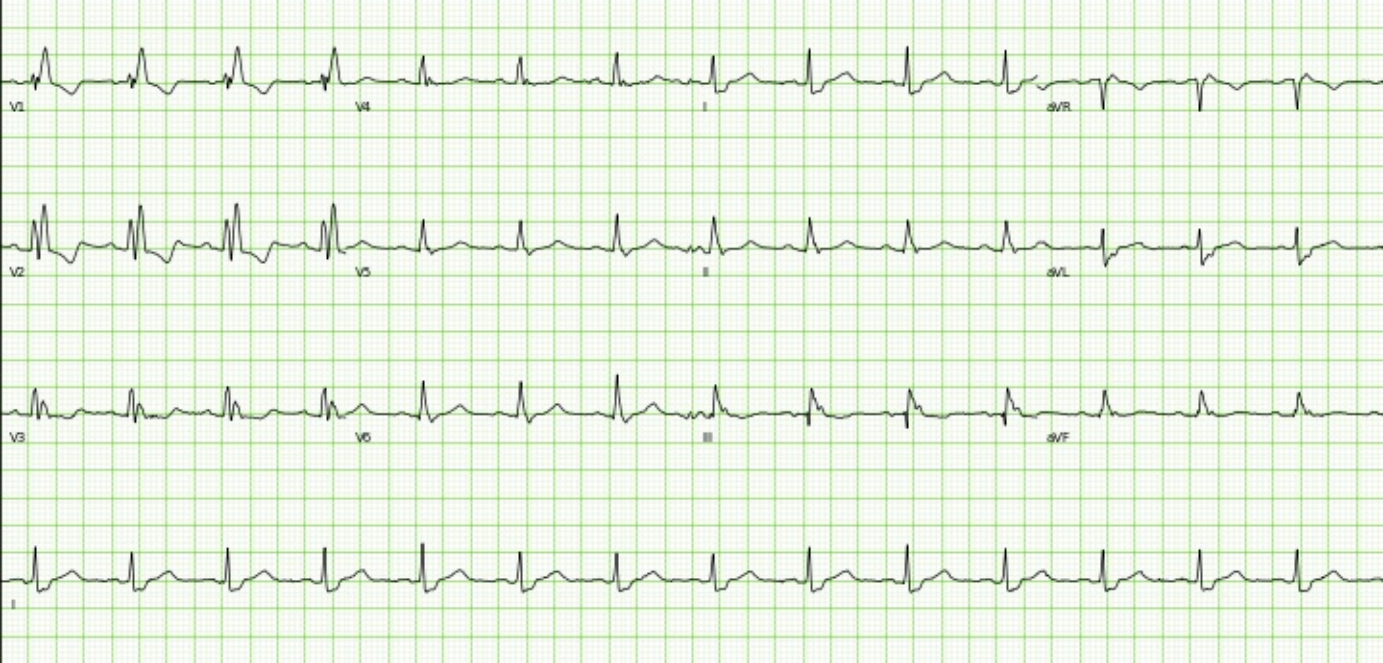
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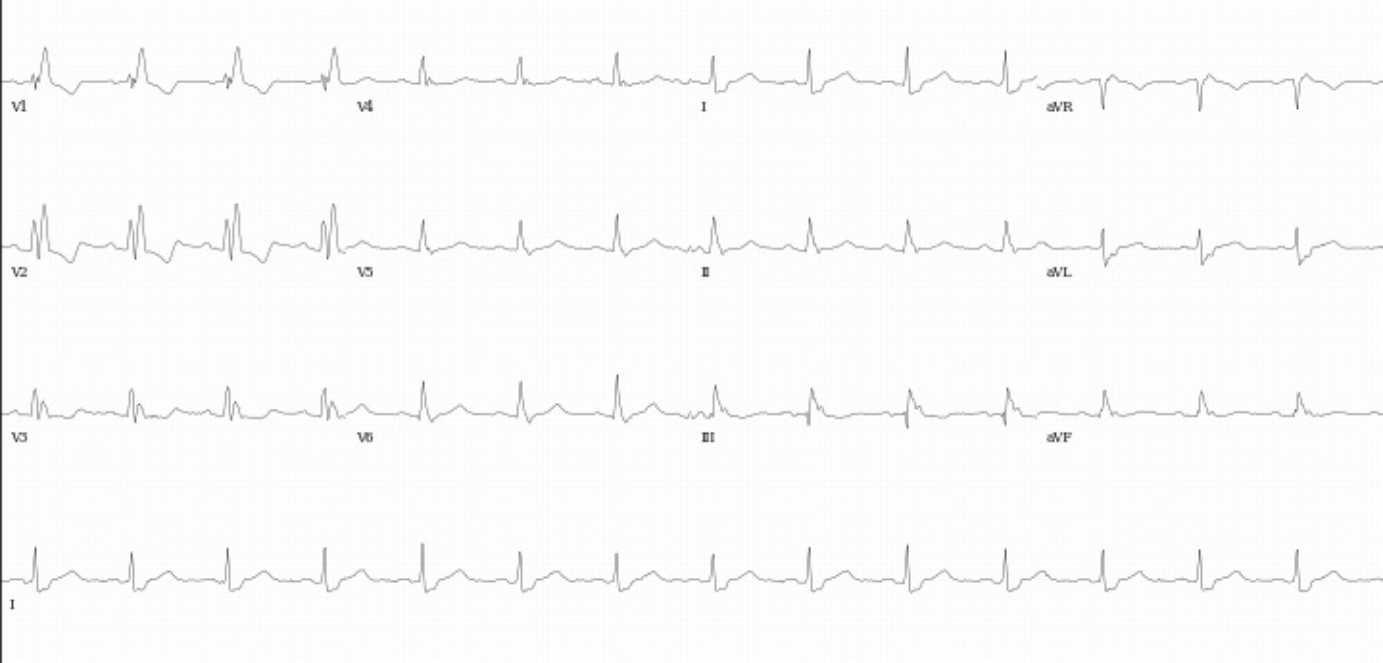
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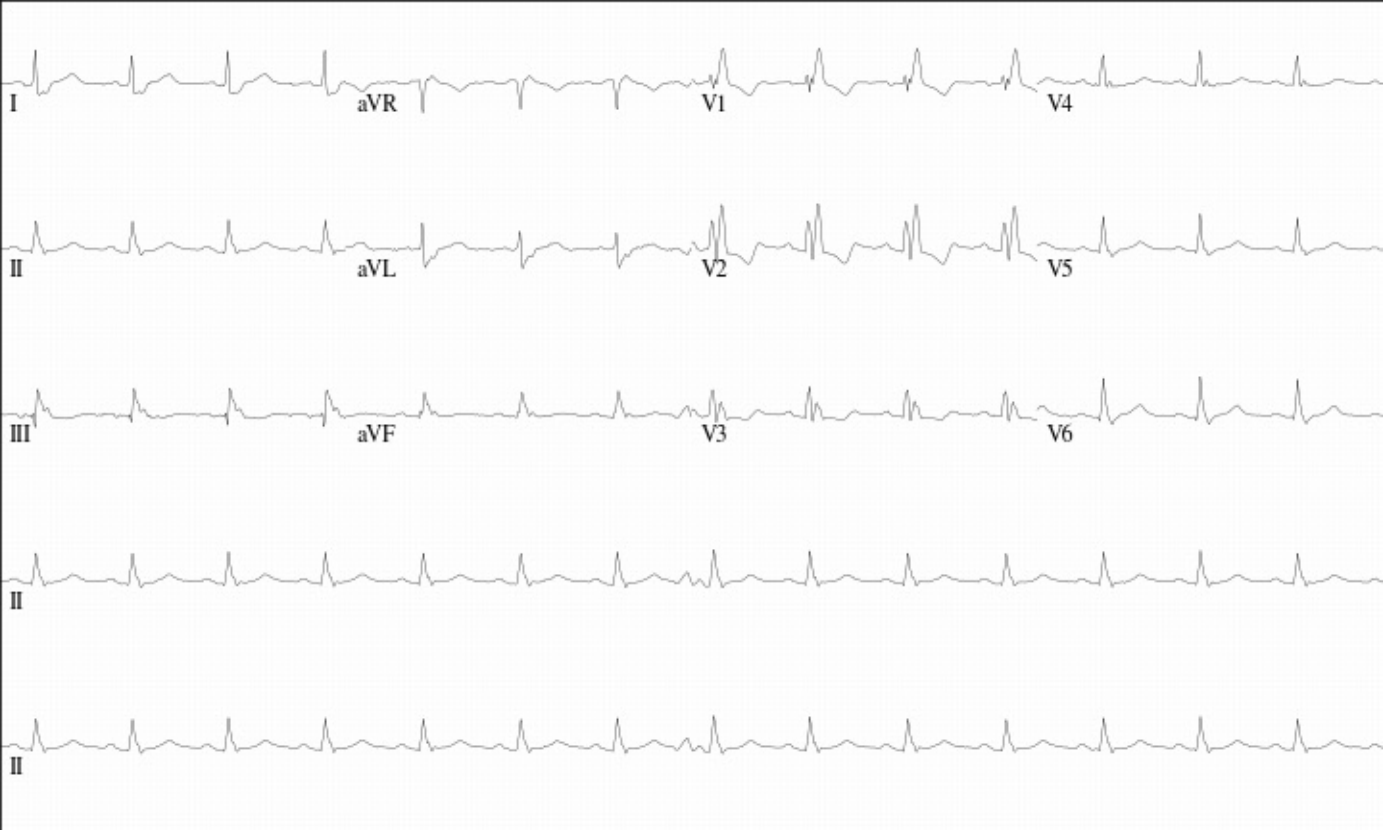
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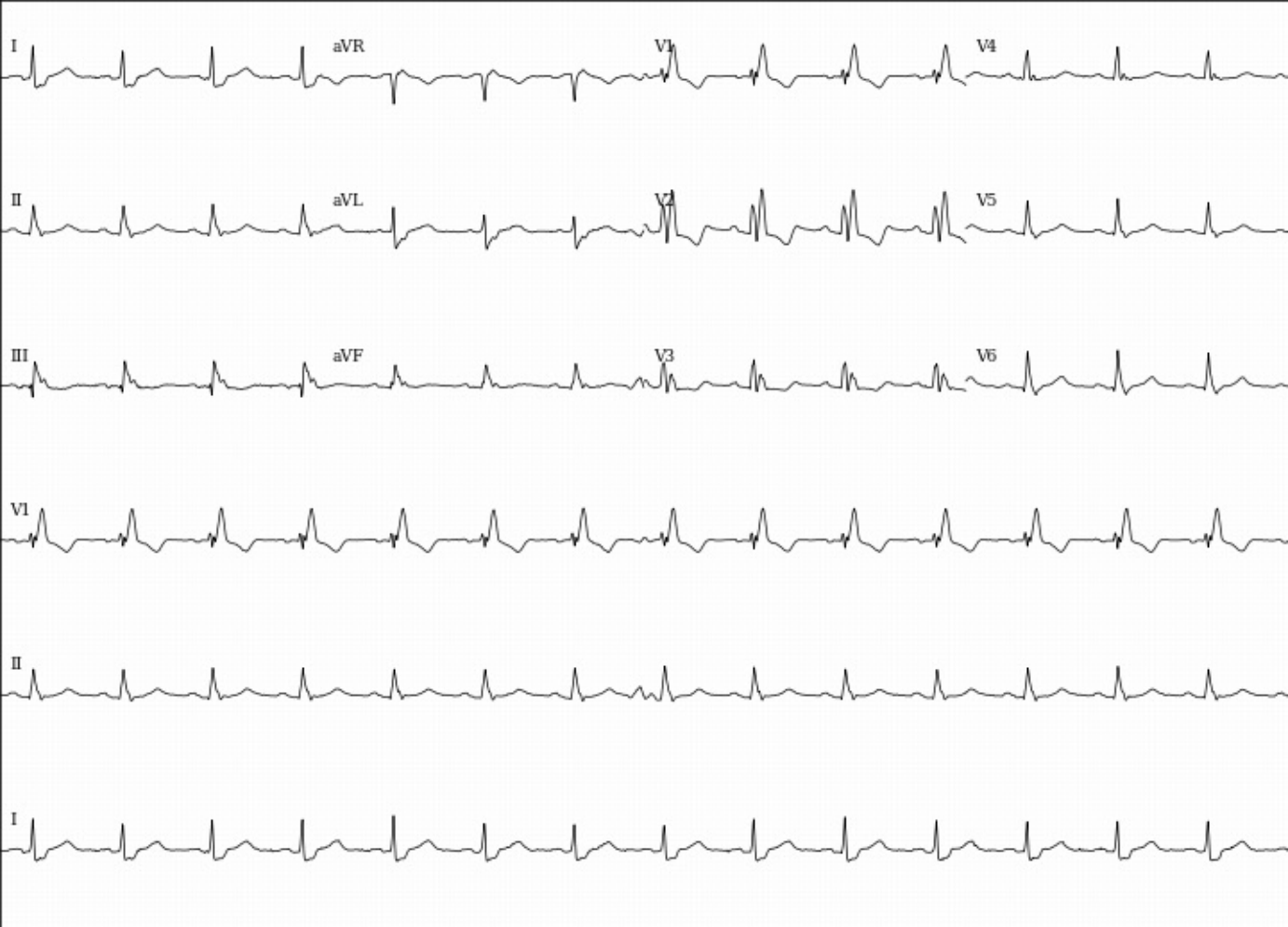
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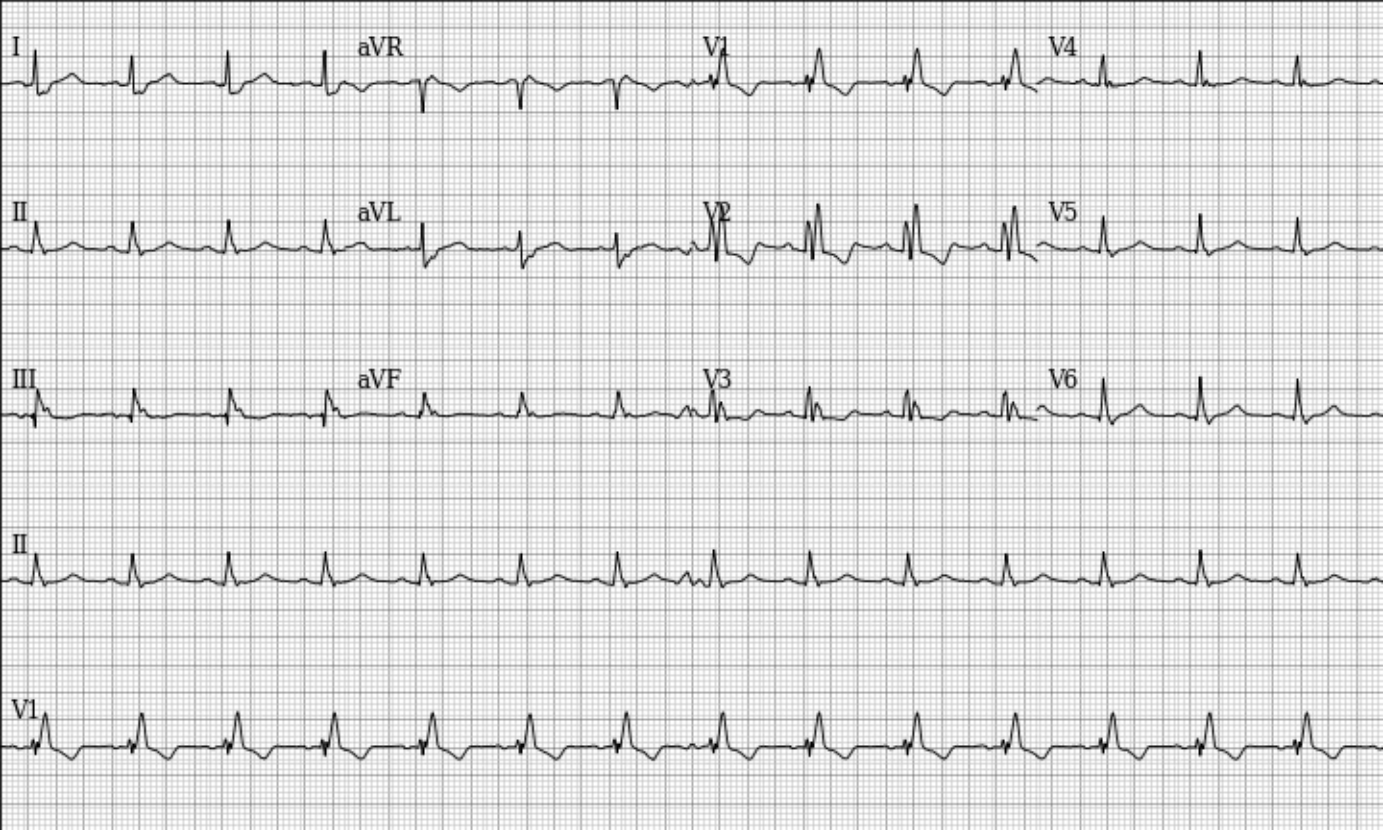
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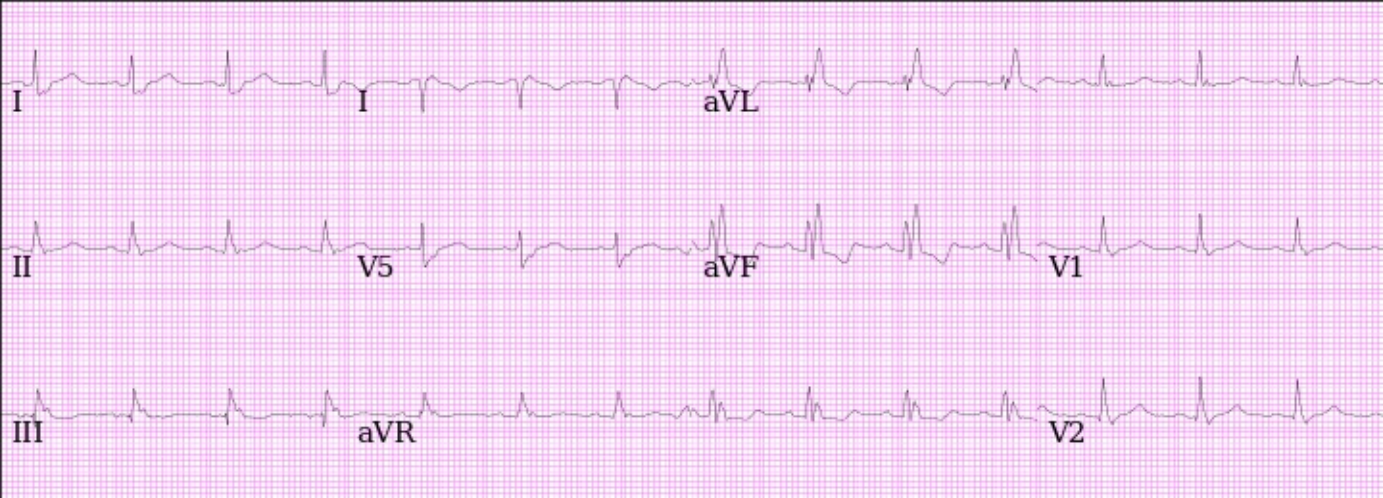
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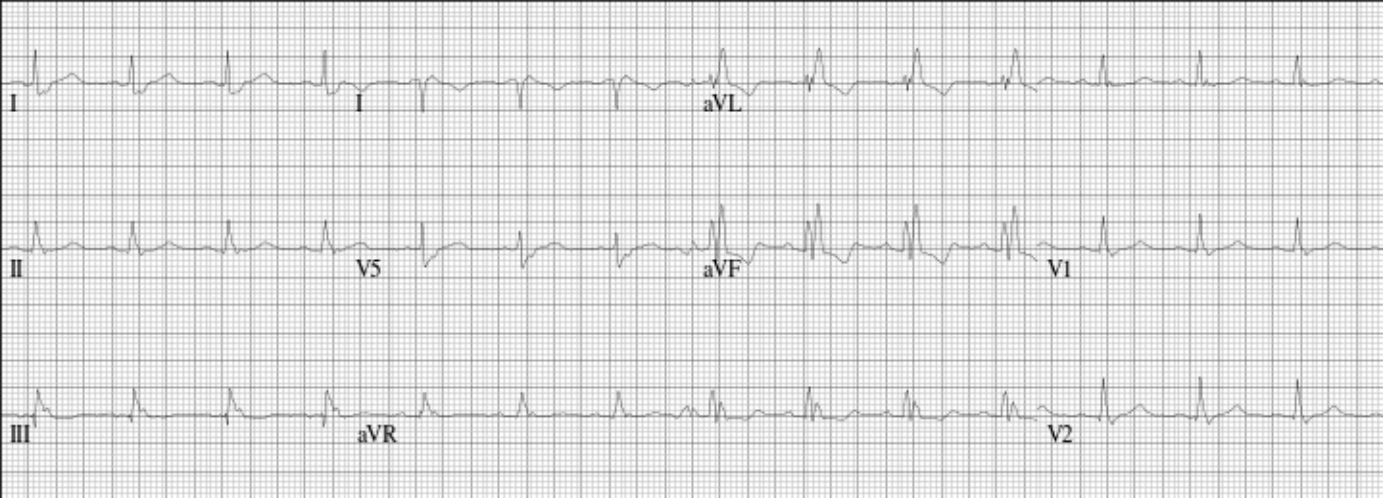
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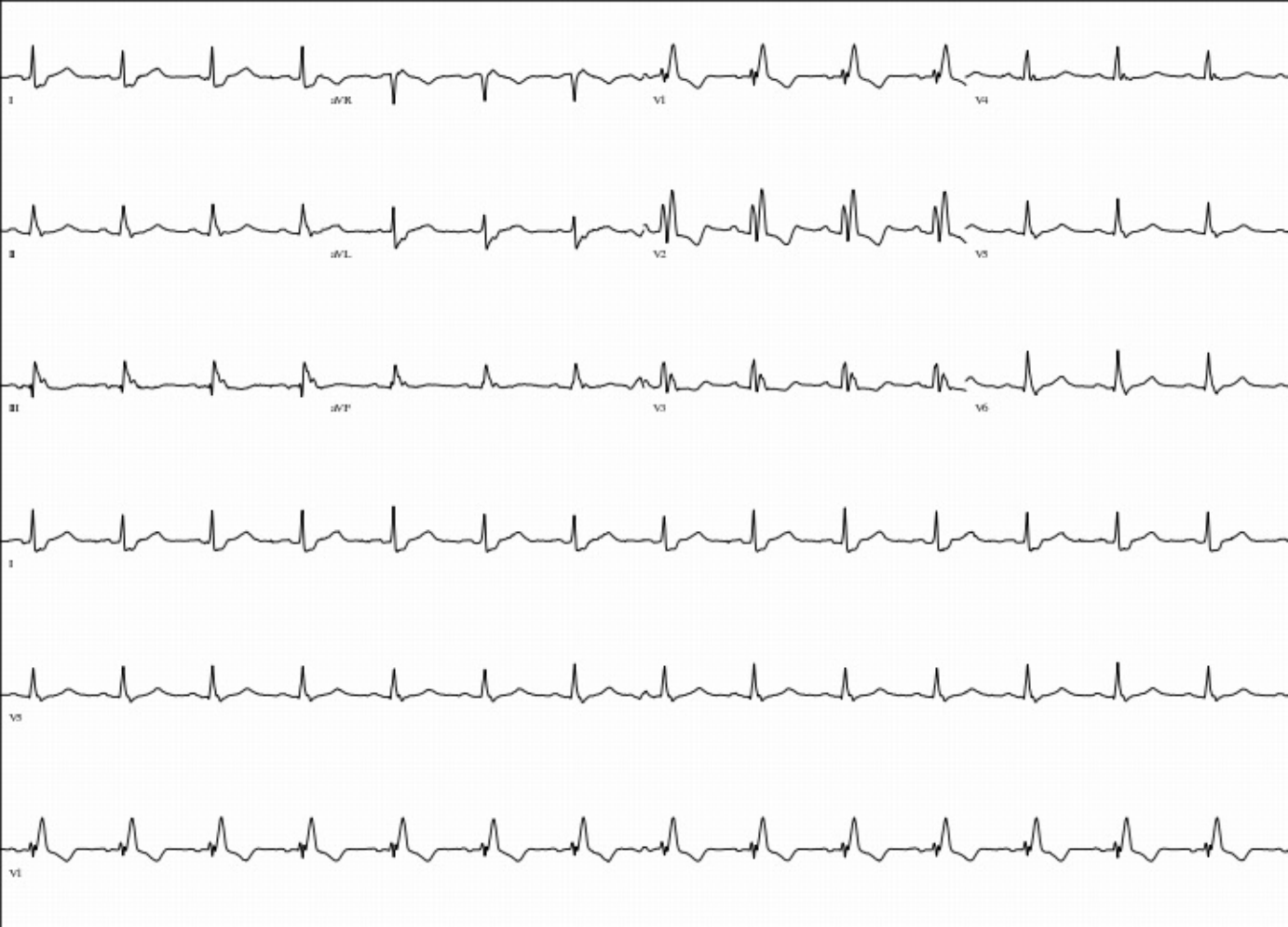
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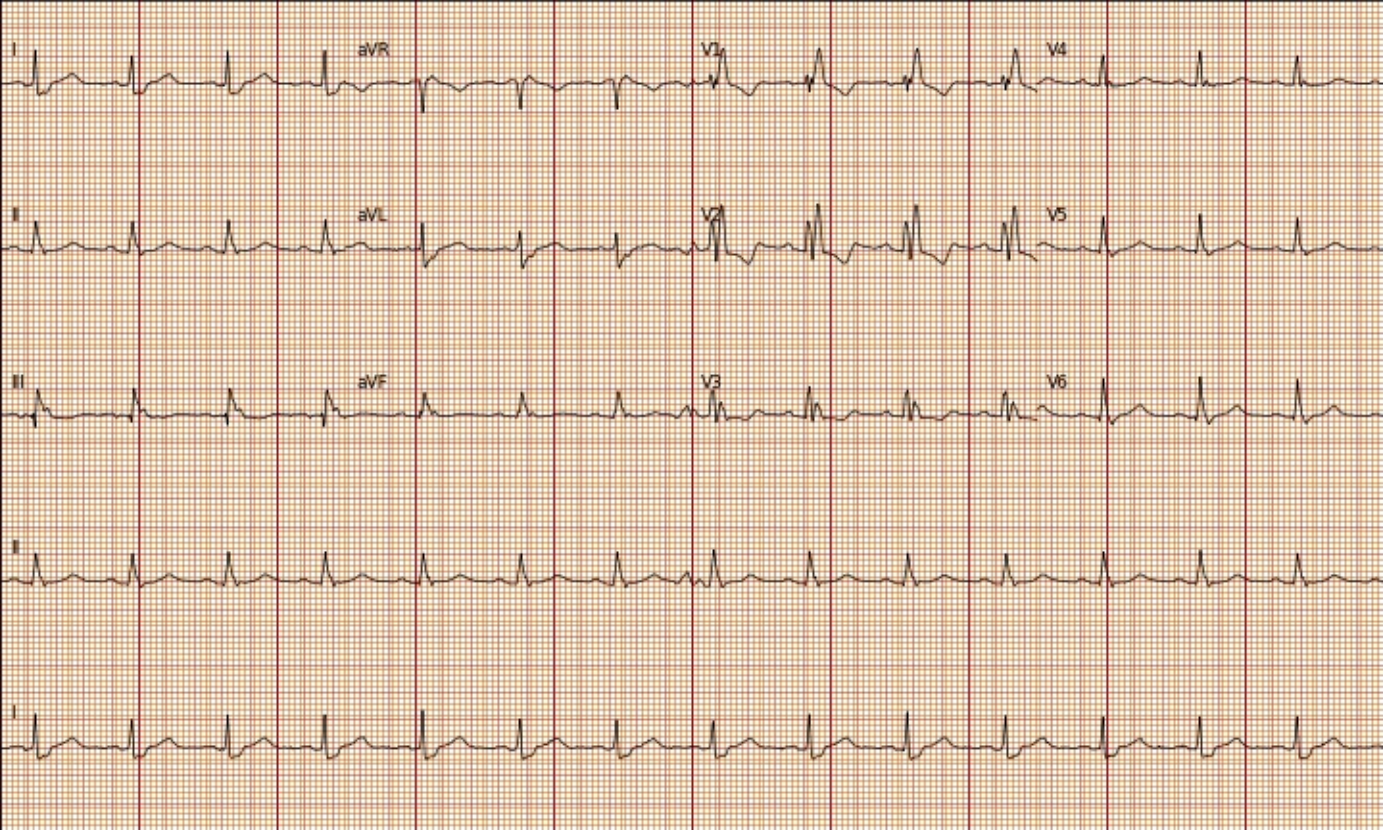
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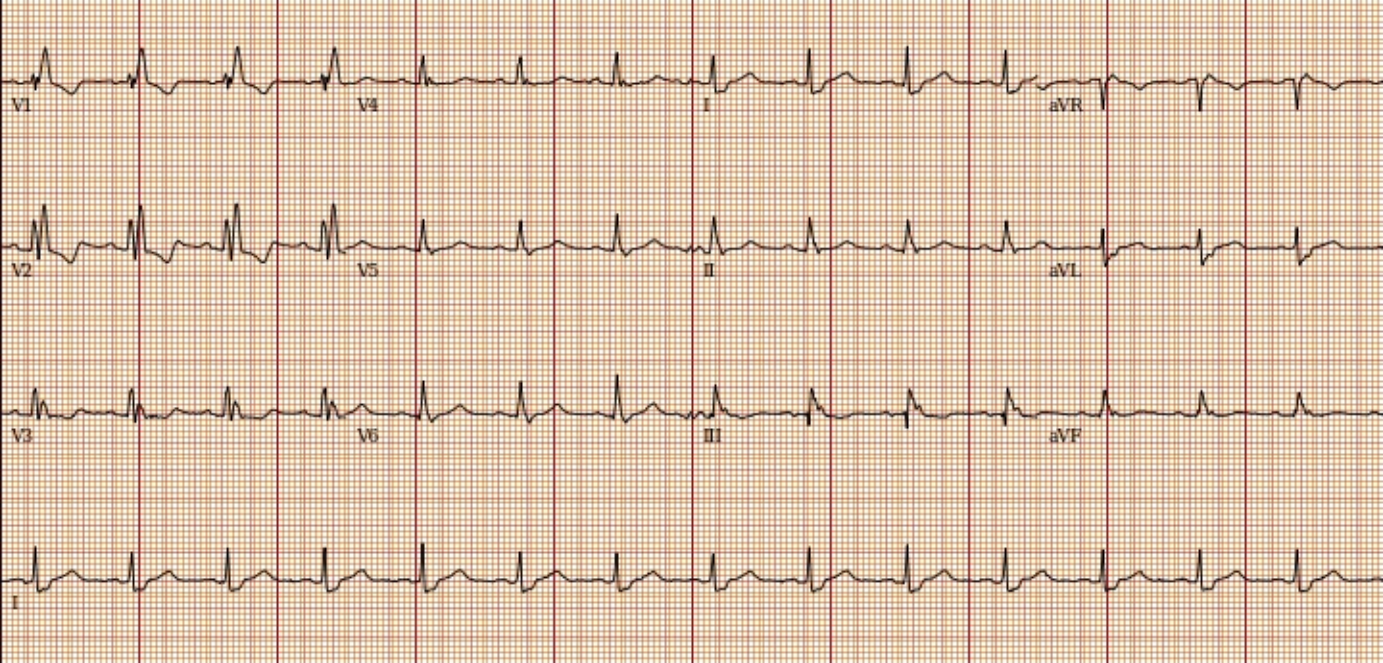
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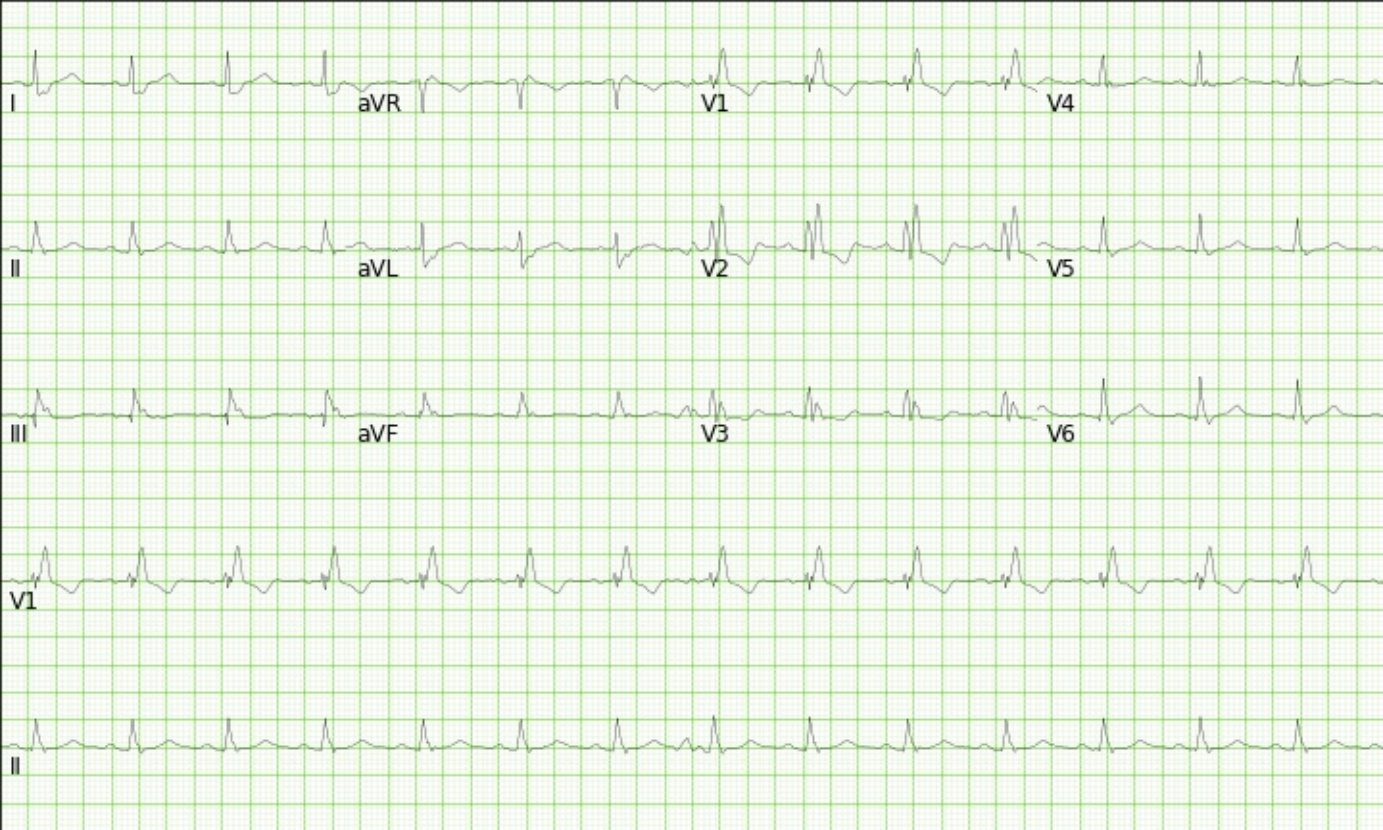
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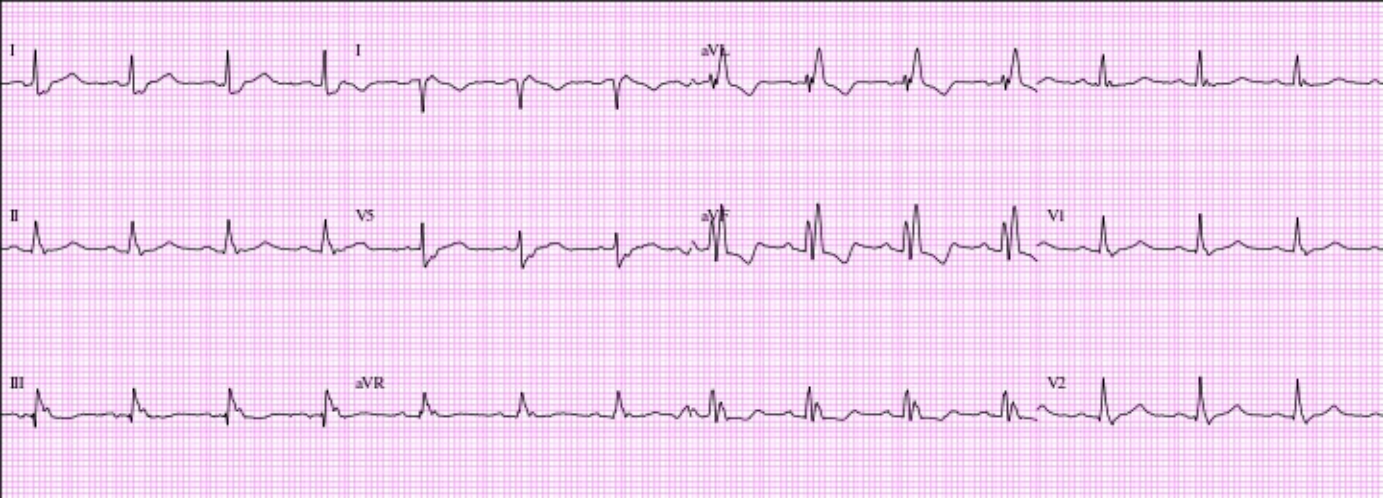
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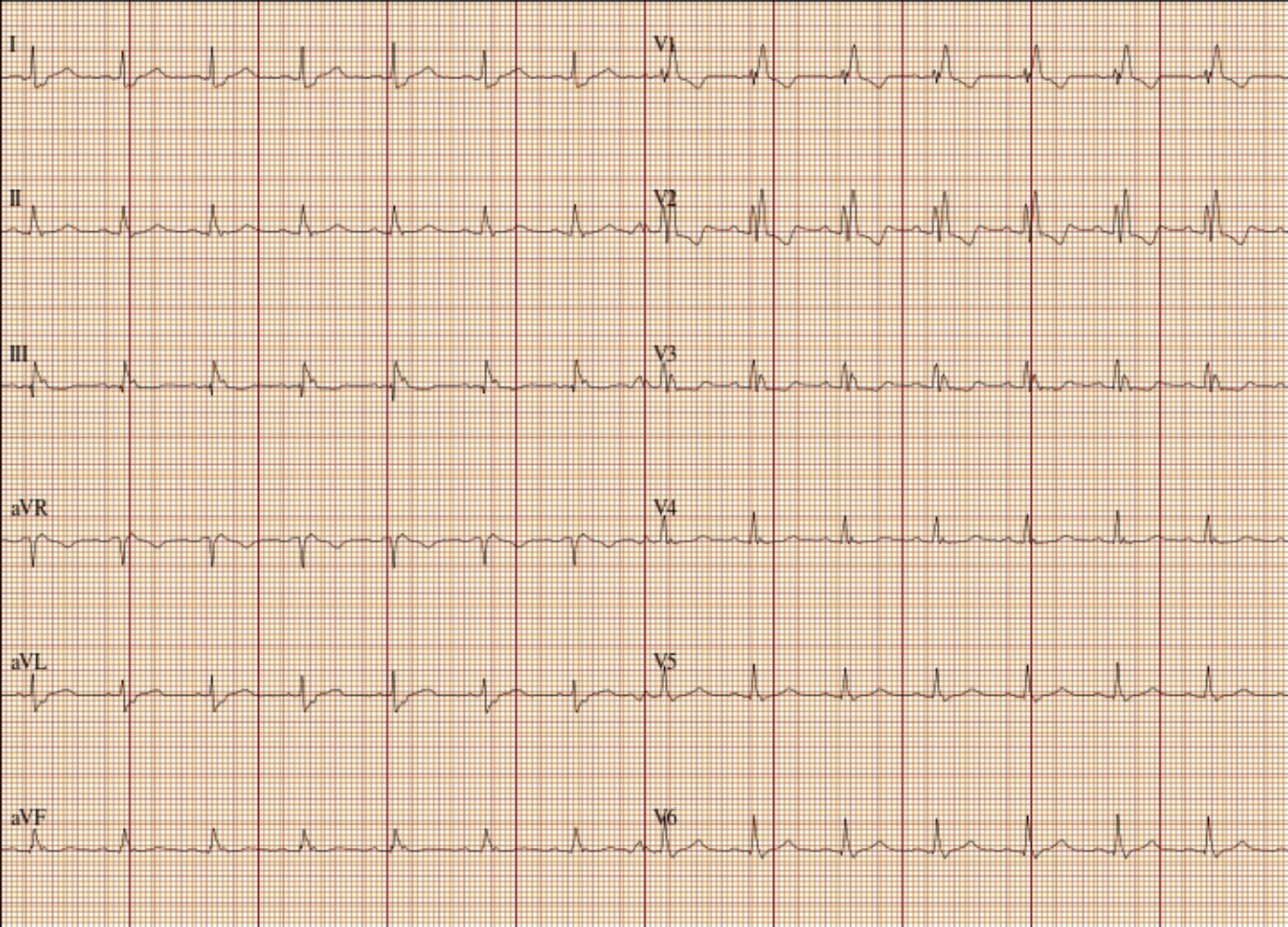
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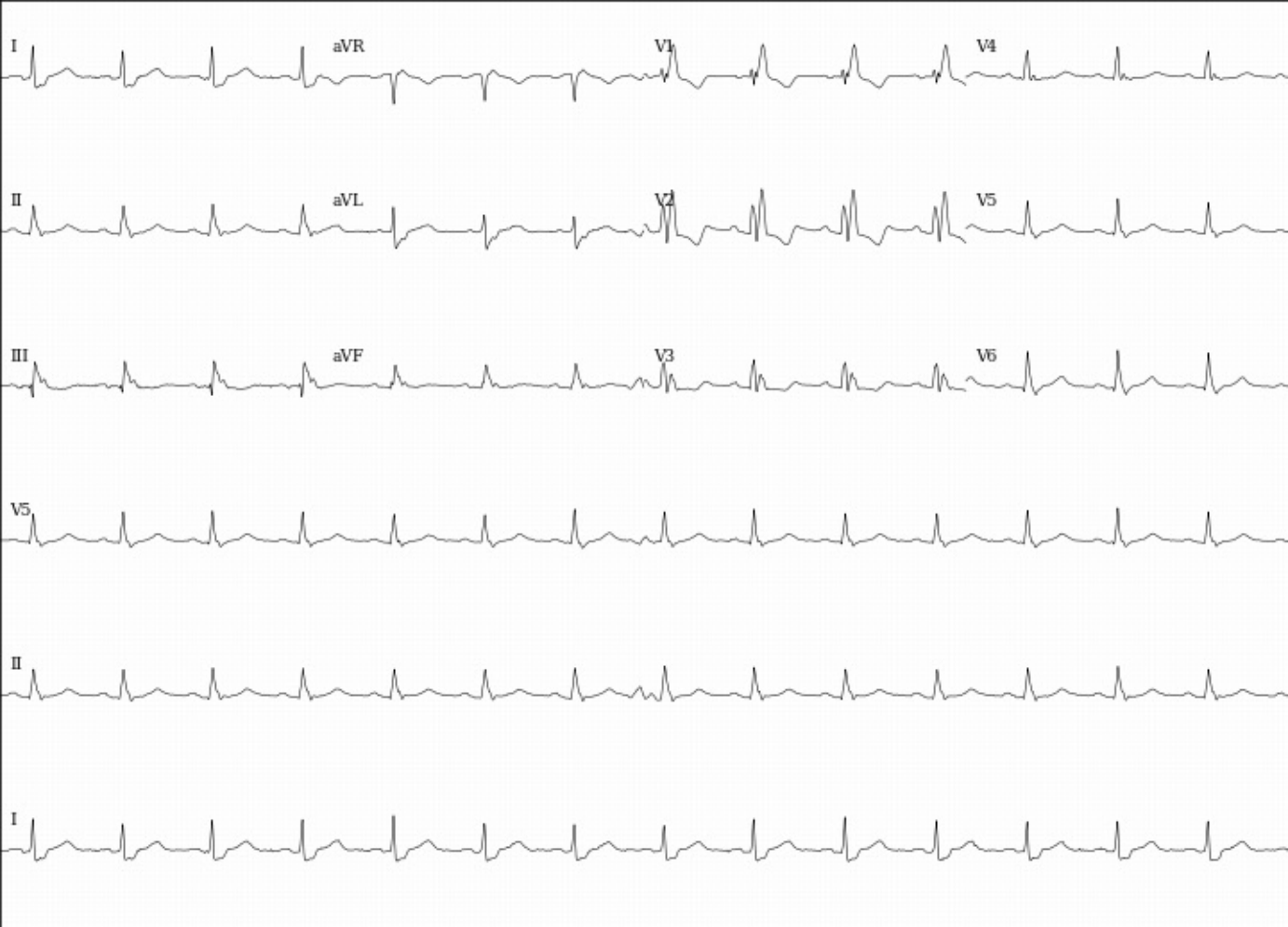
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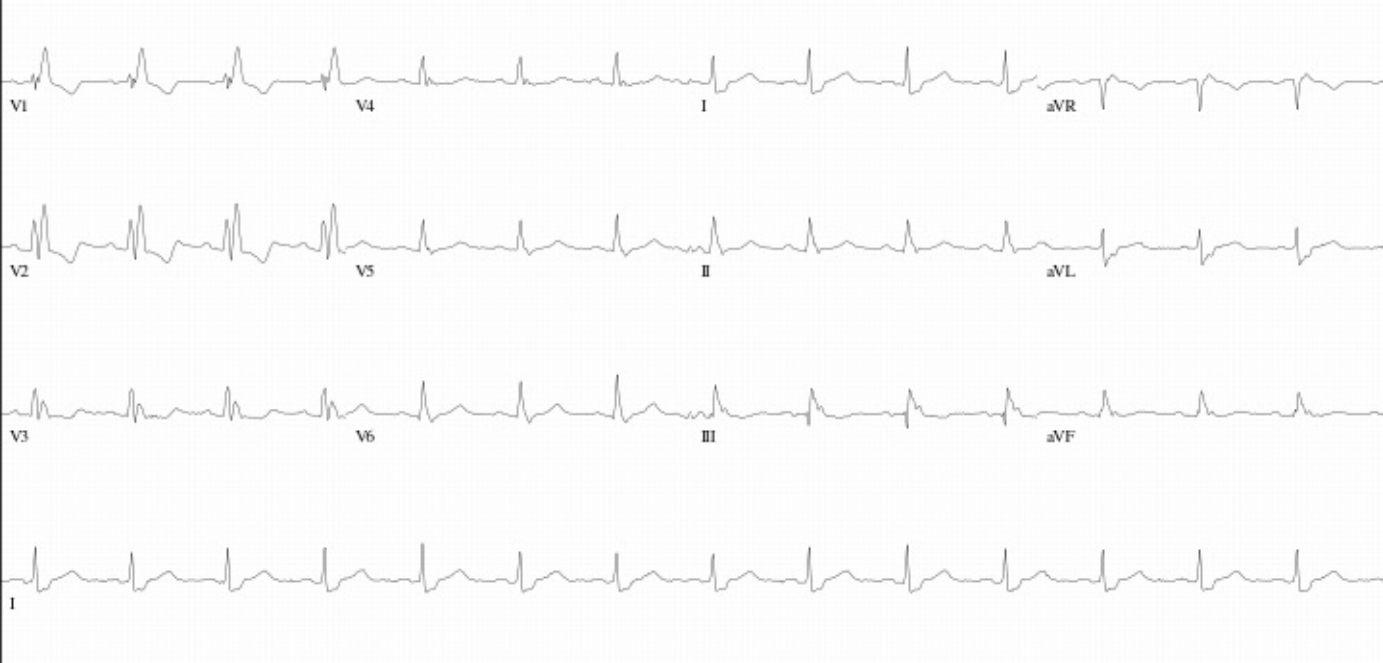
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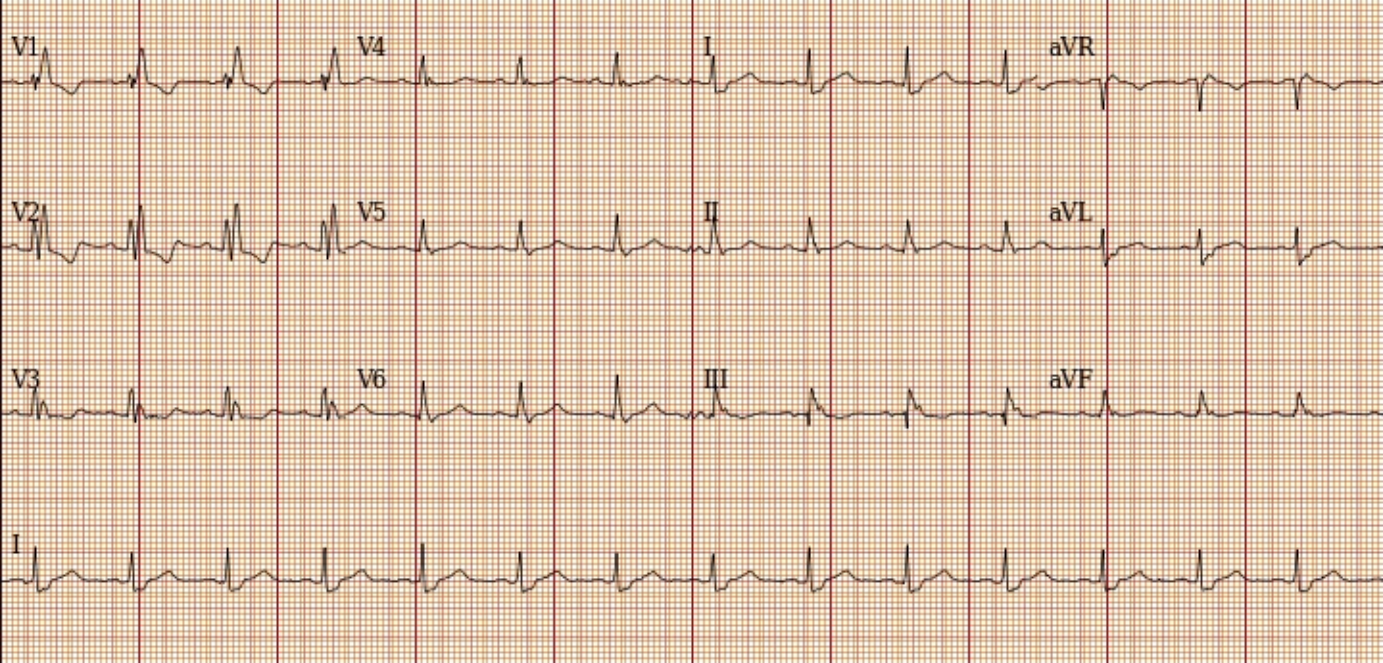
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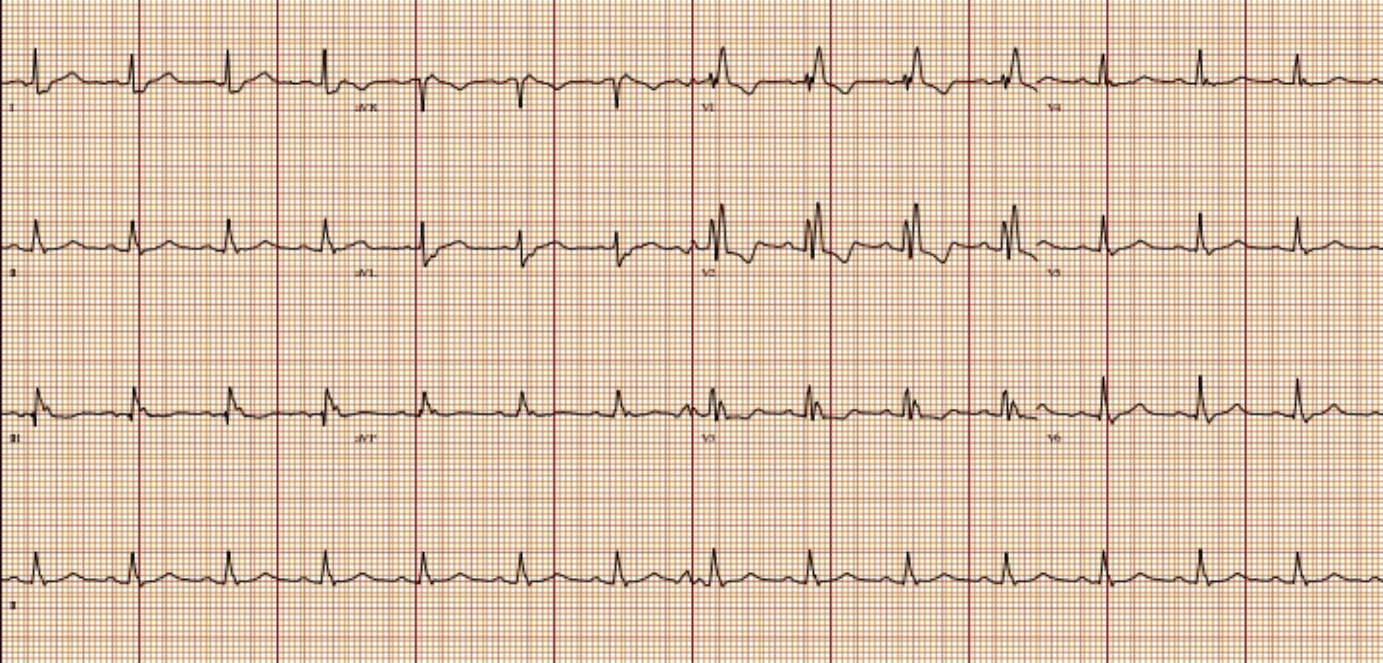
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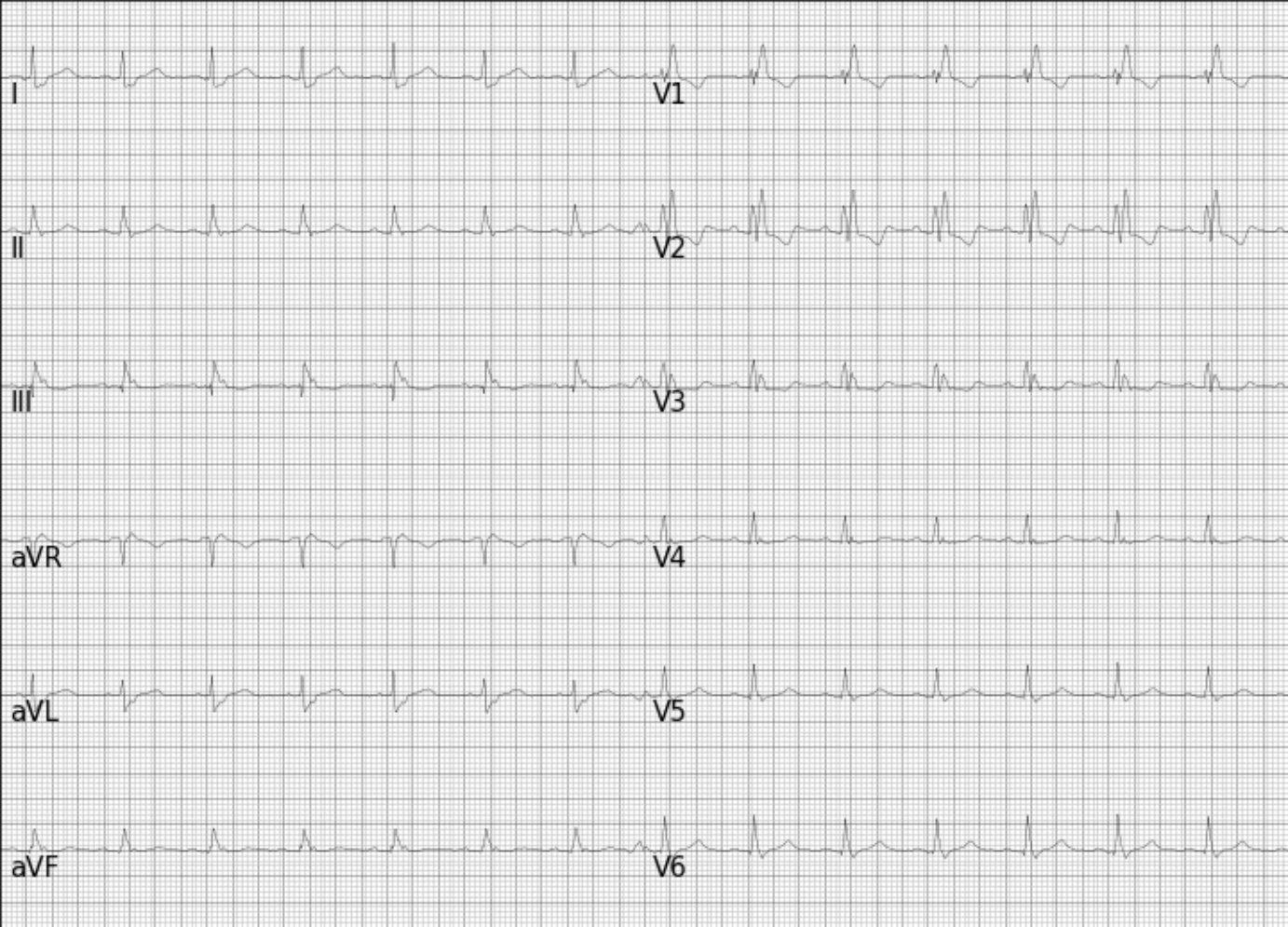
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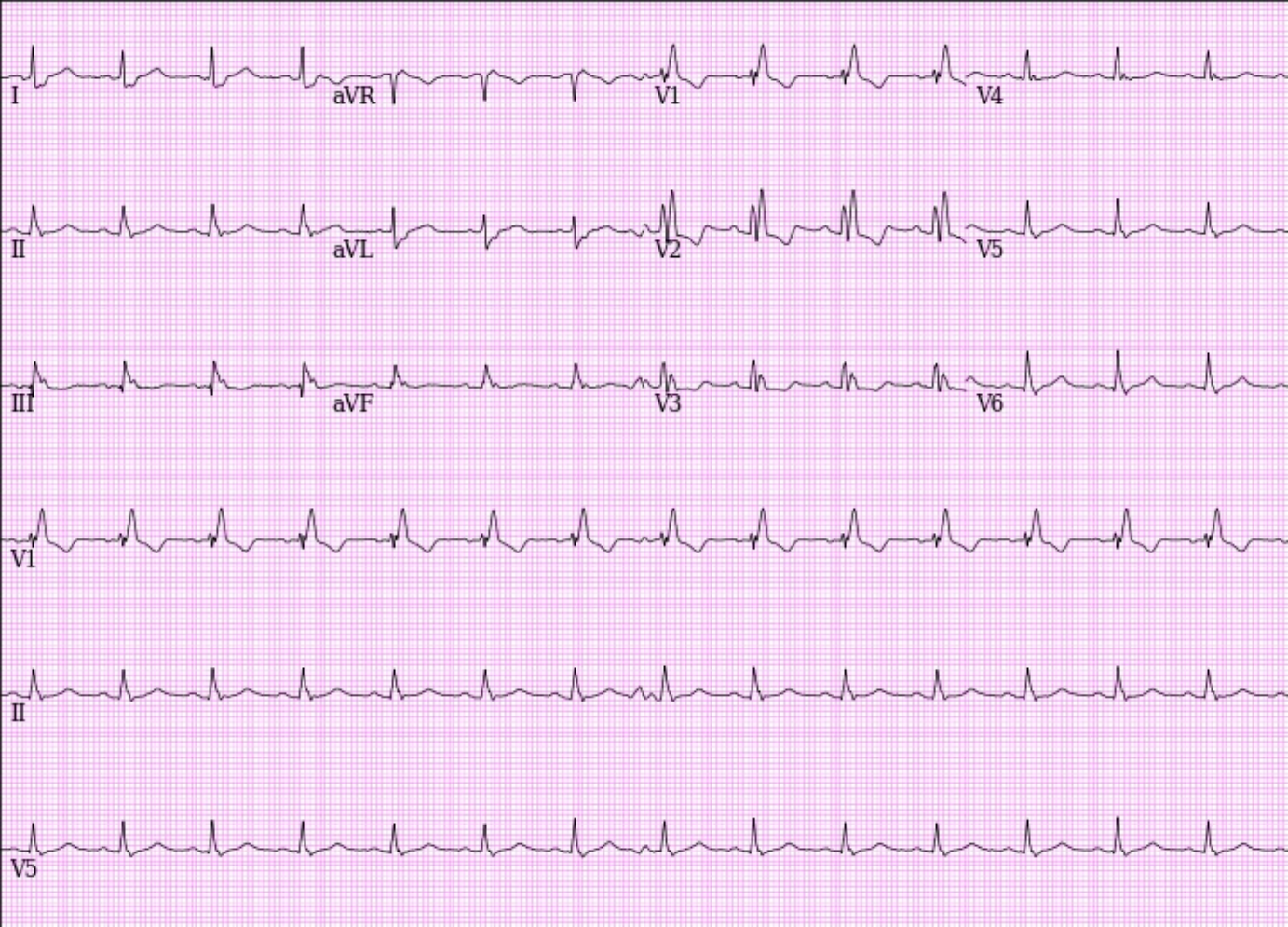
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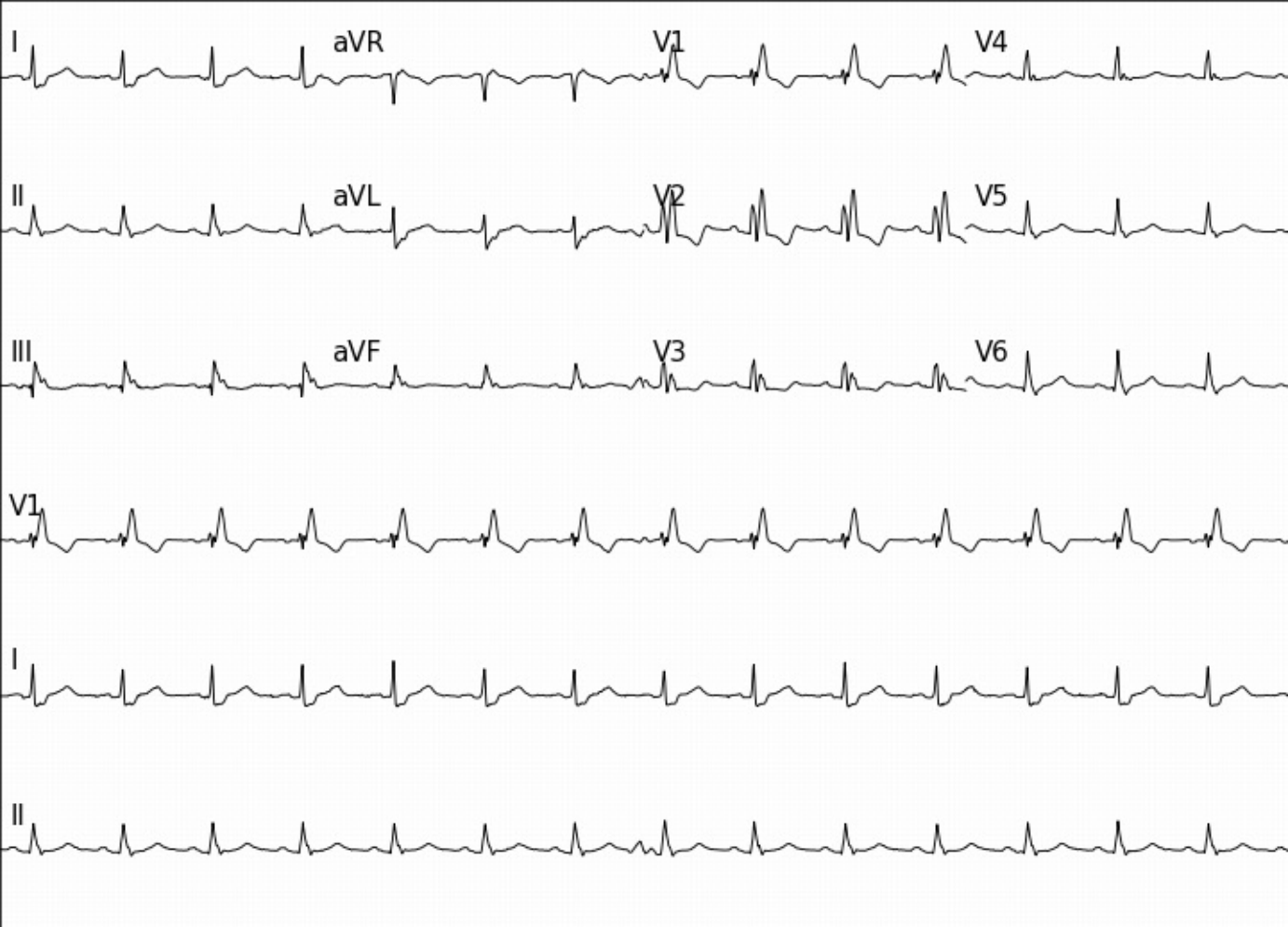
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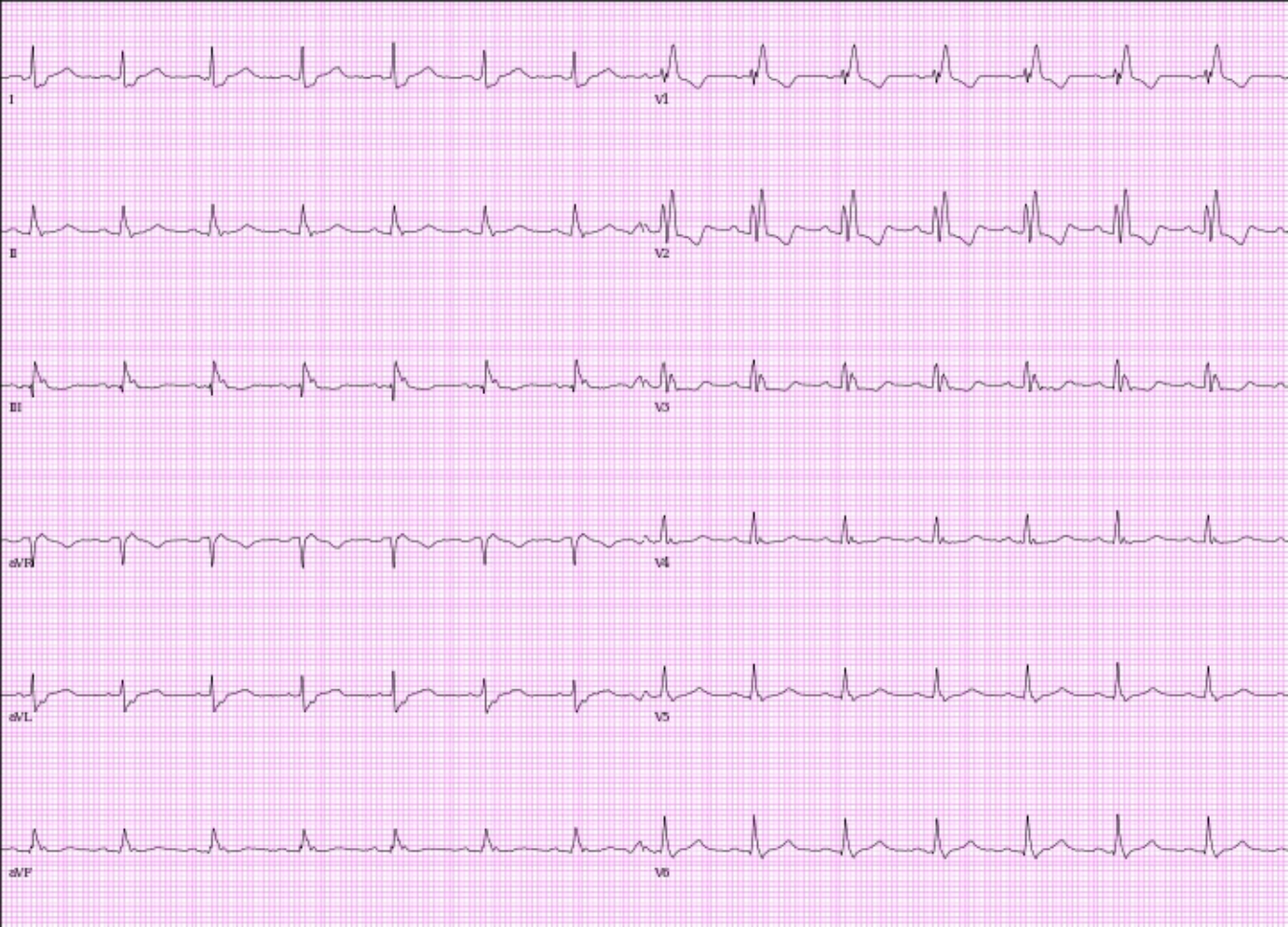
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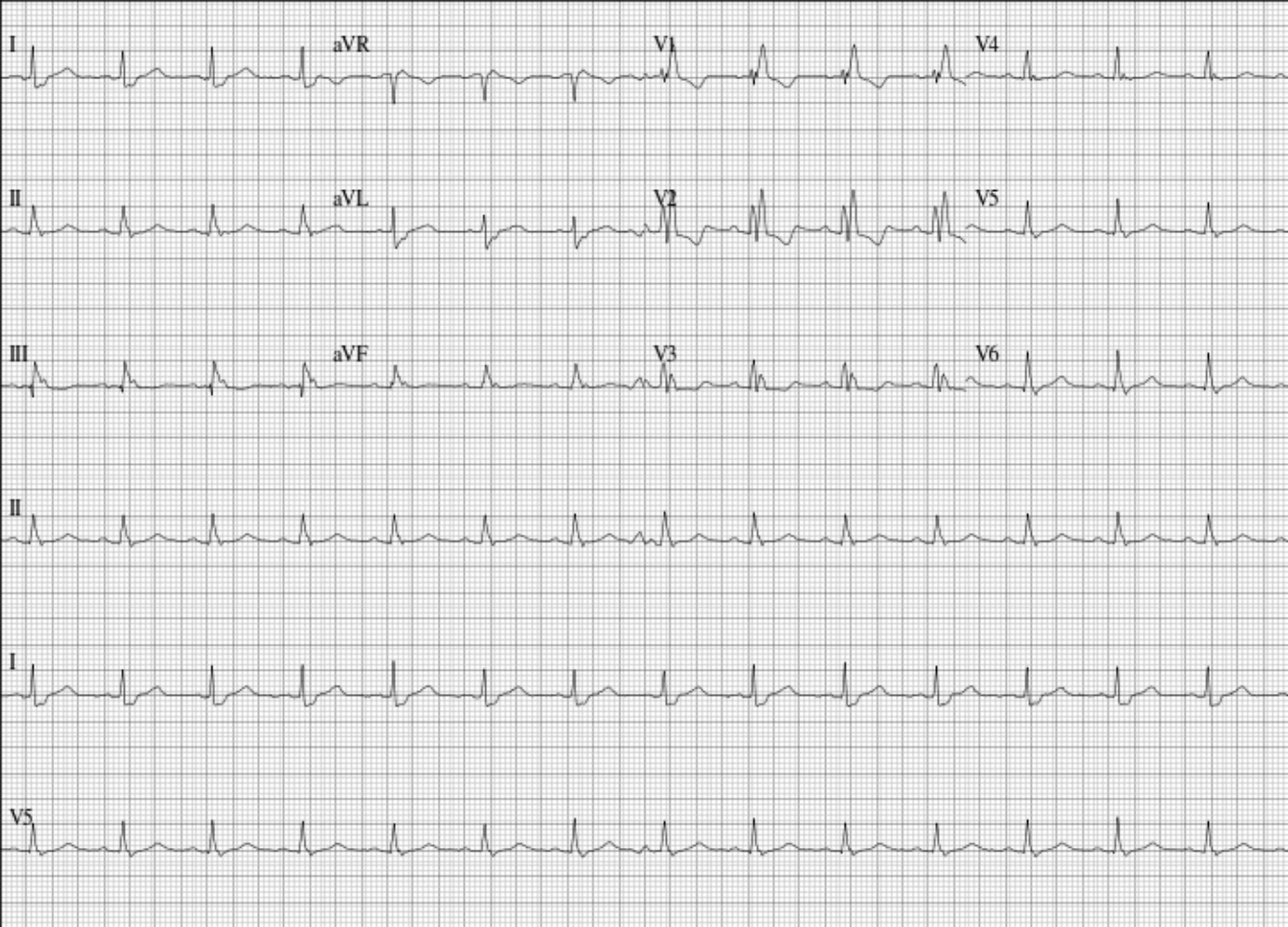
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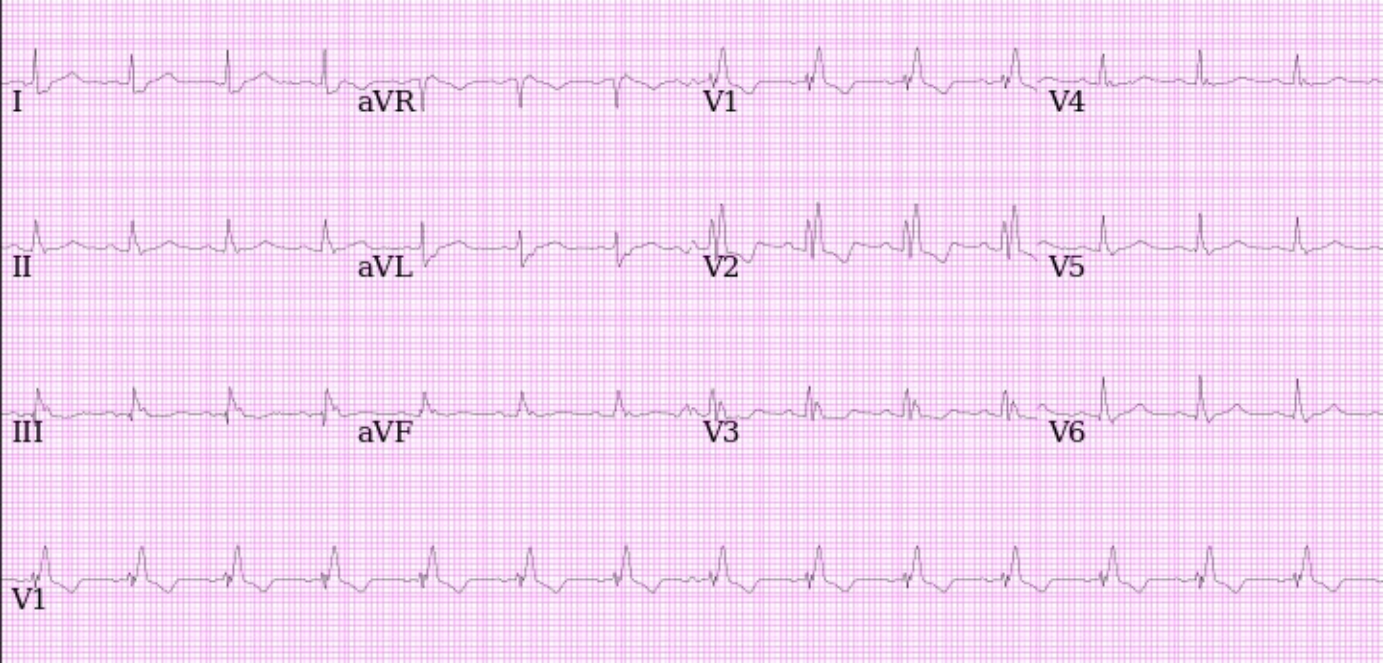
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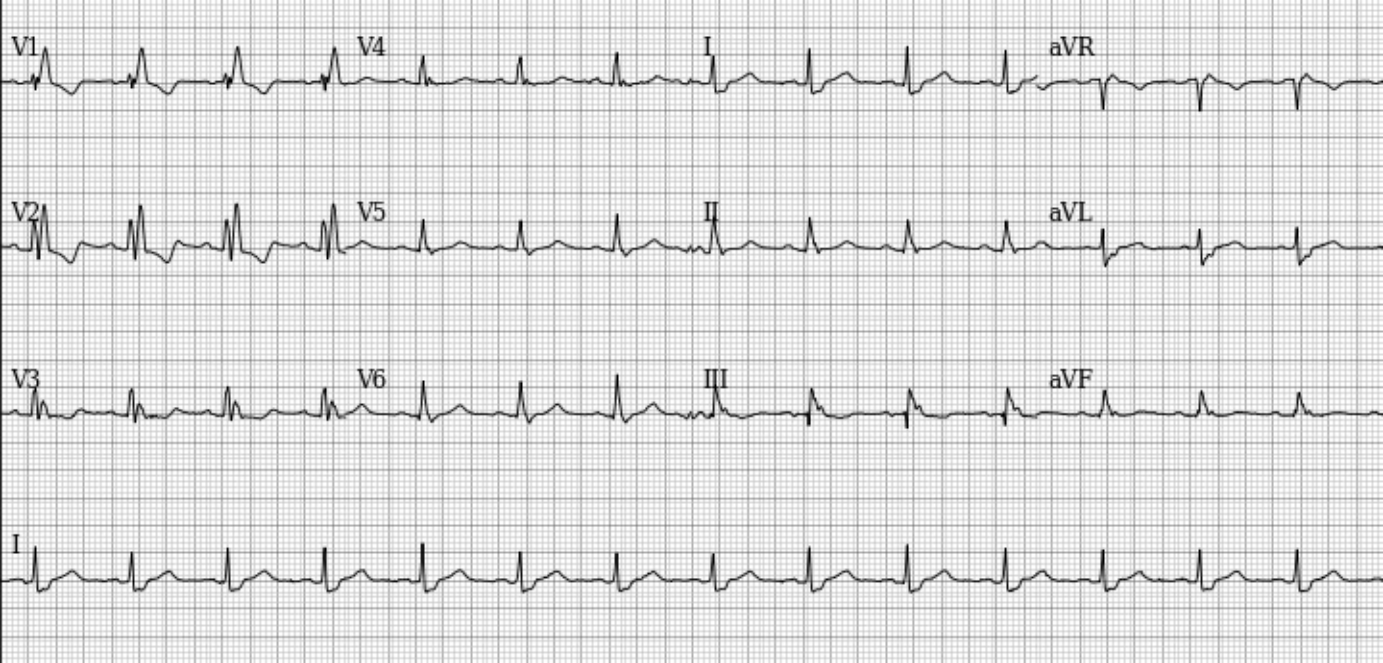
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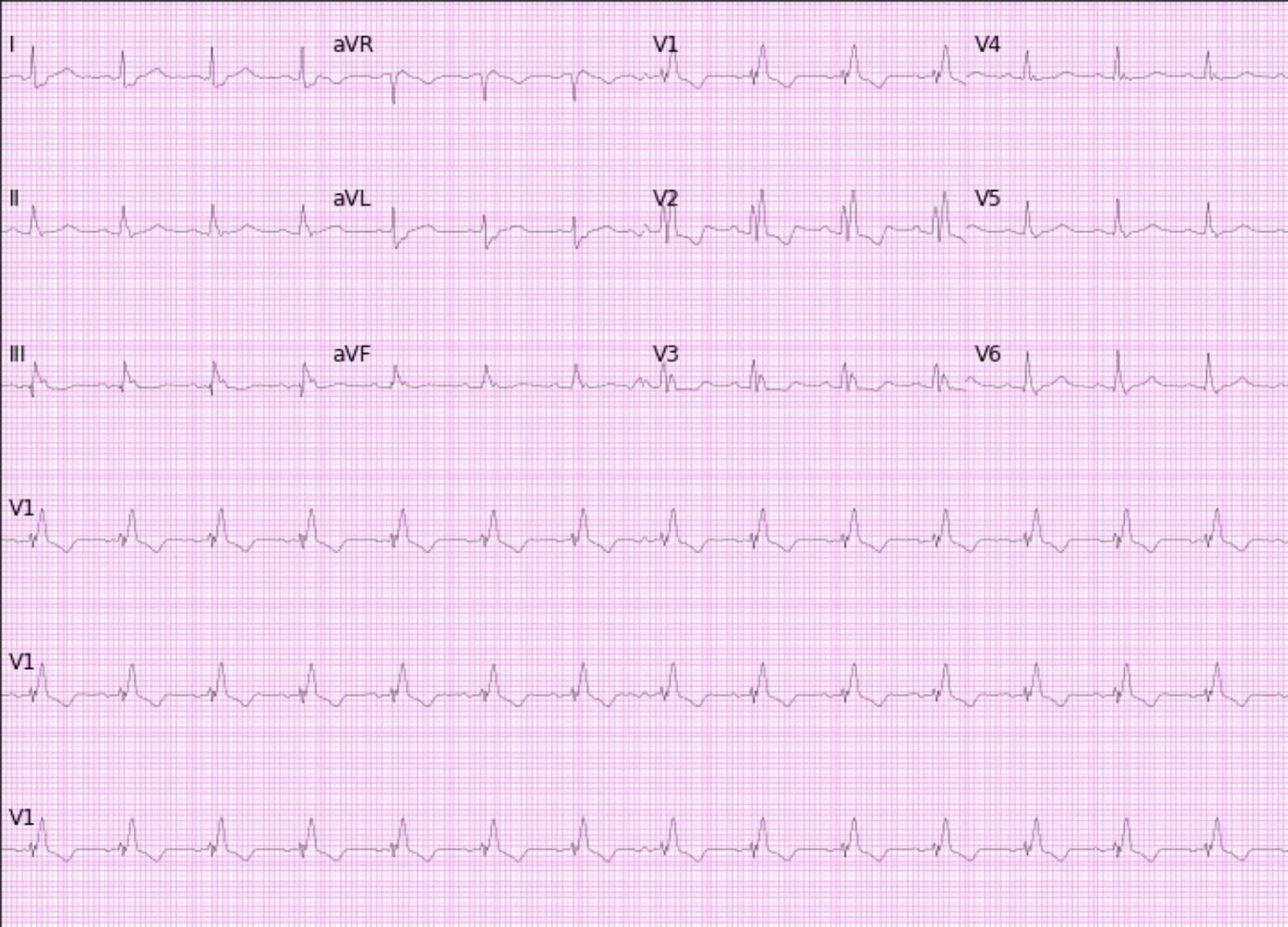
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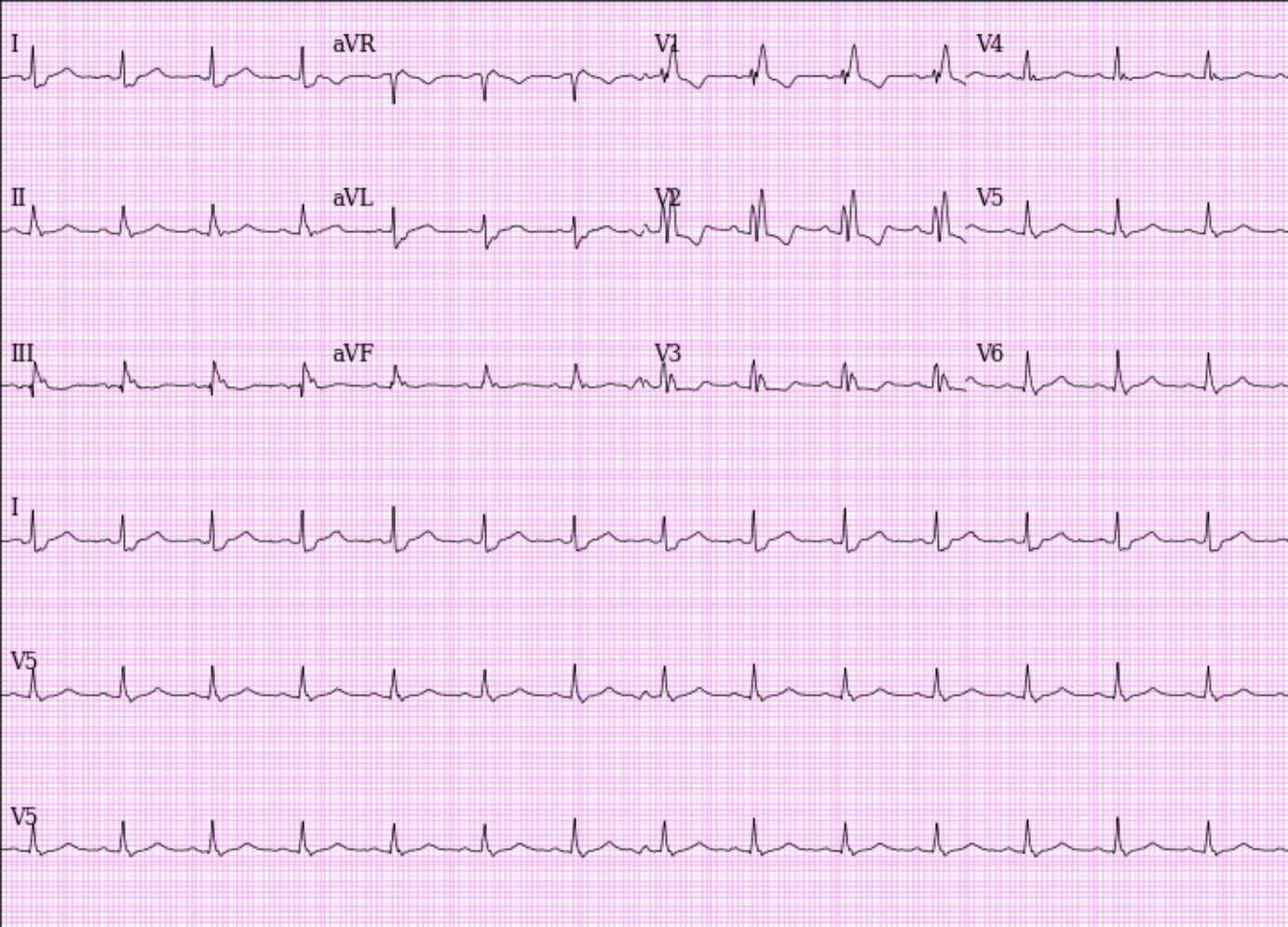
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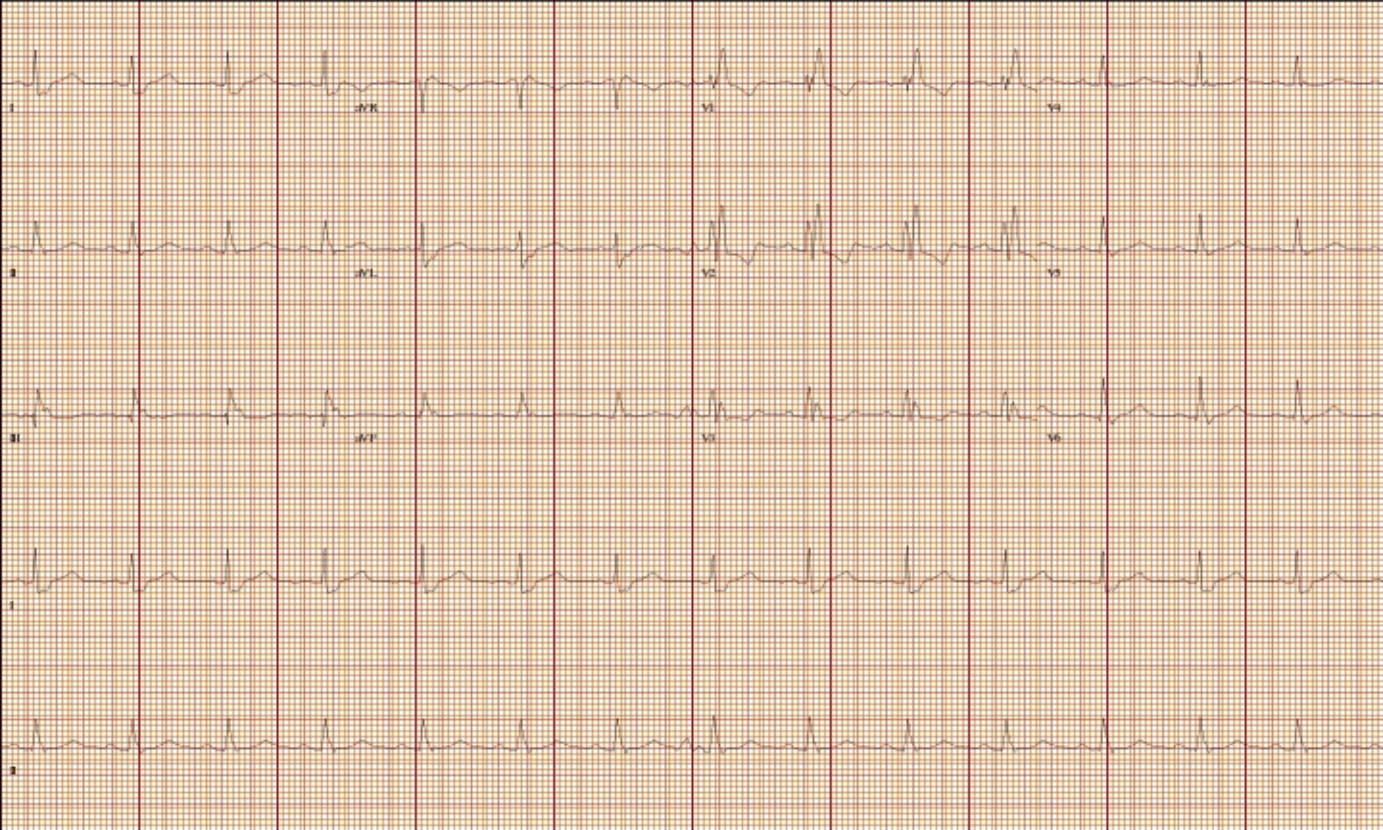
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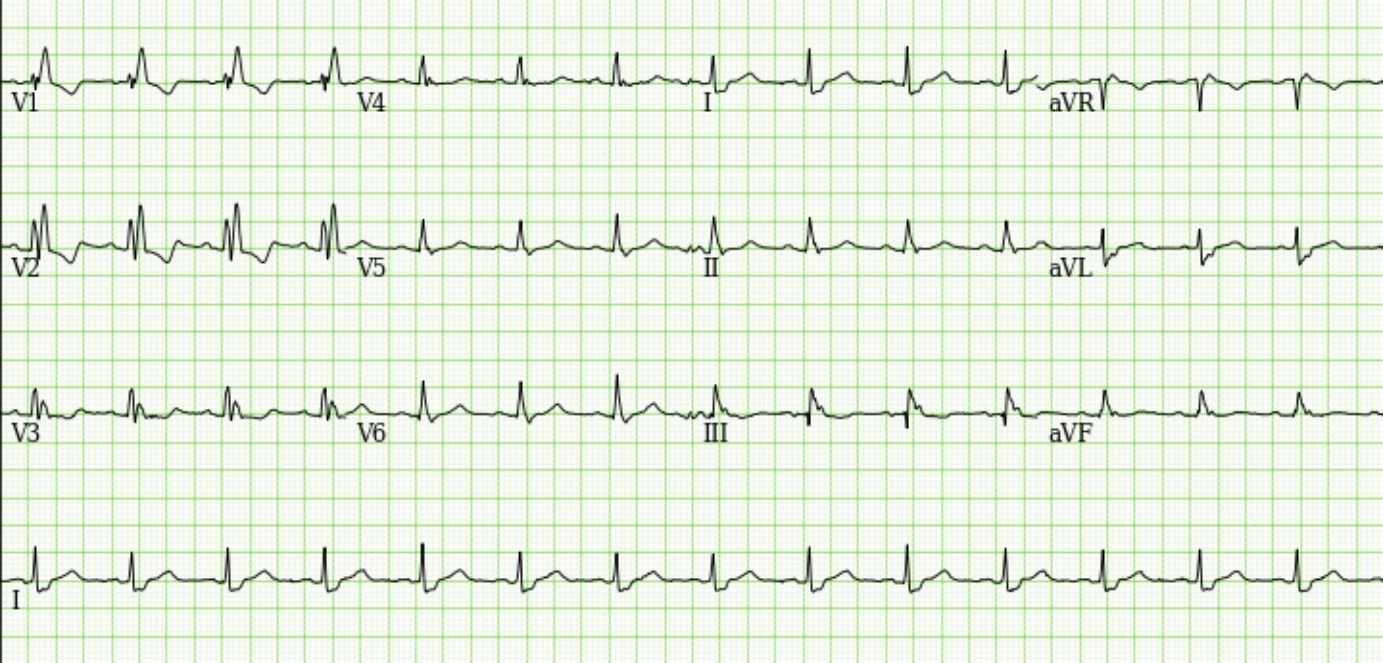
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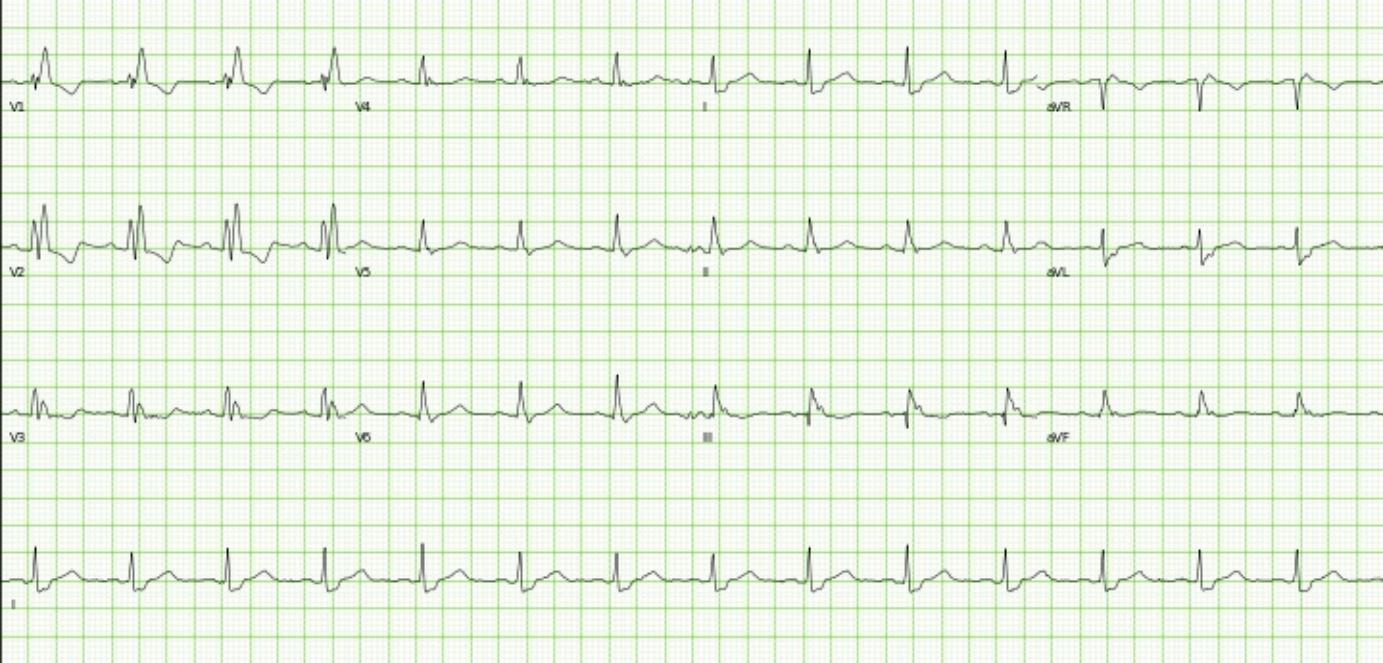
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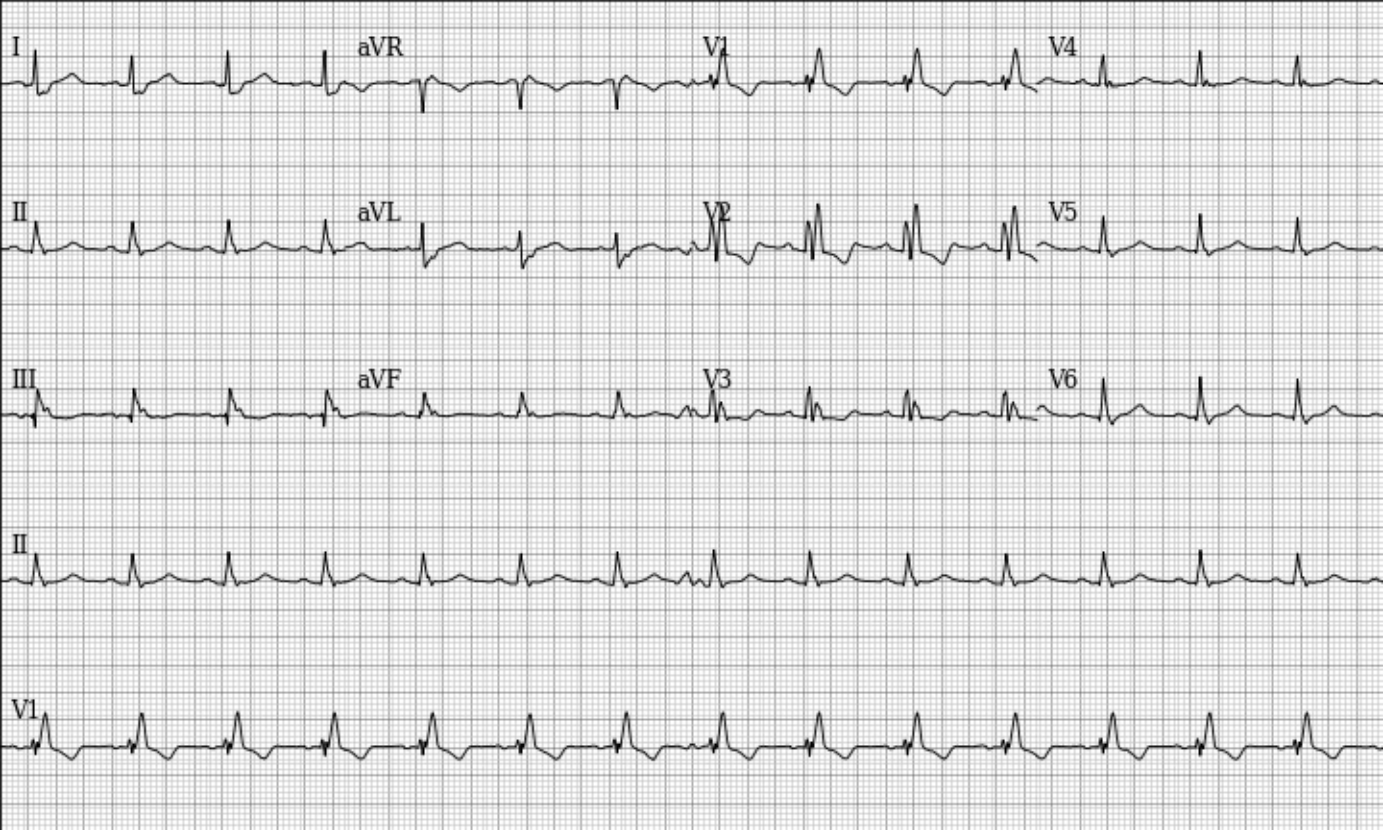
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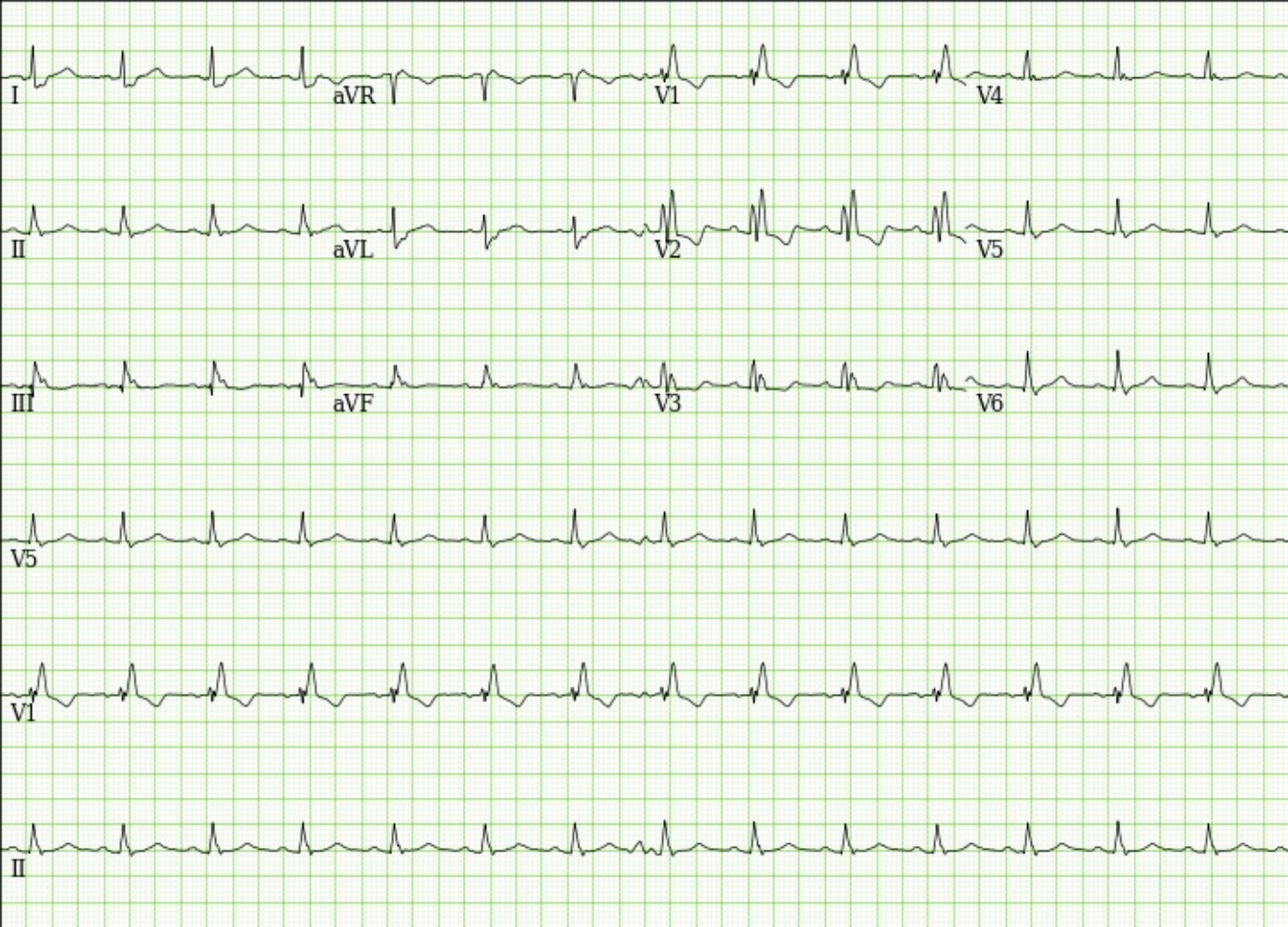
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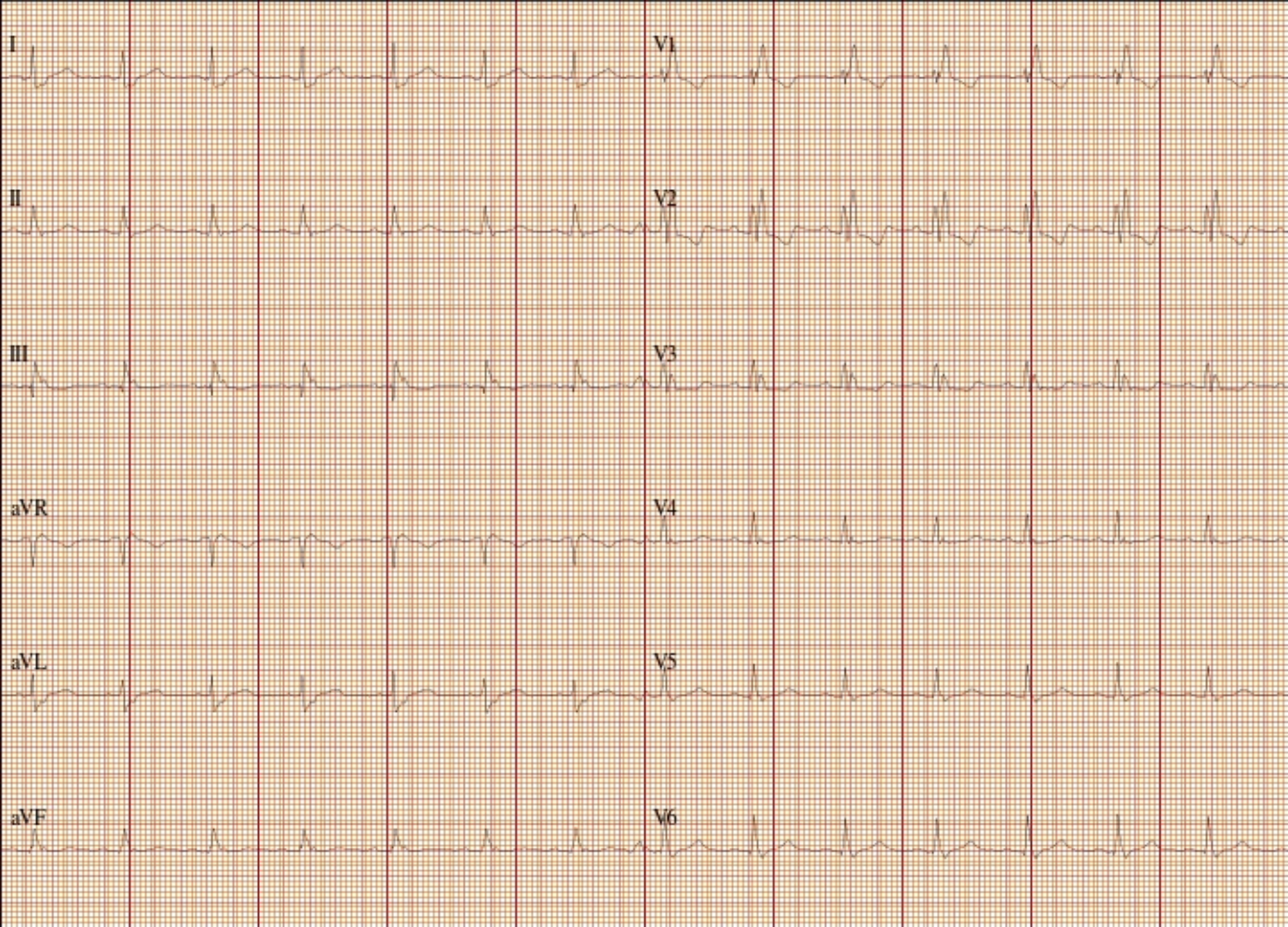
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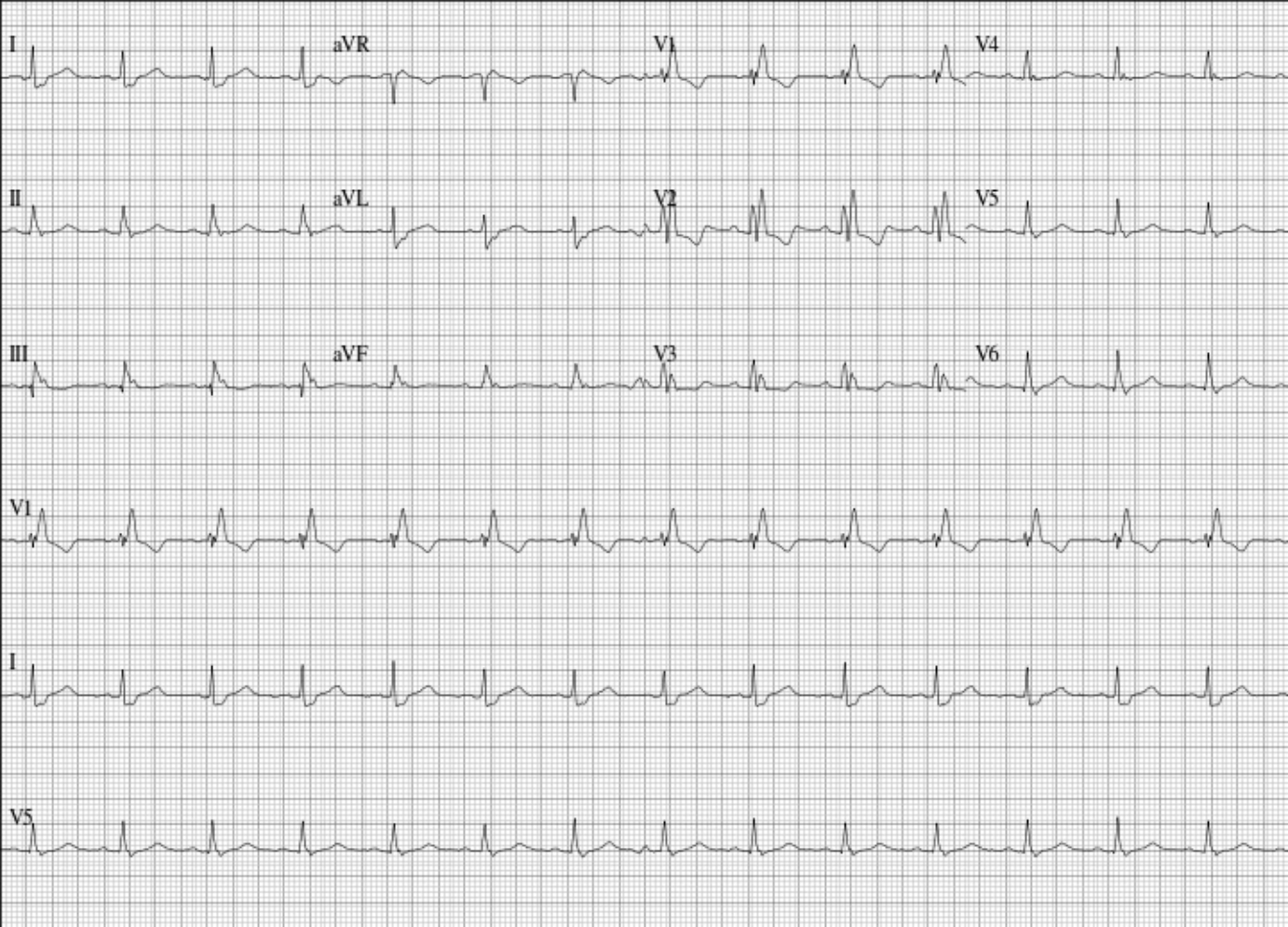
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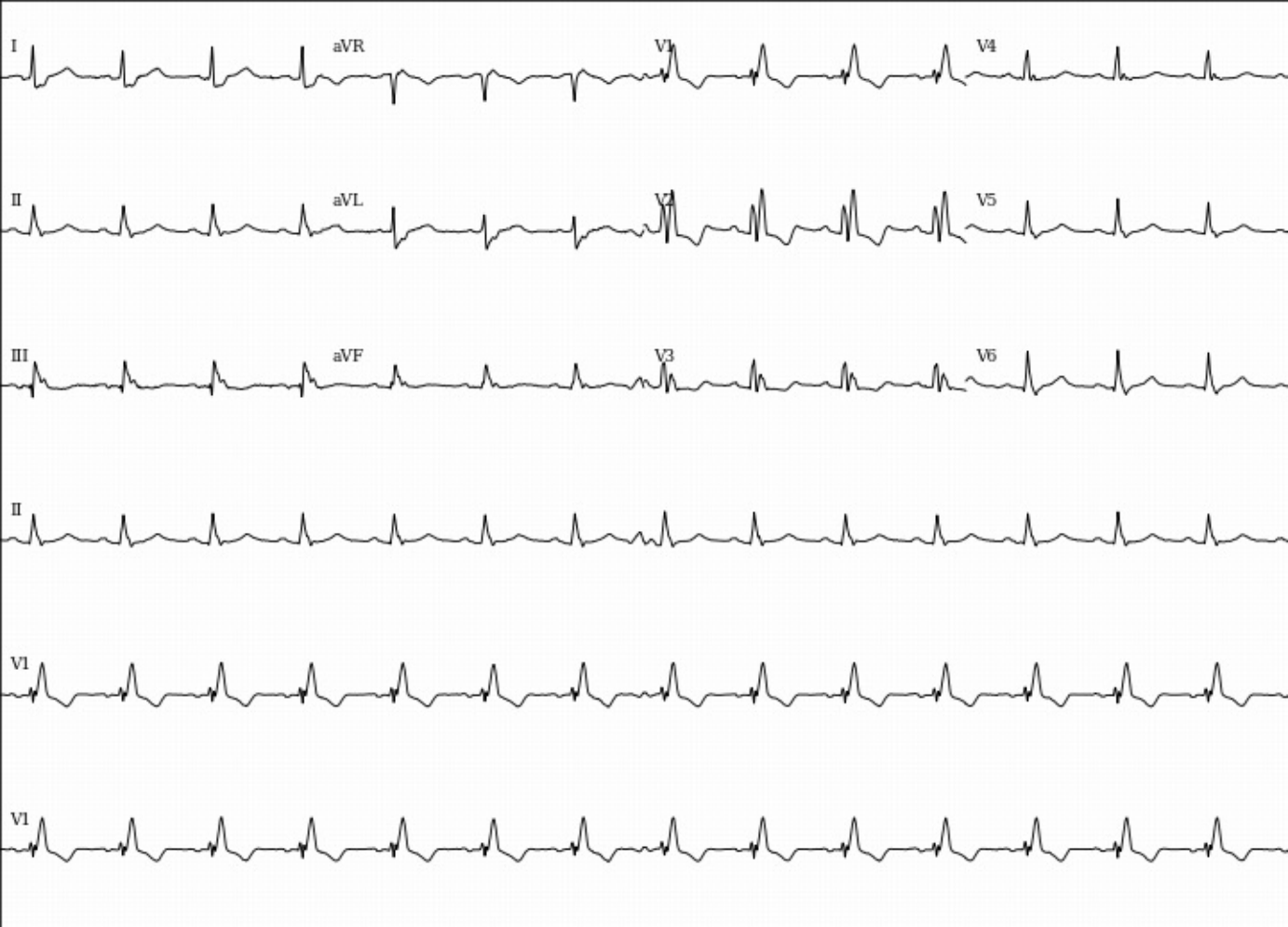
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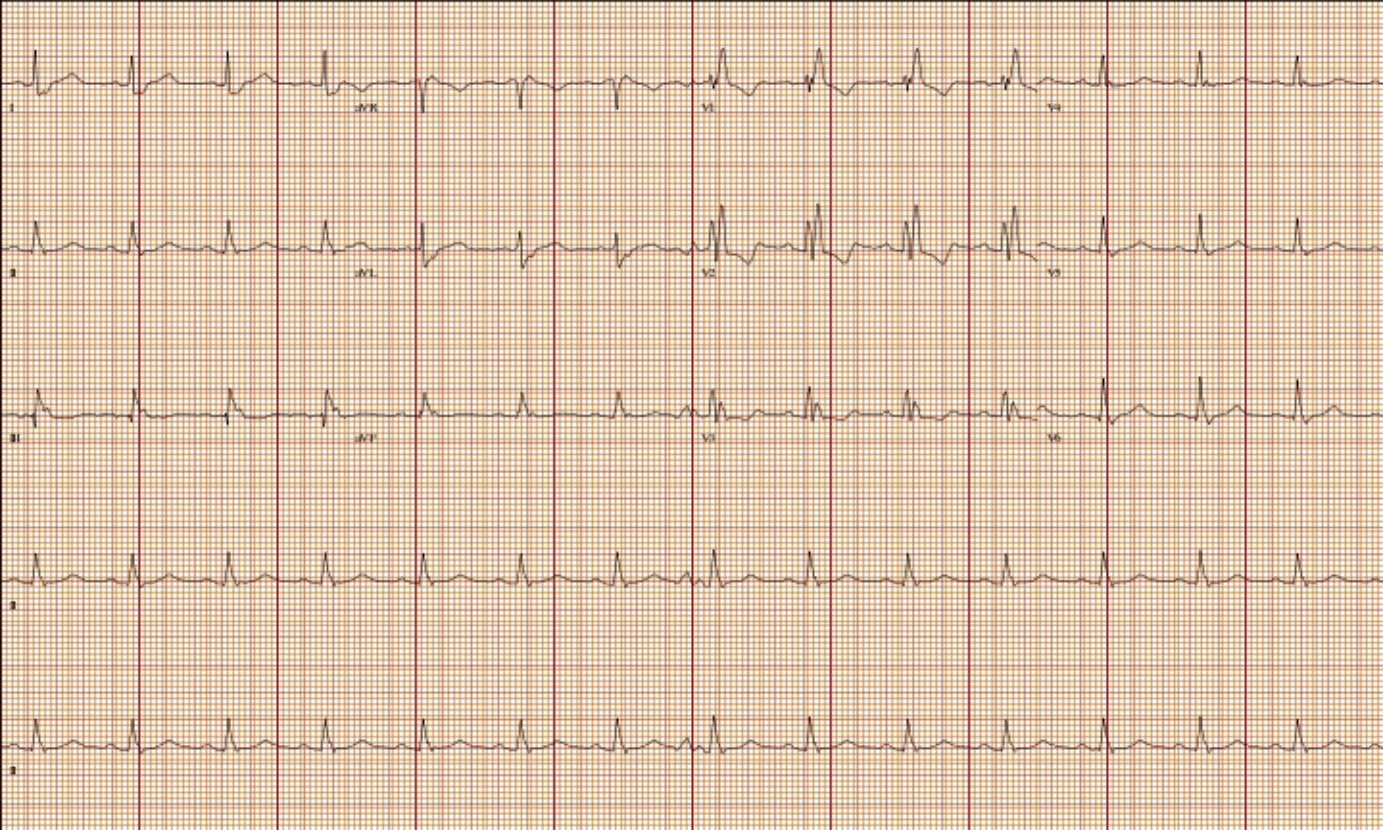
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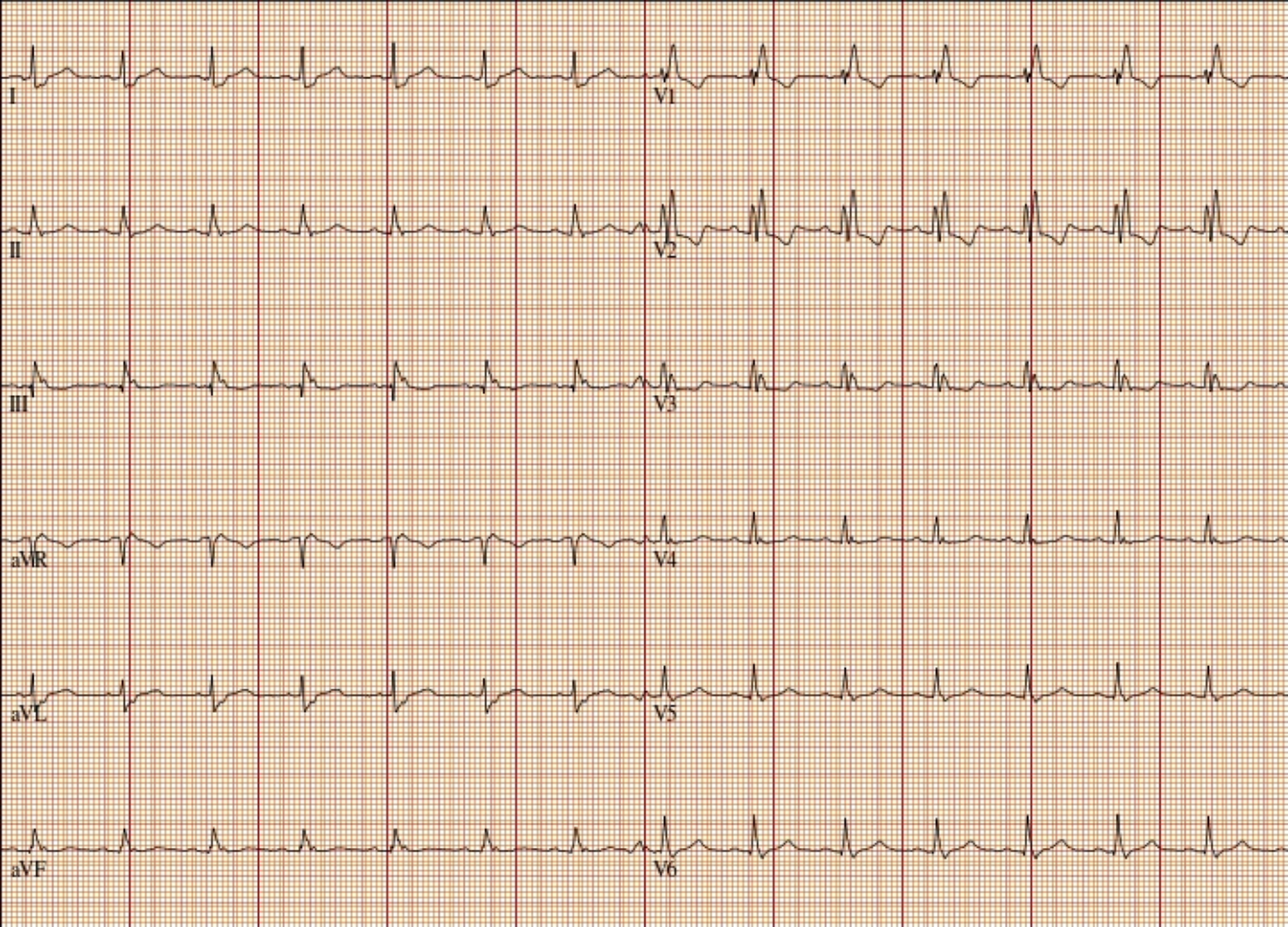
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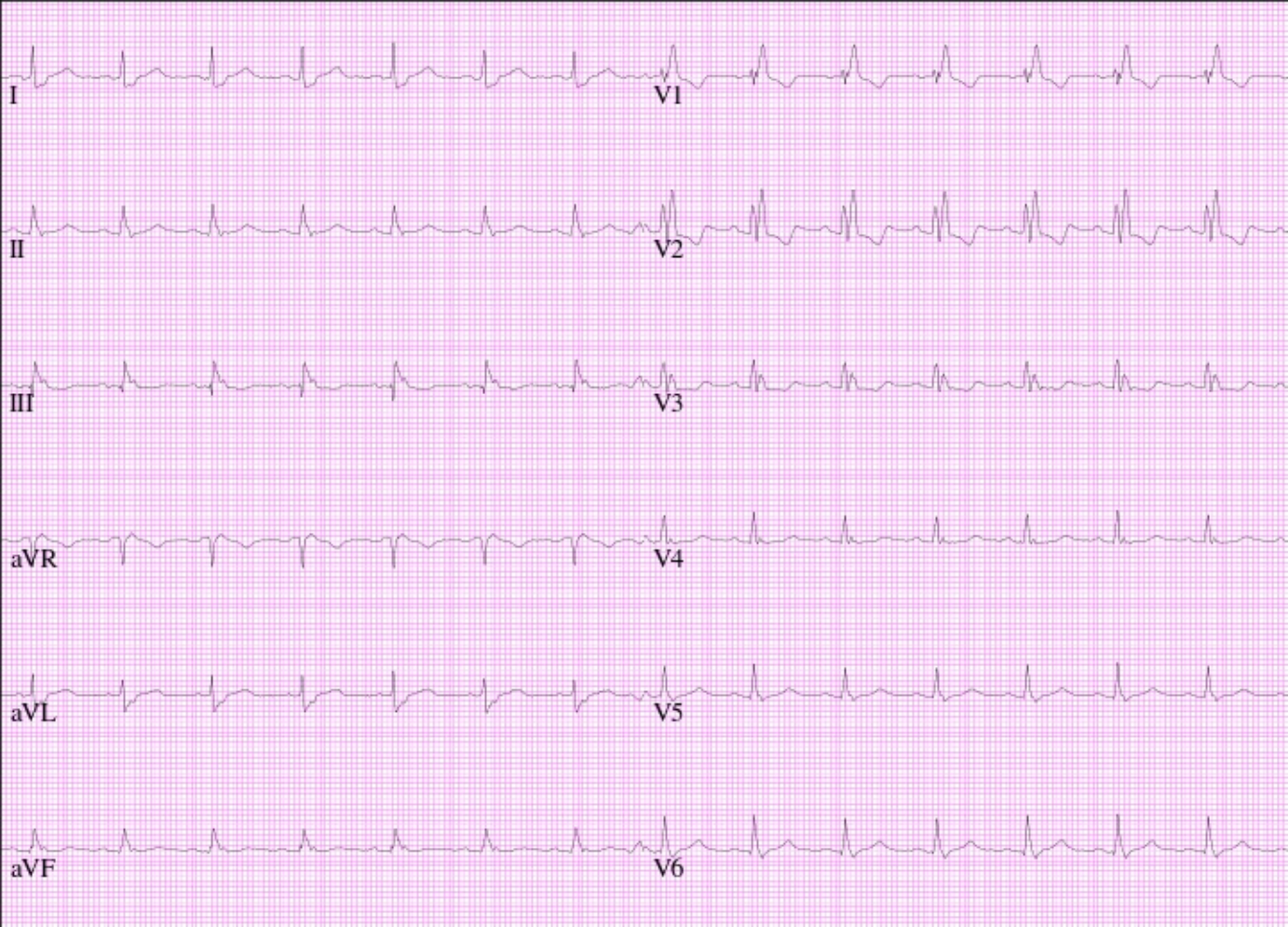
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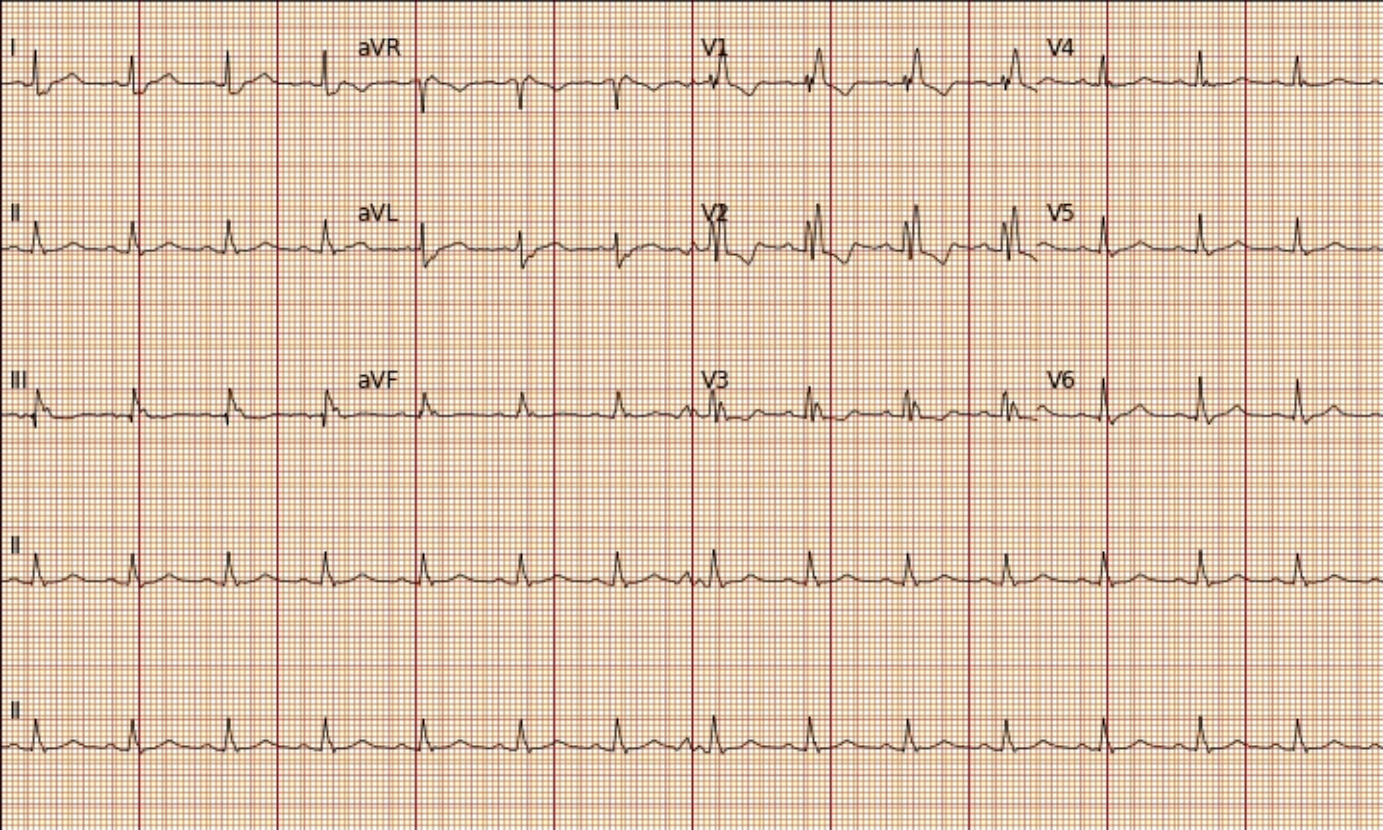
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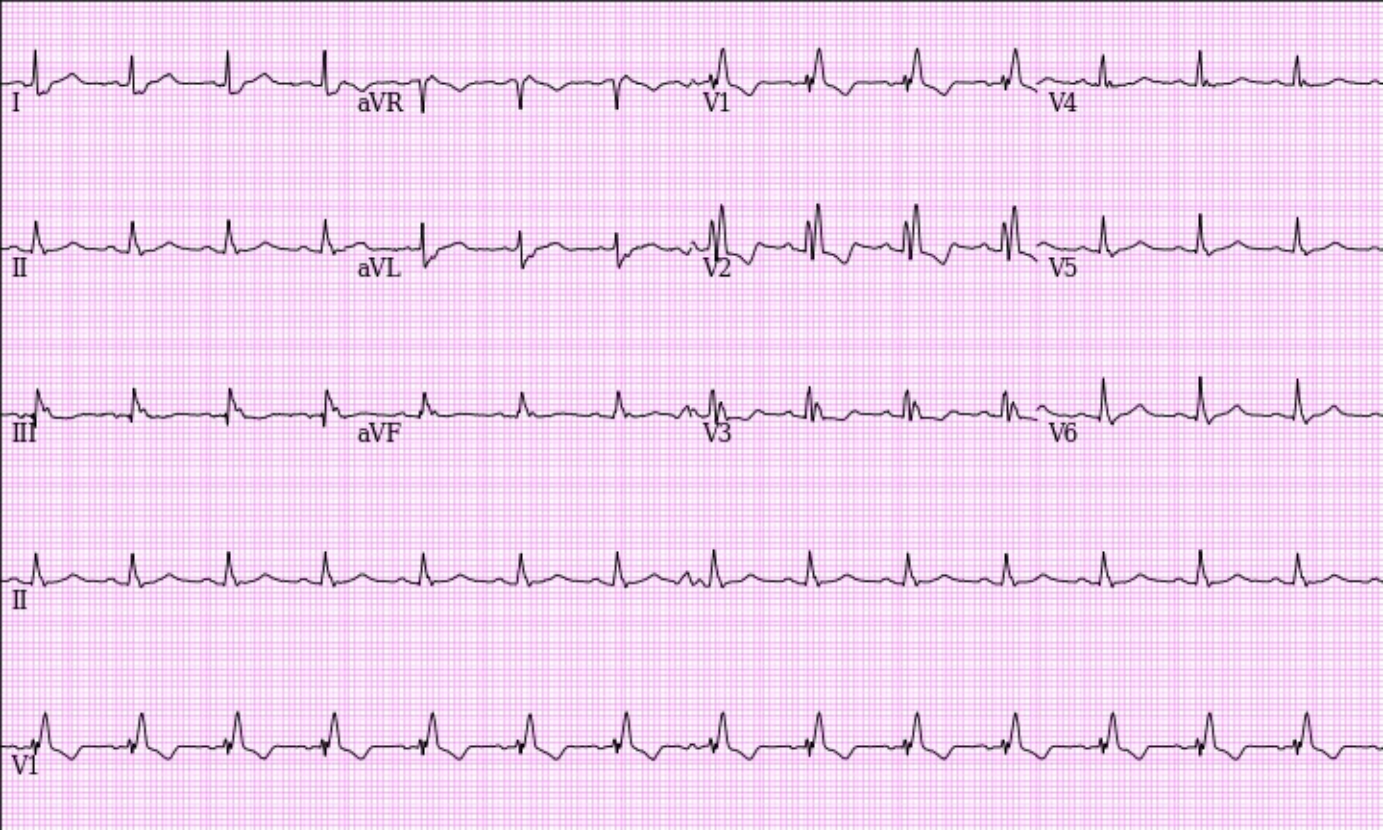
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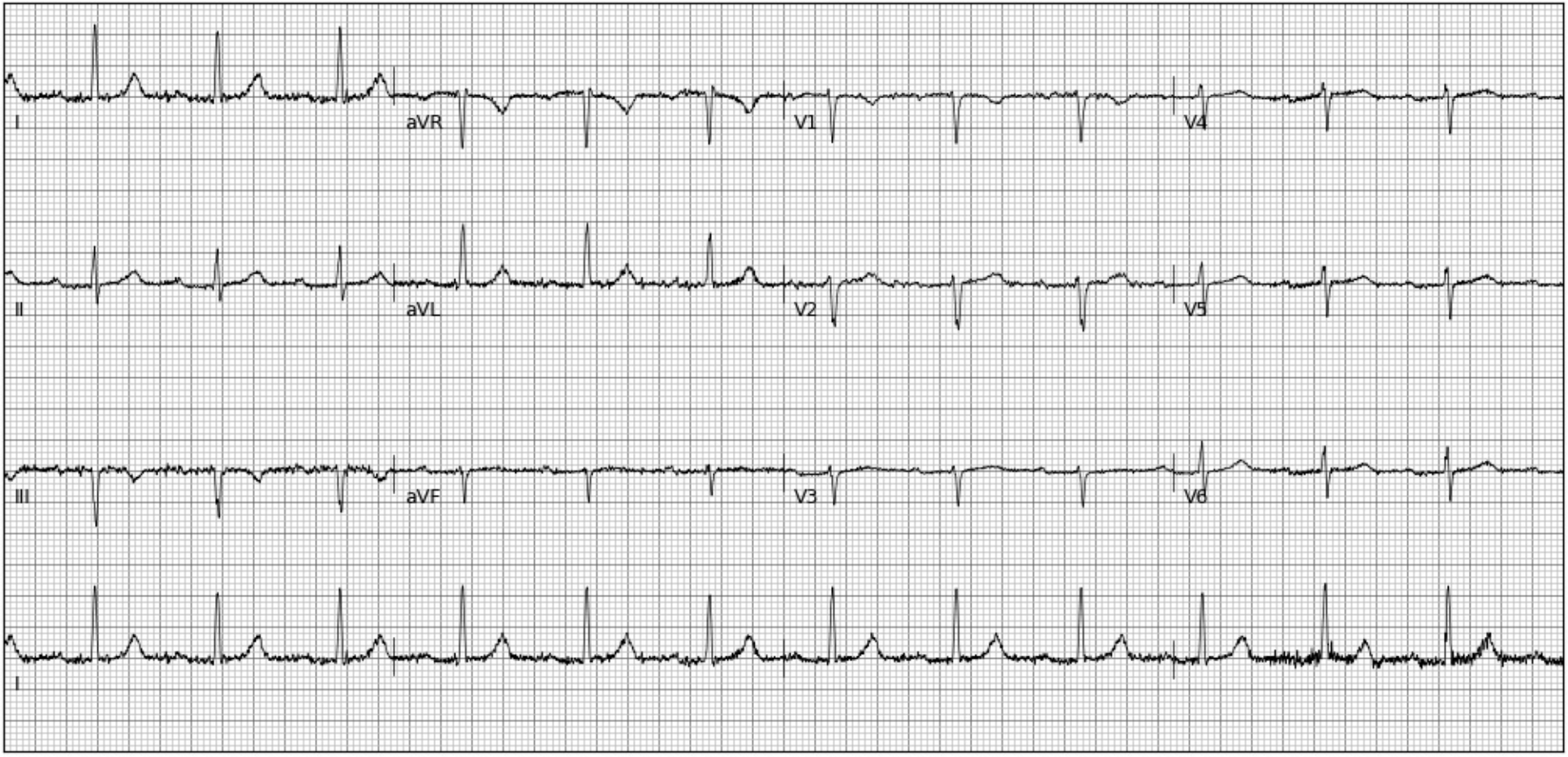
Section 2. Random examples of 25 electrocardiogram images plotted in standard clinical layout used during model evaluation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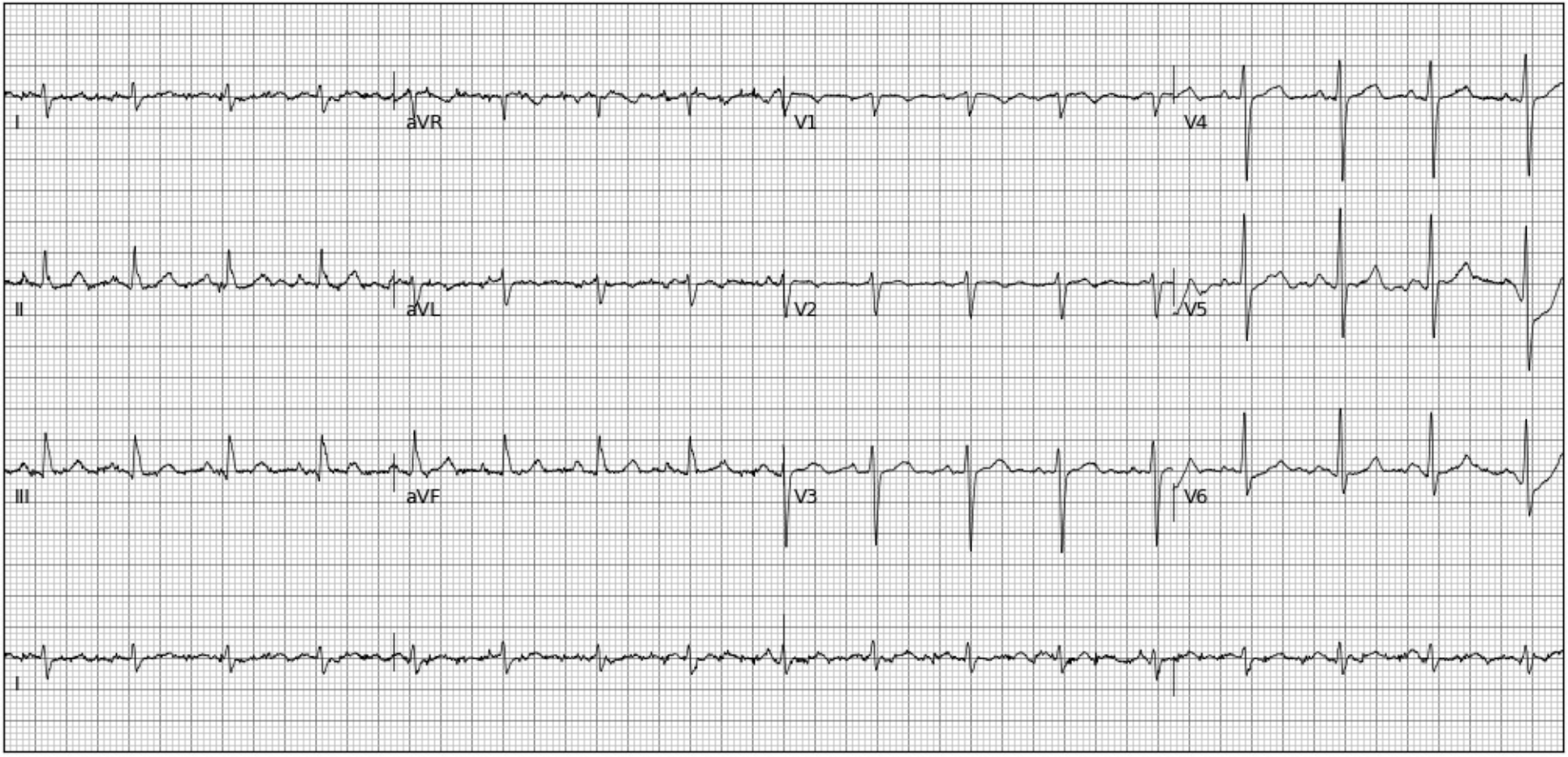
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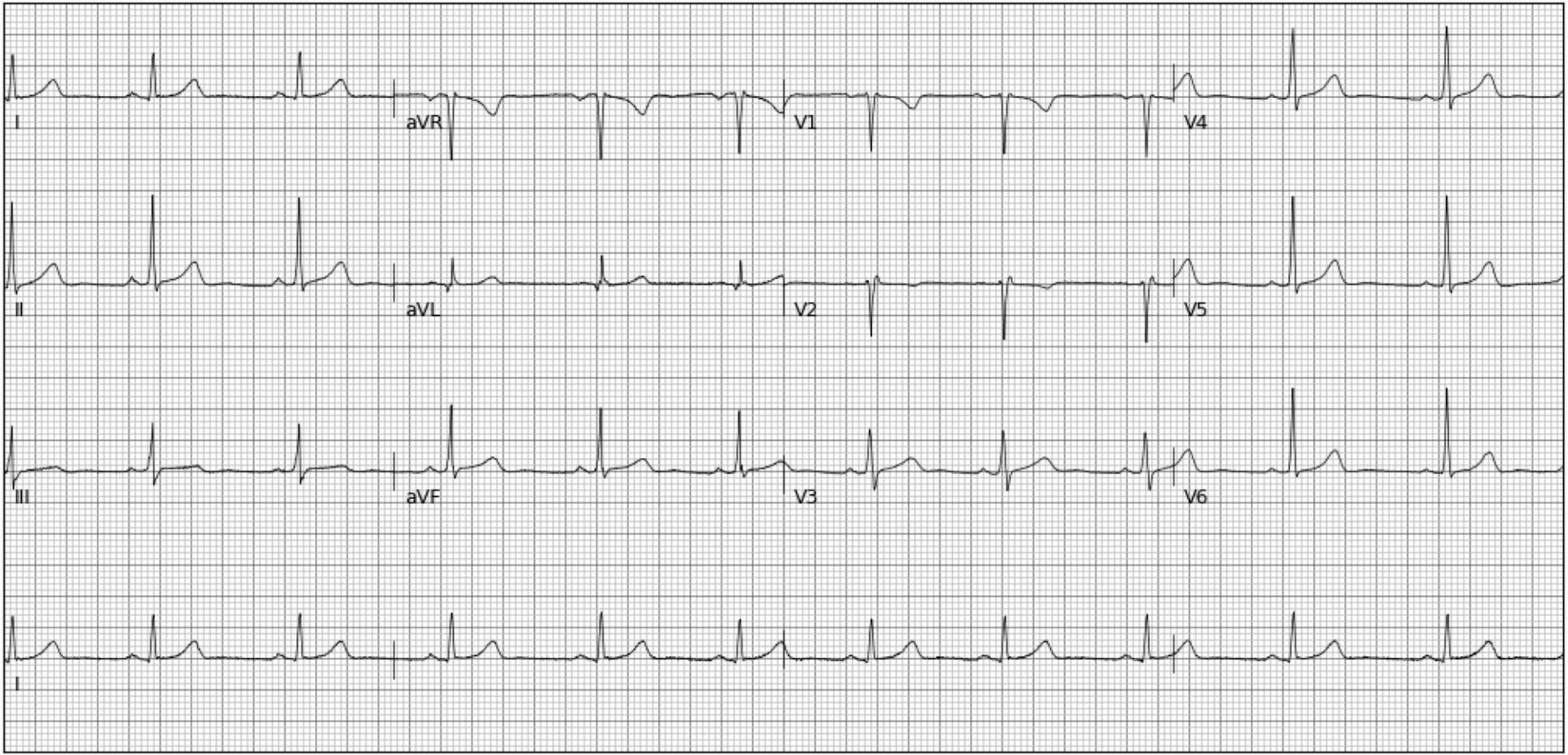
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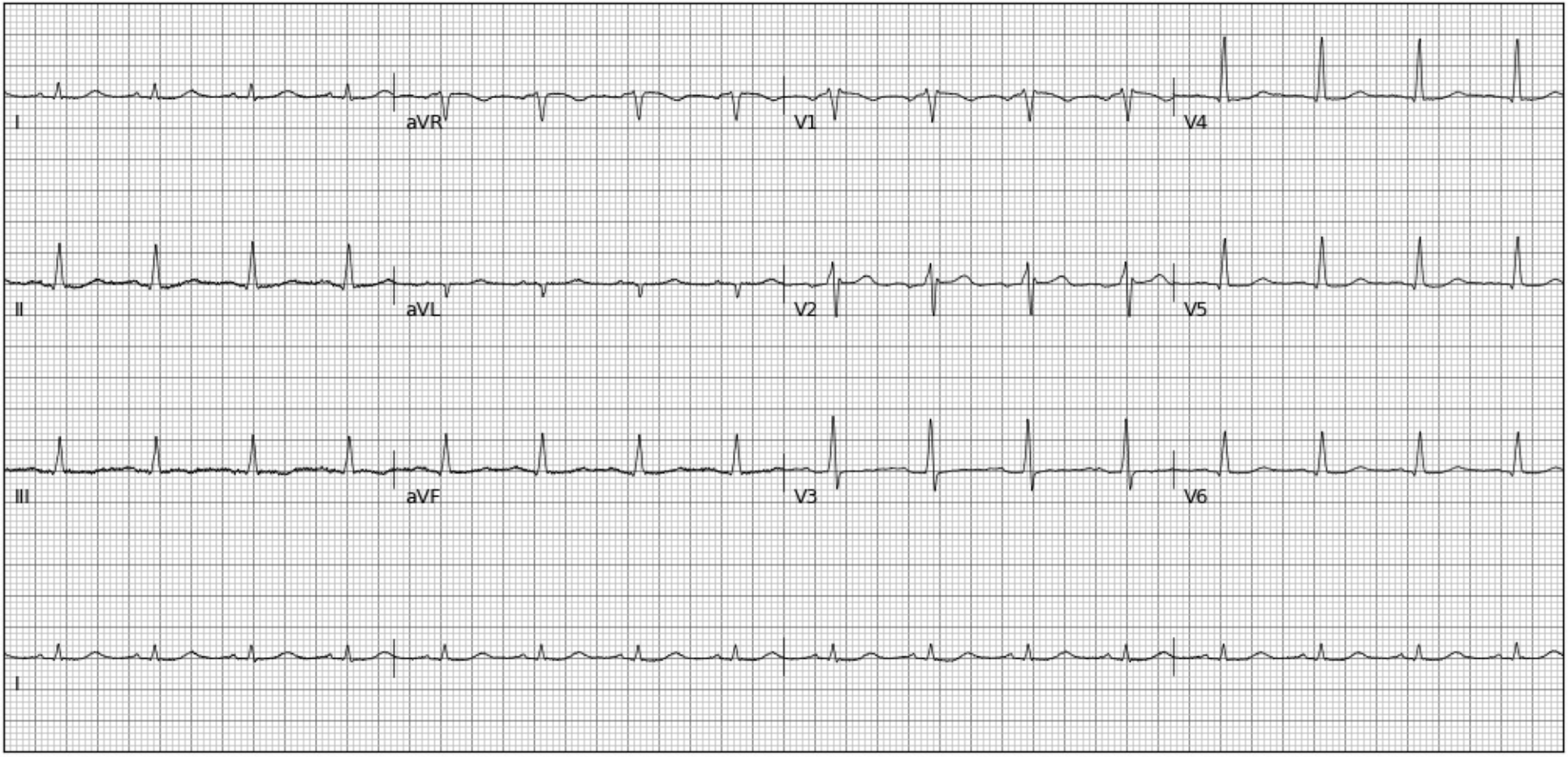
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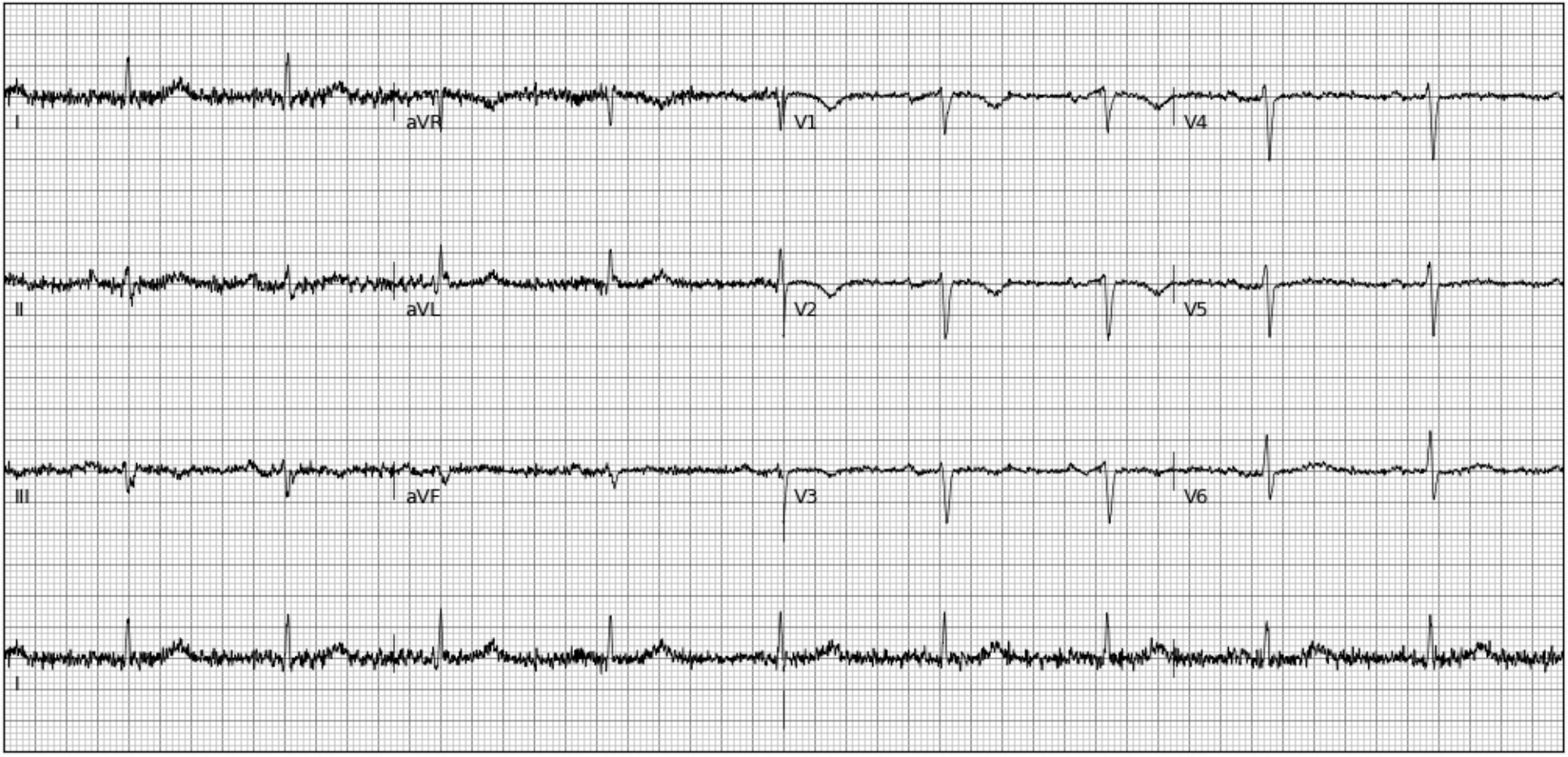
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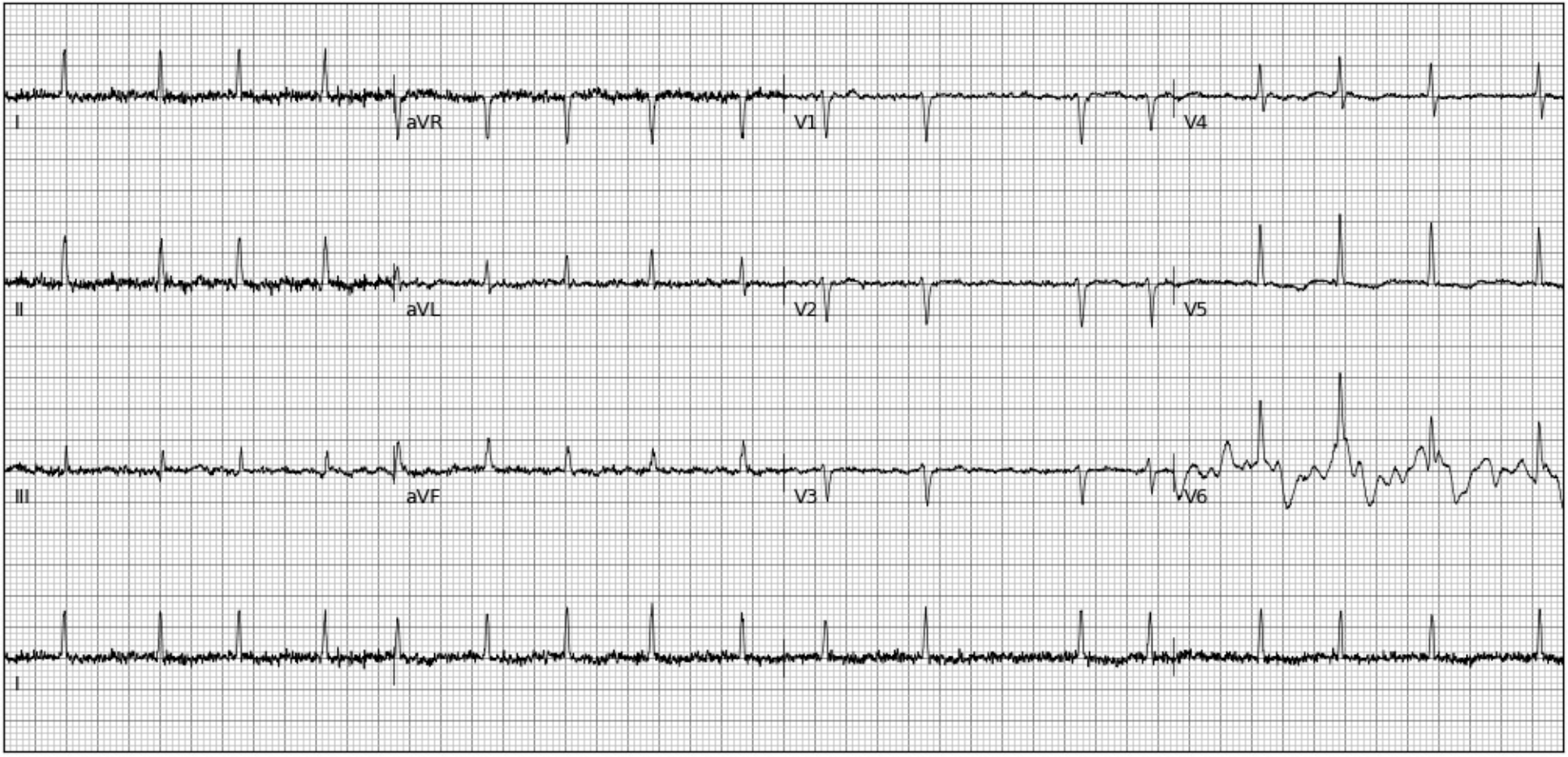
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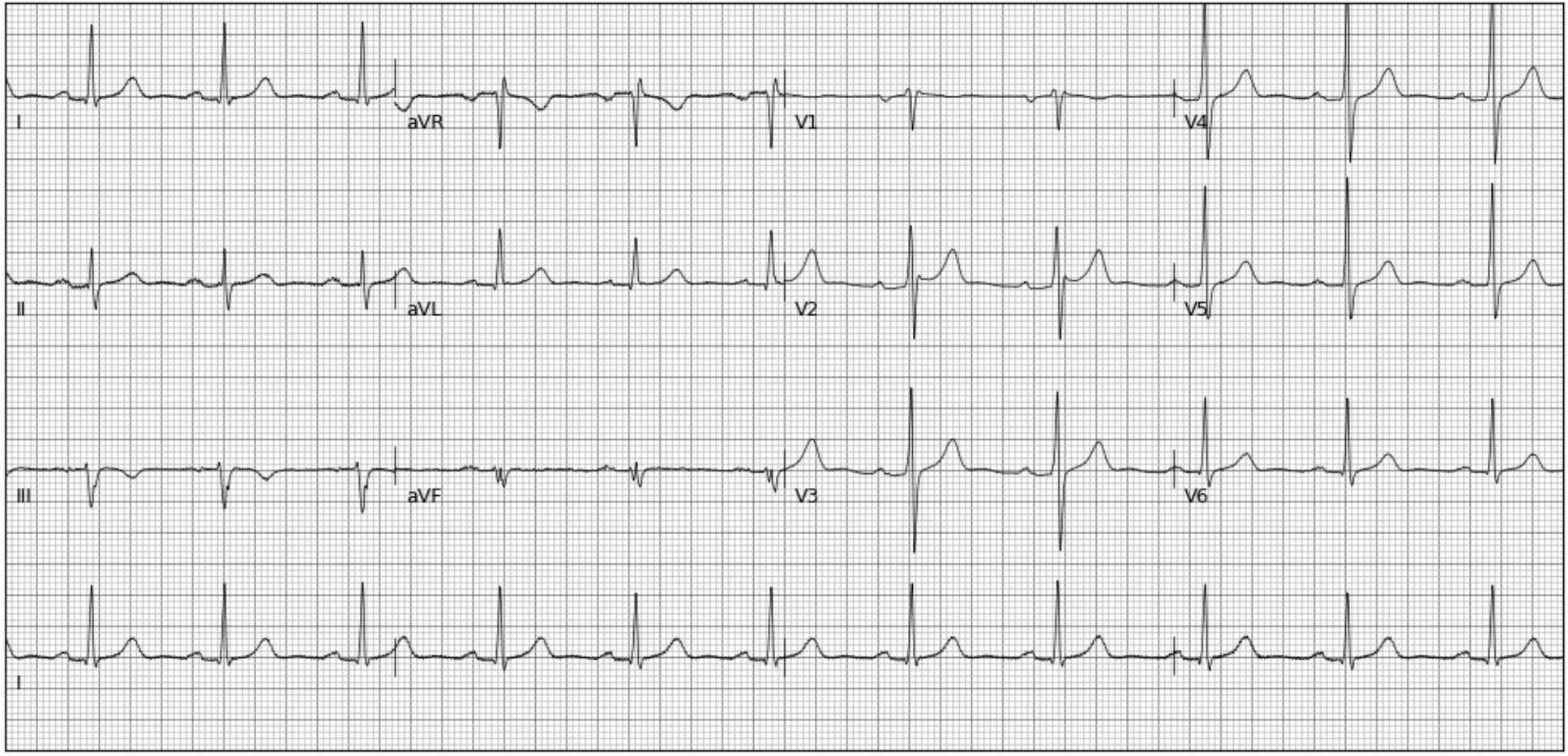
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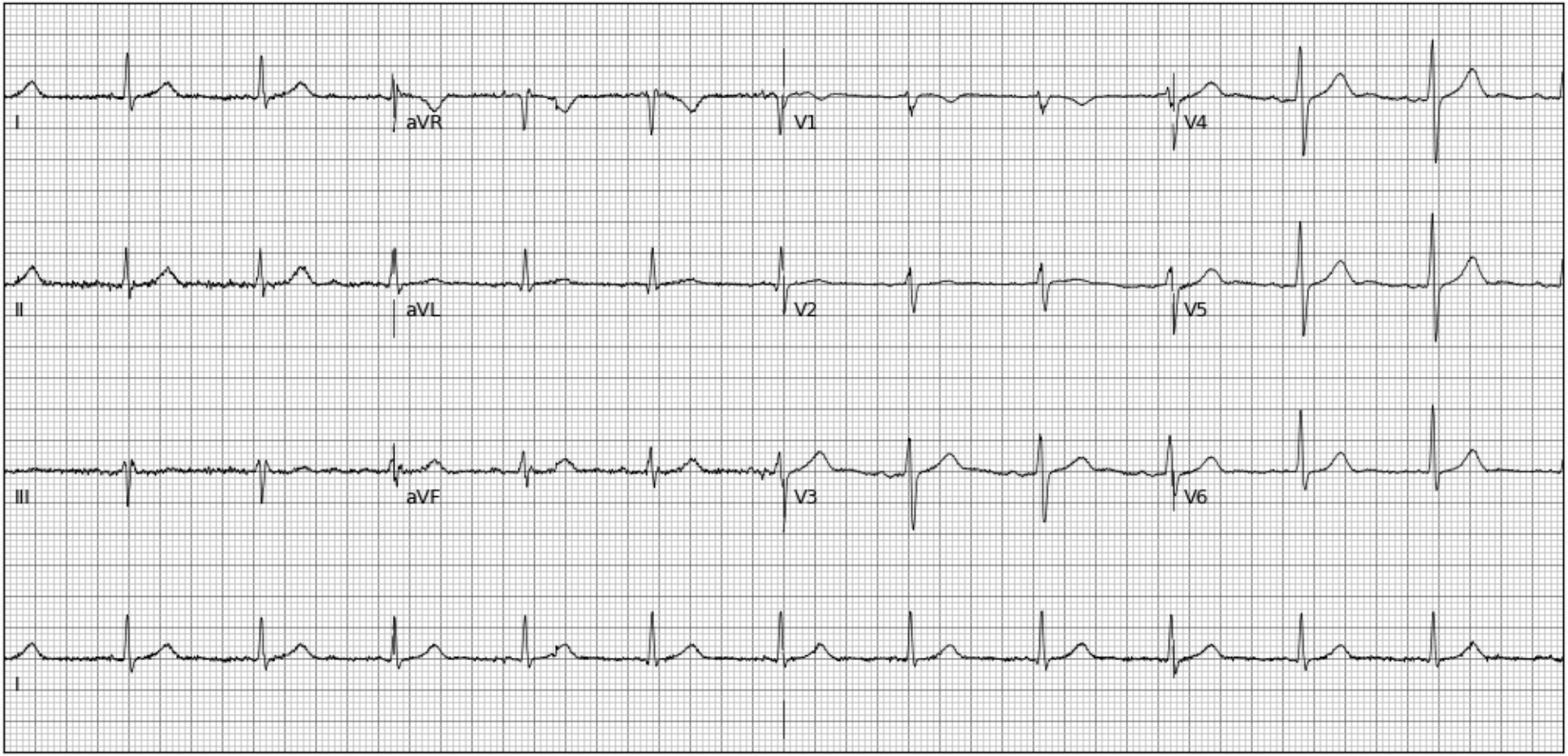
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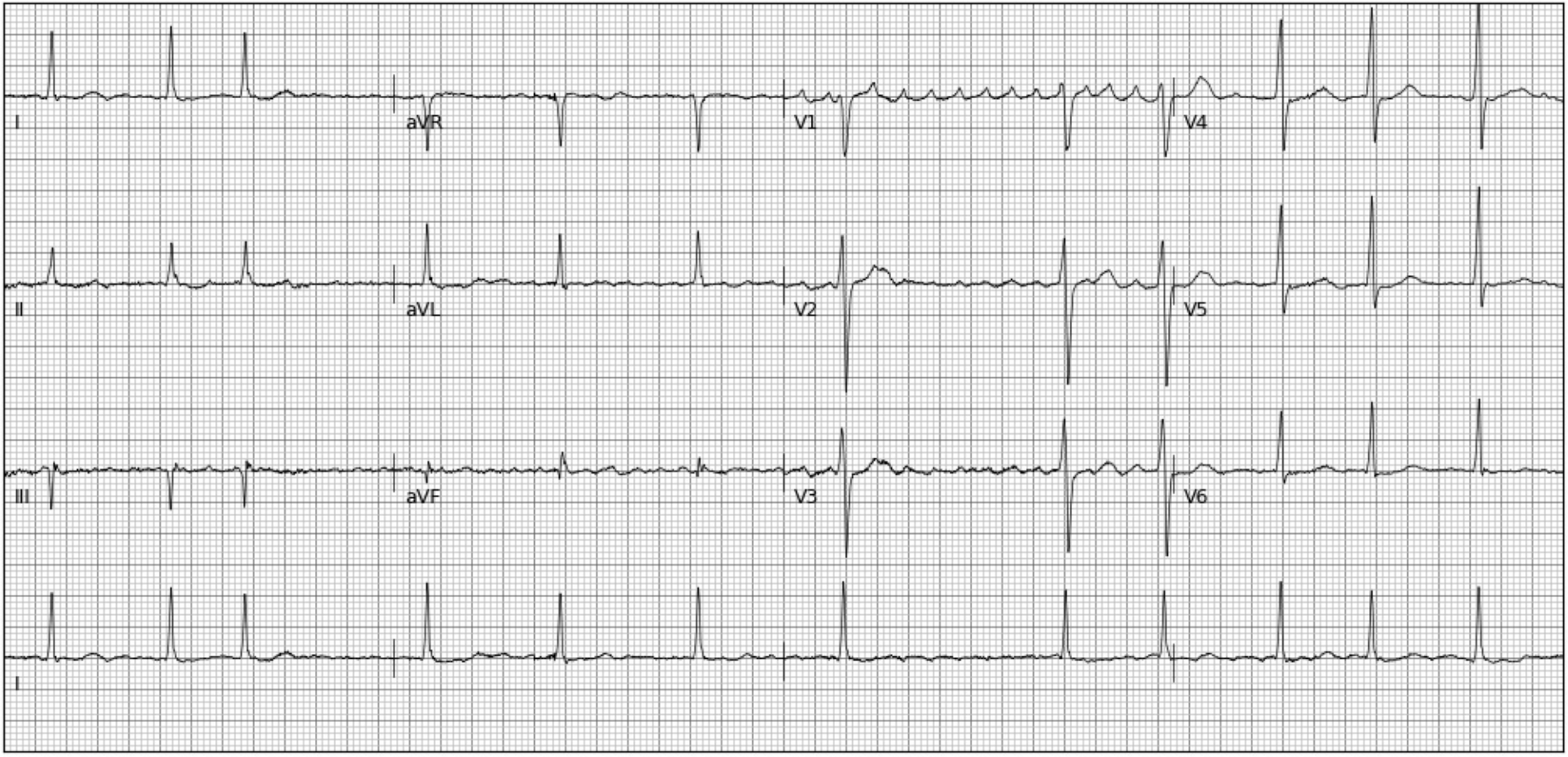
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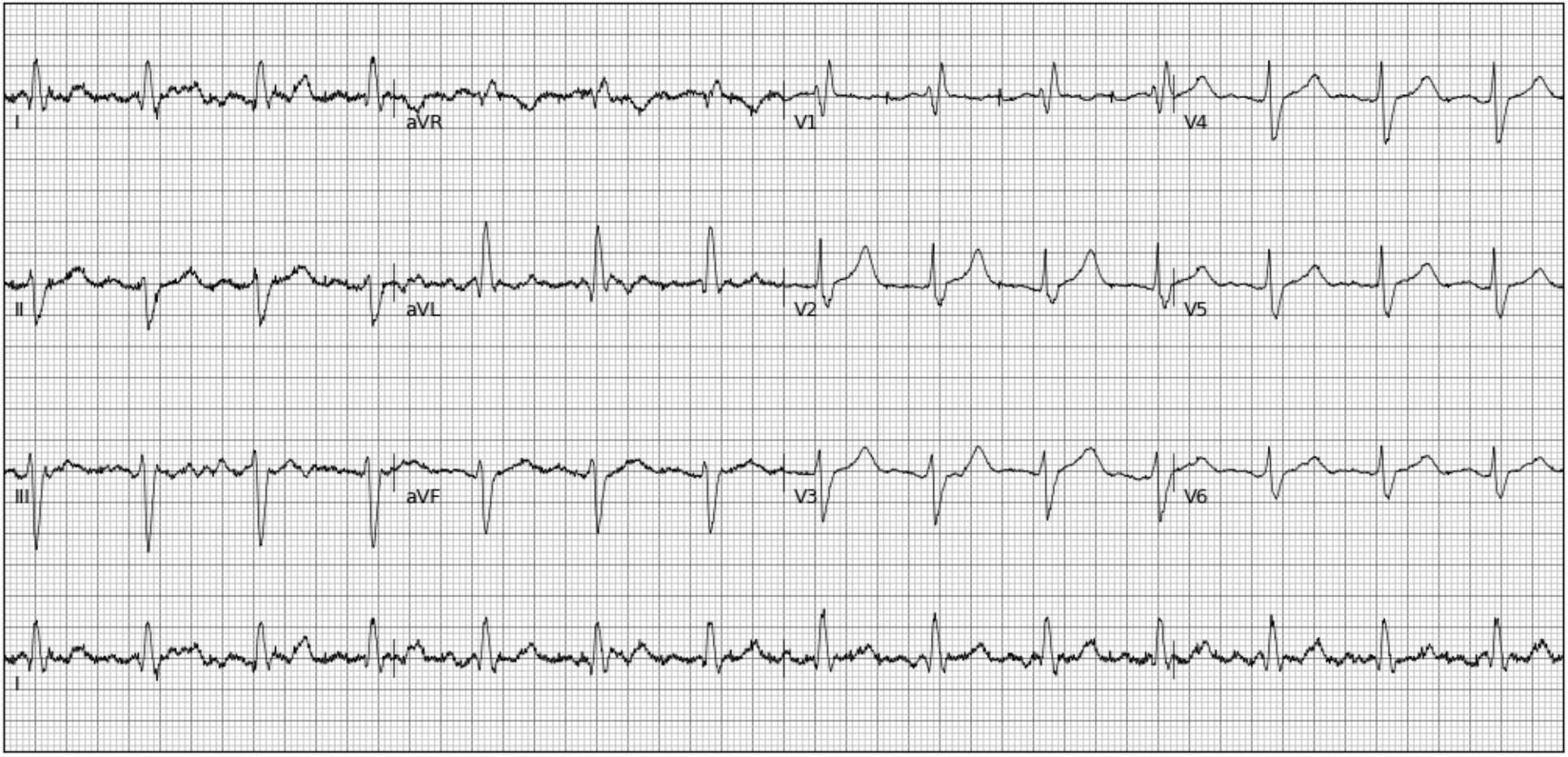
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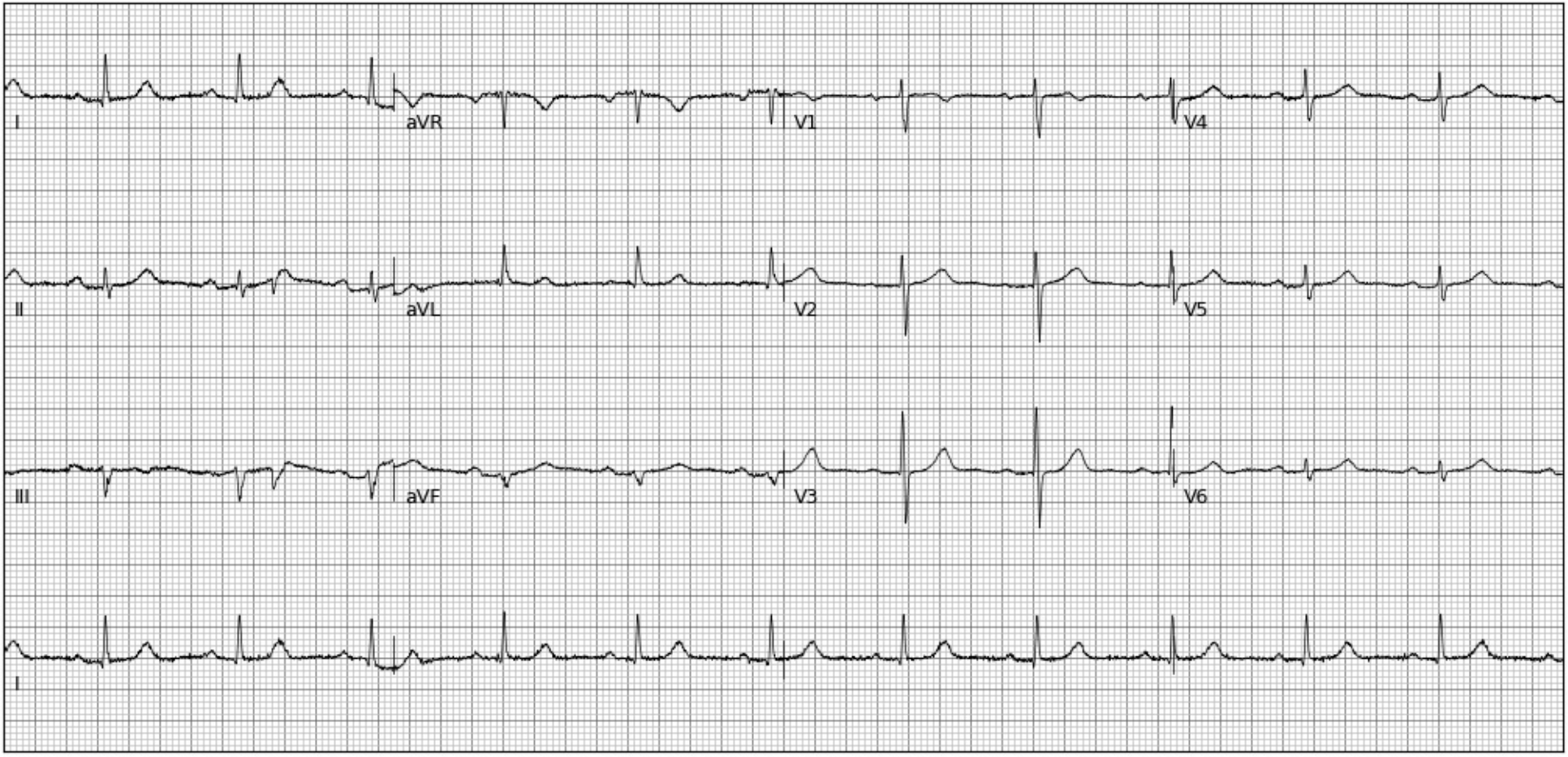
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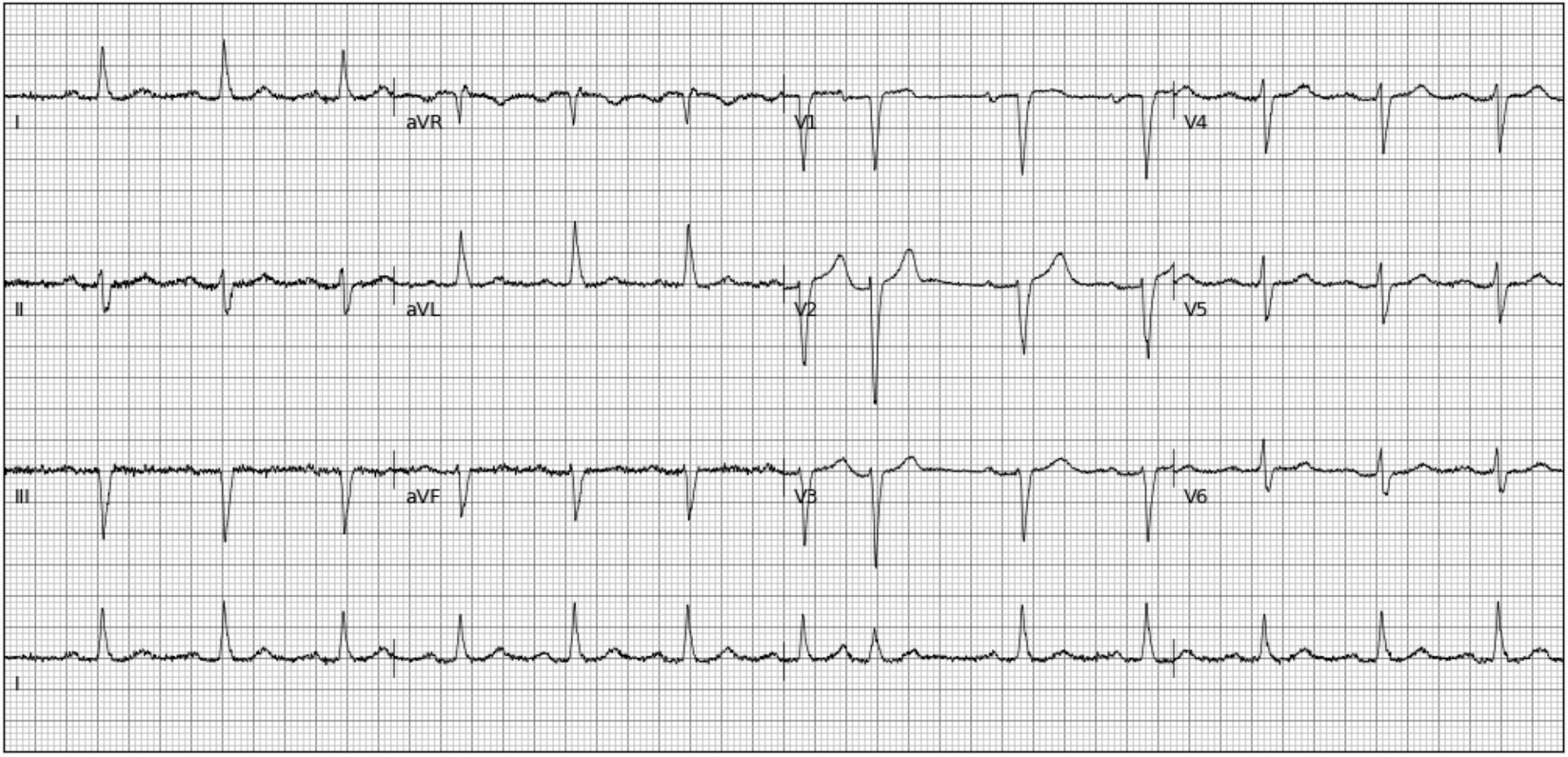
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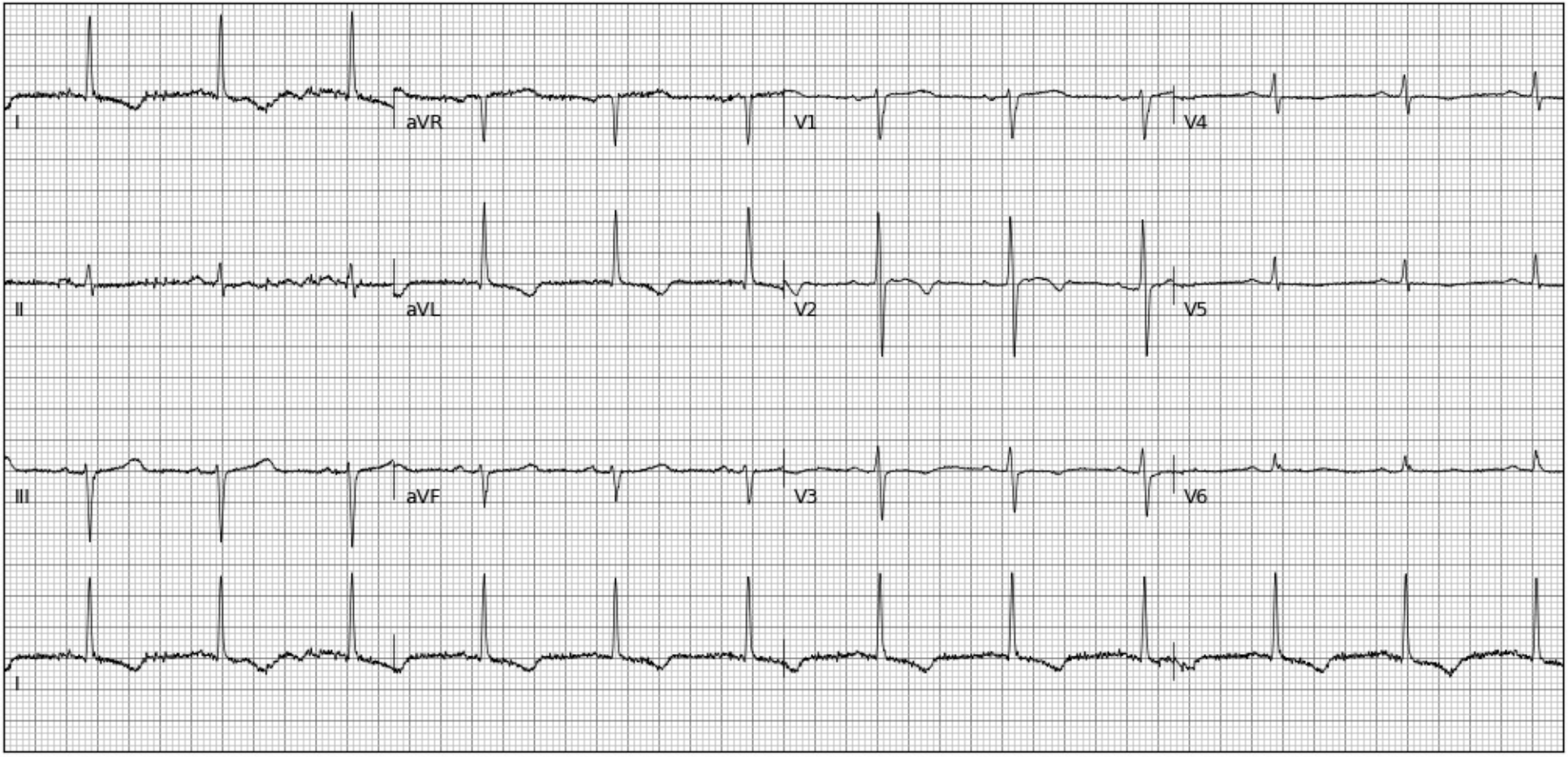
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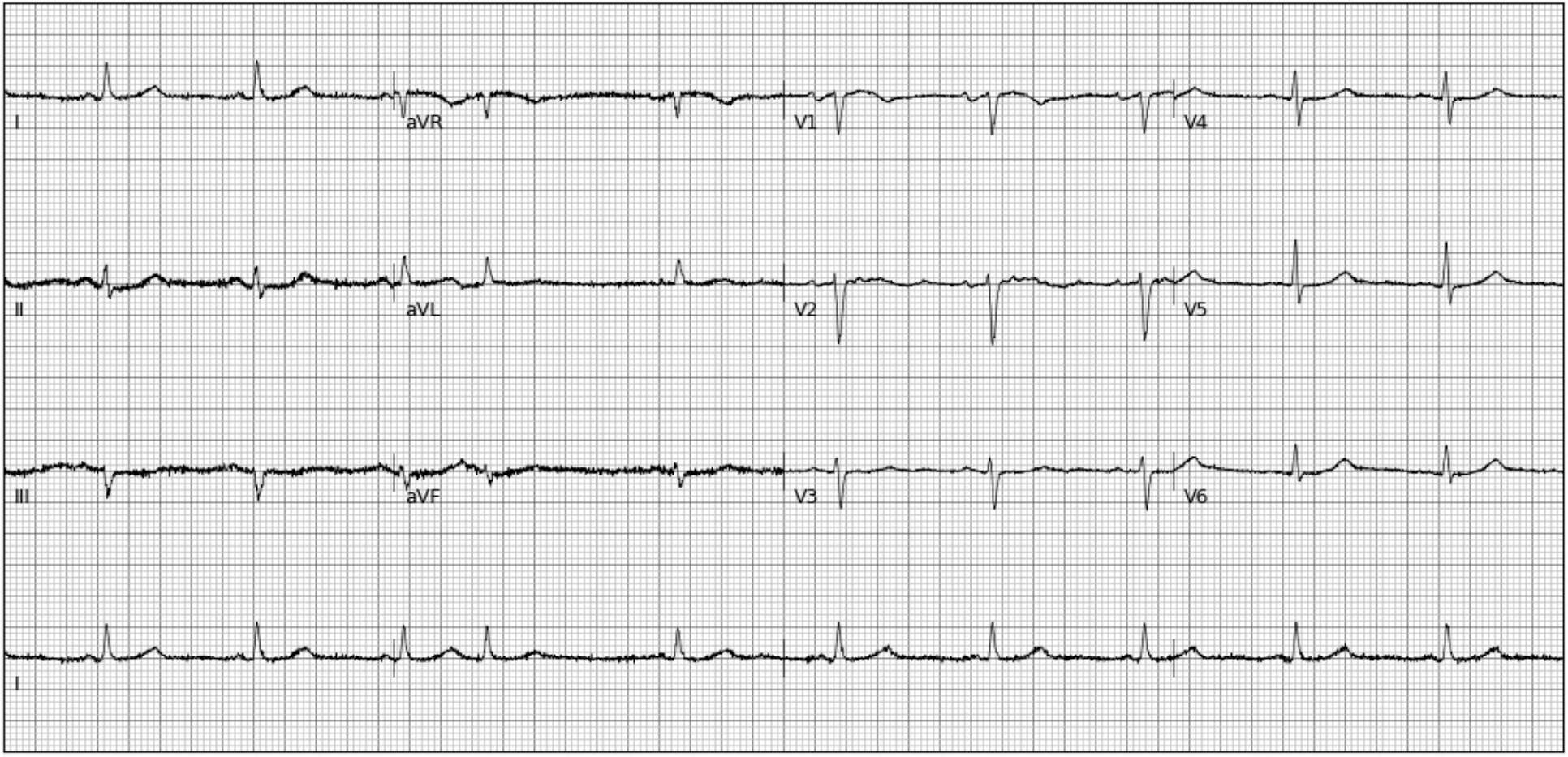
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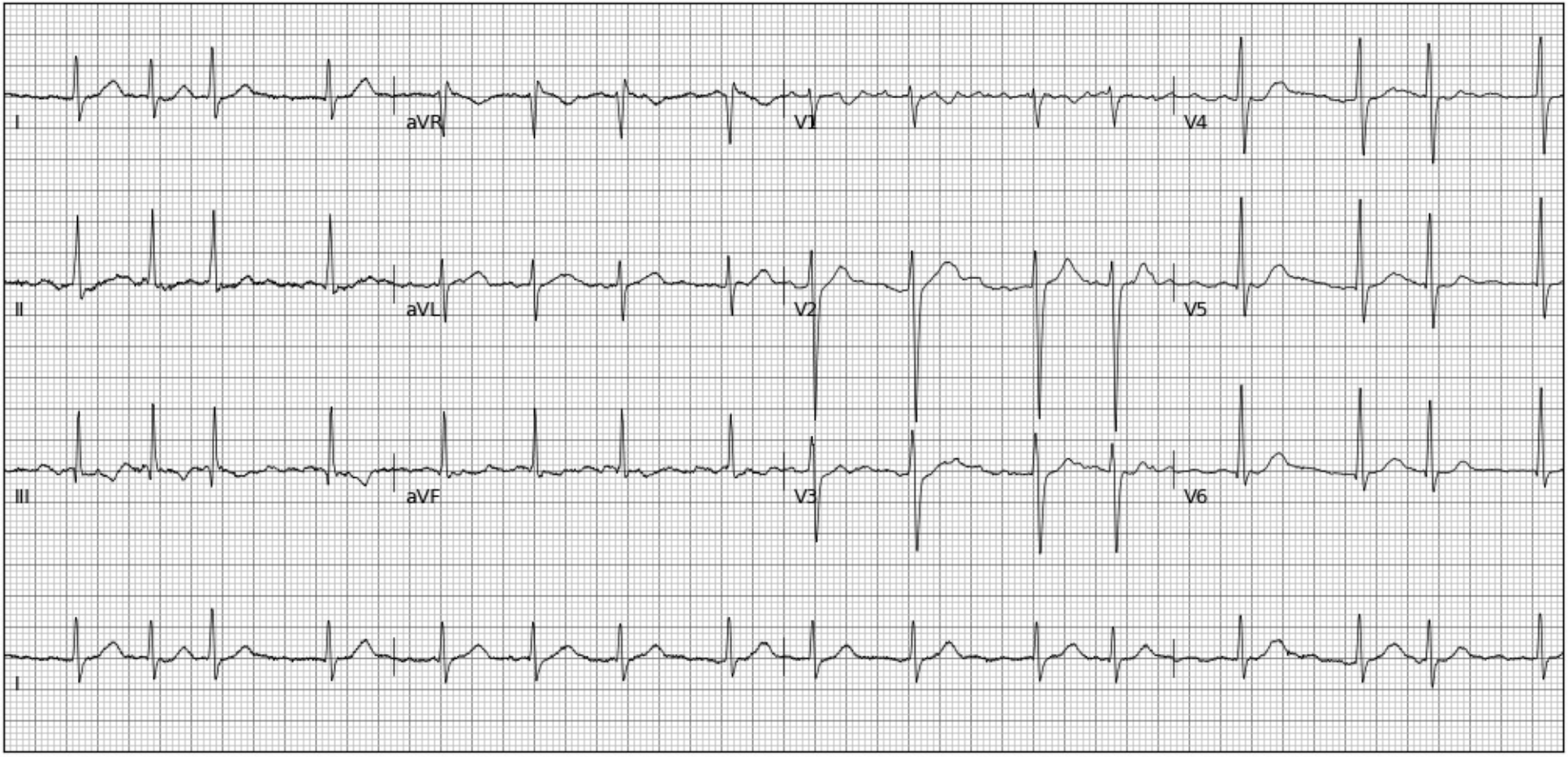
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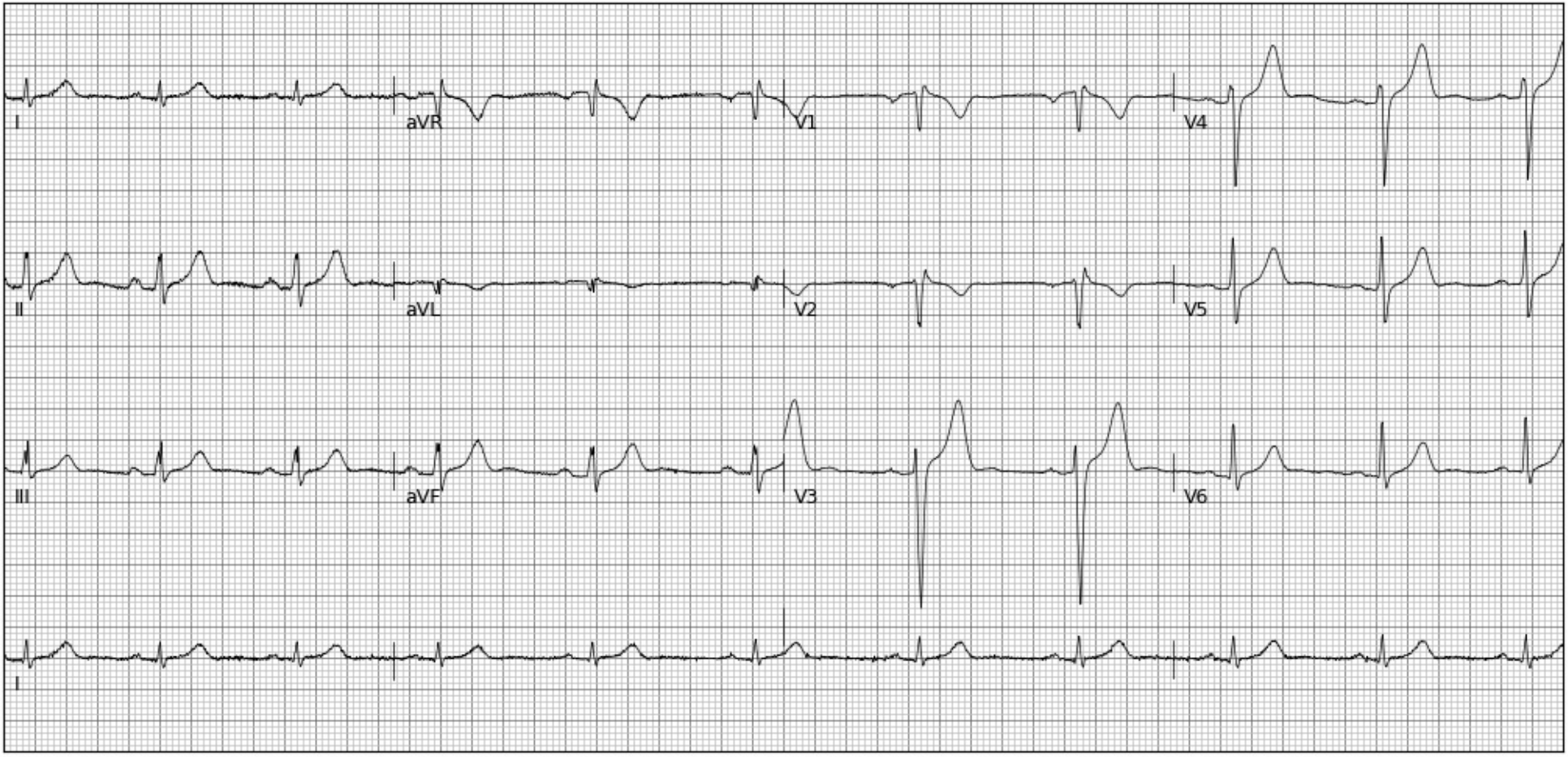
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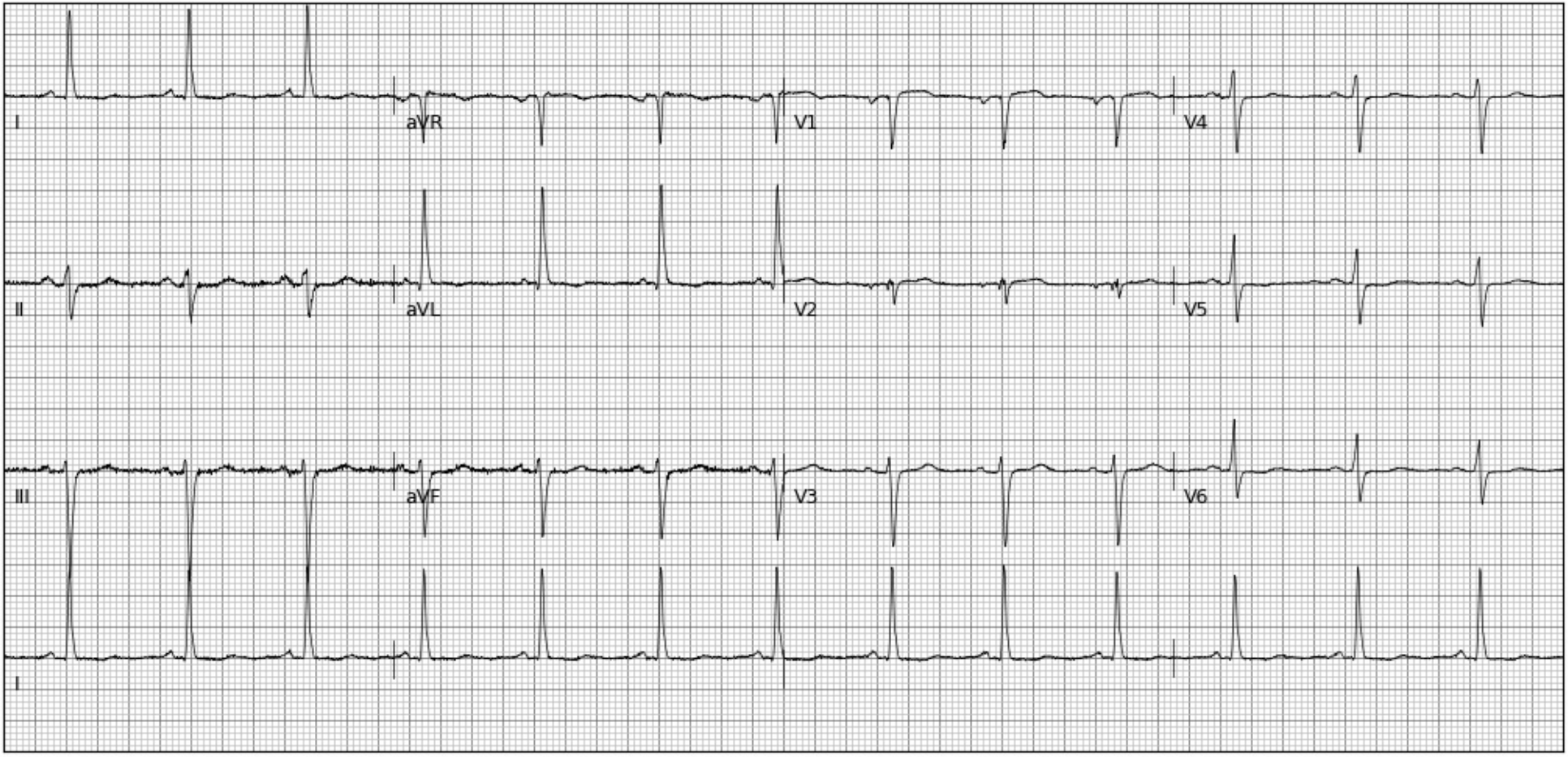
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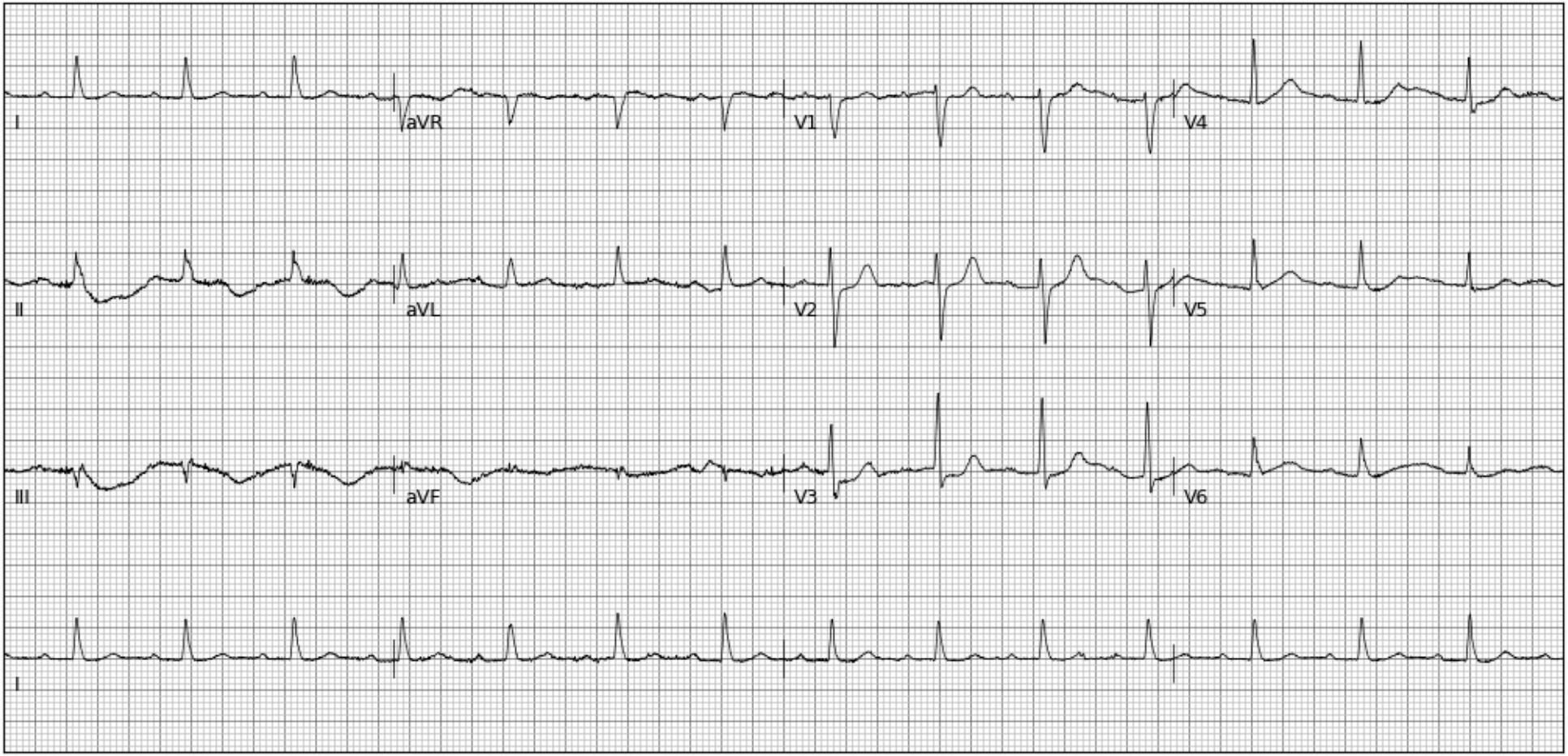
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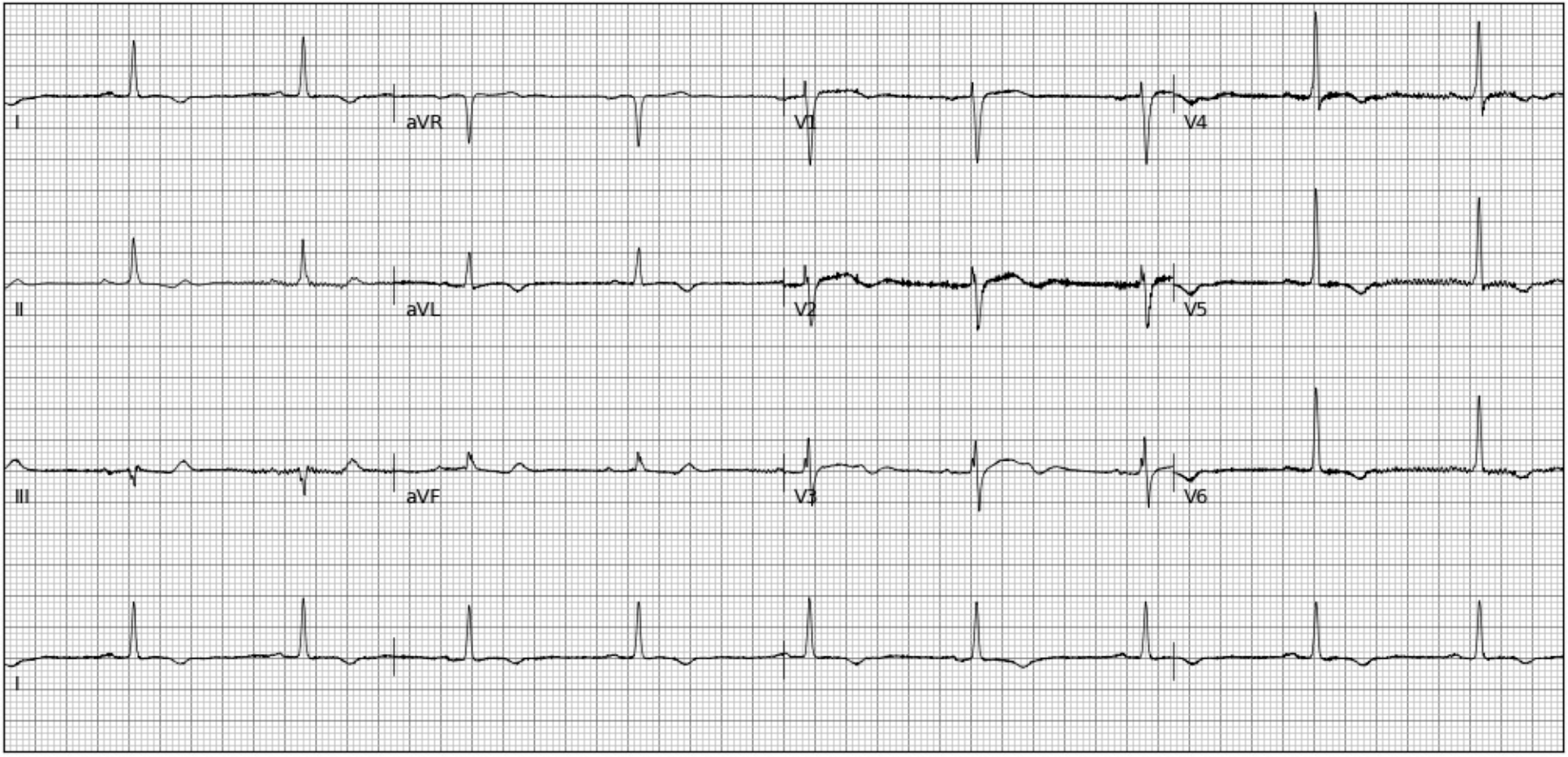
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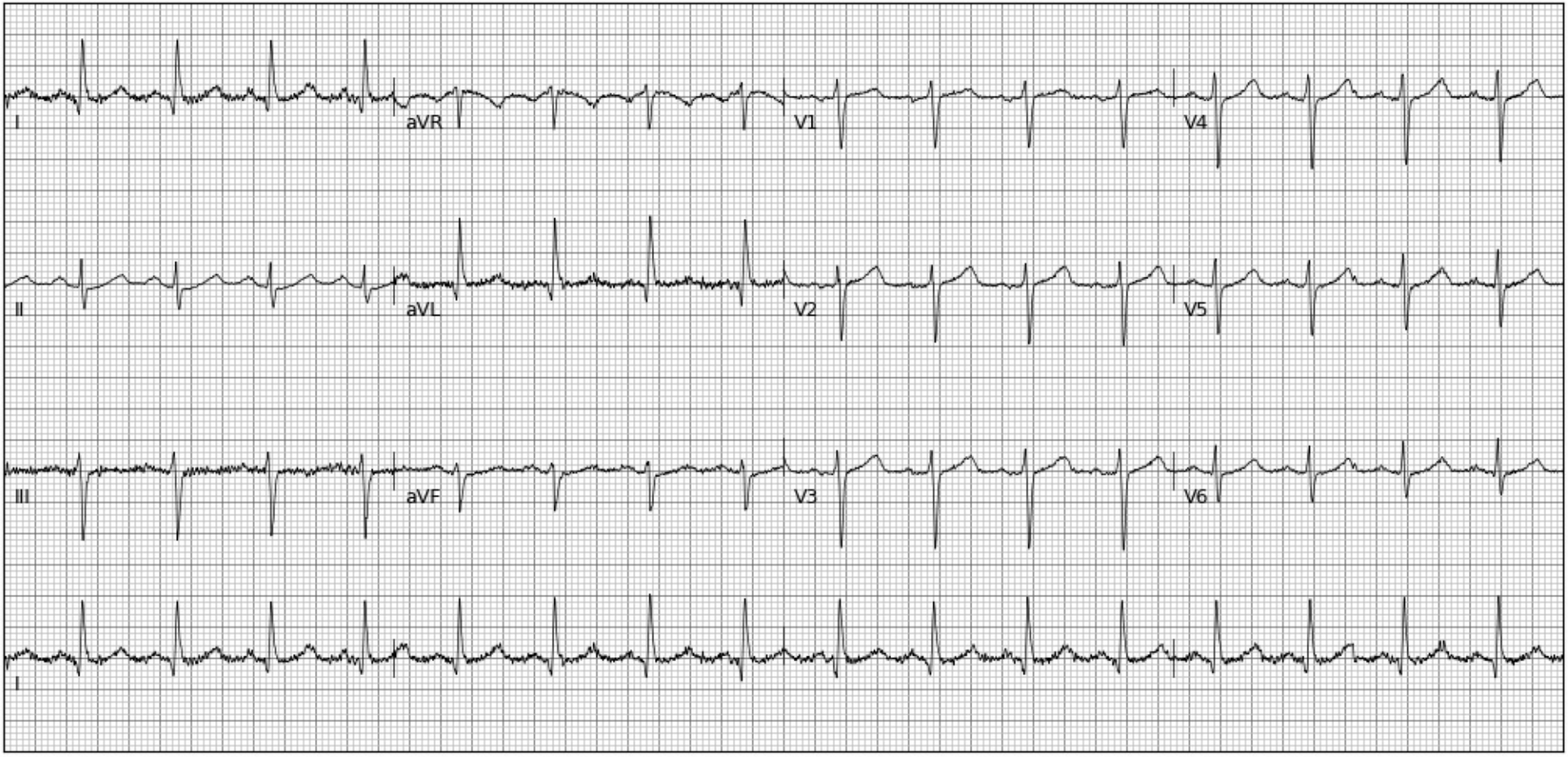
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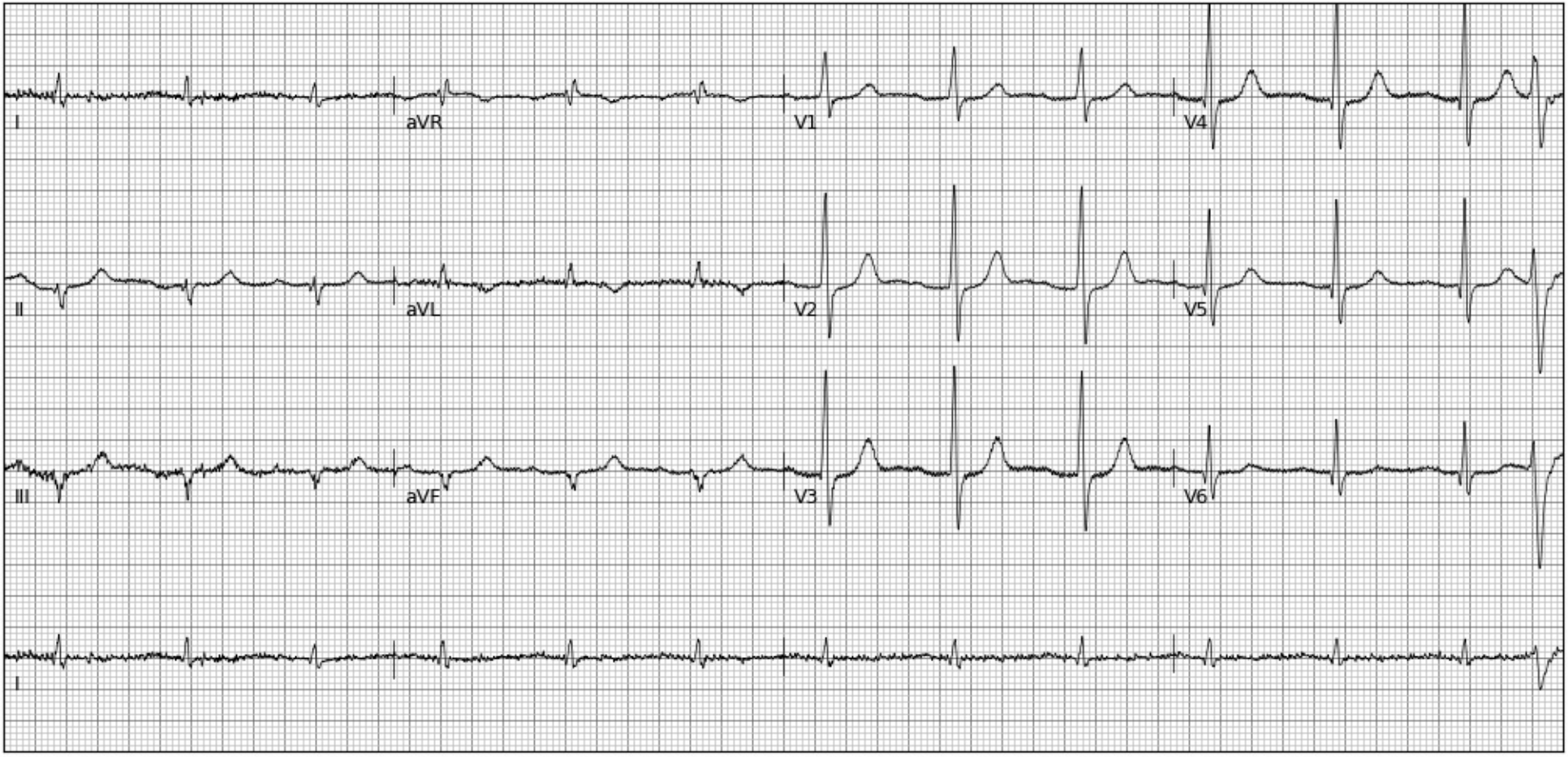
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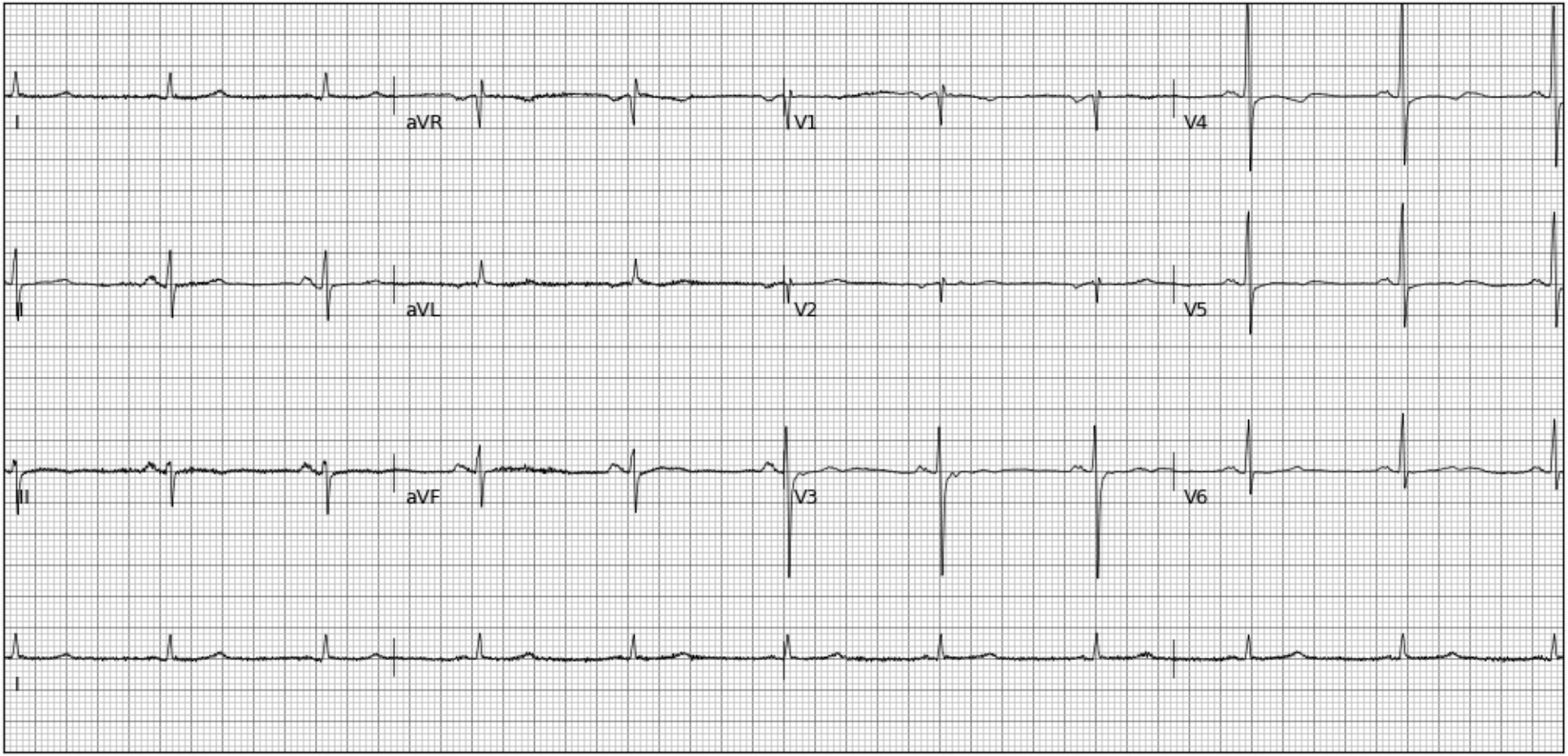
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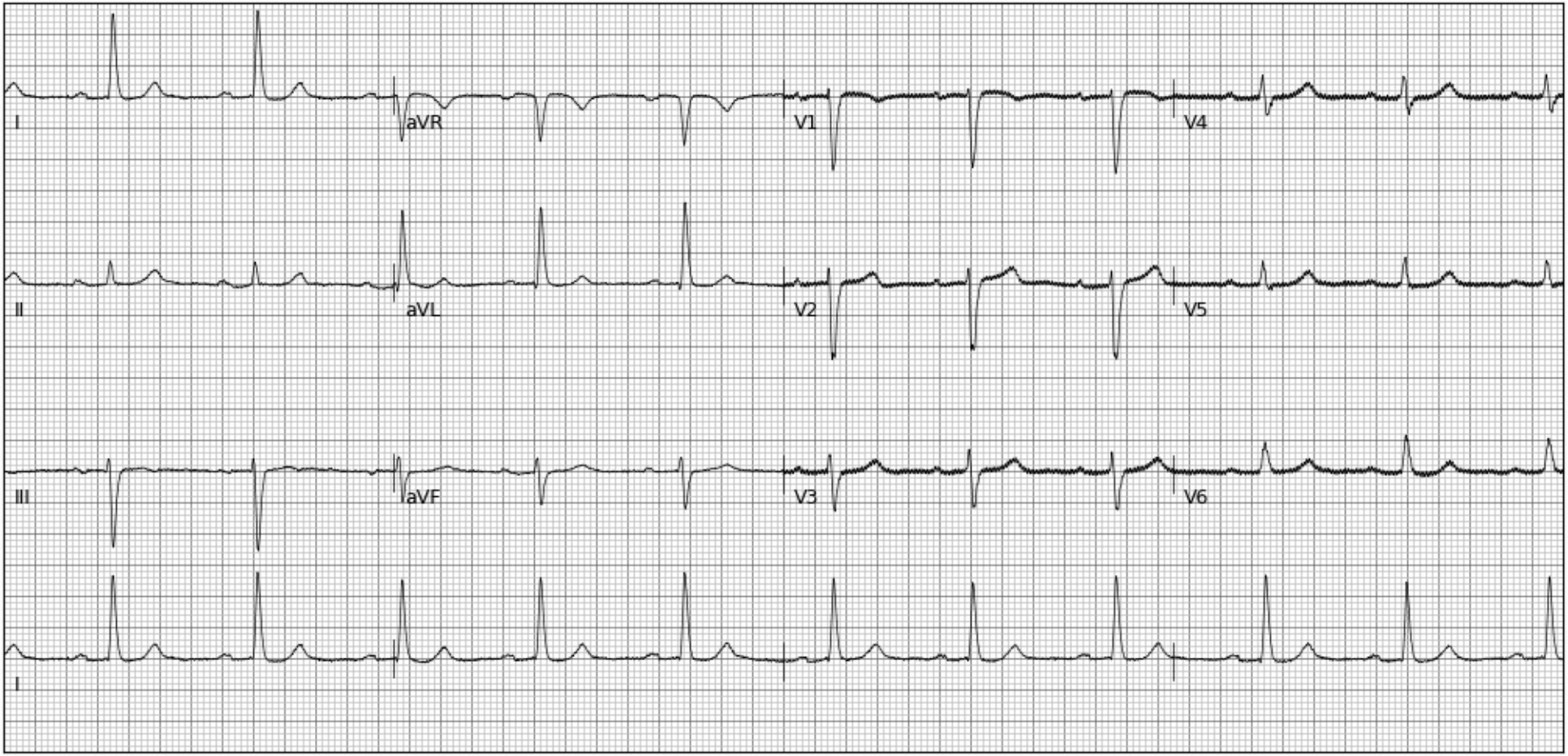
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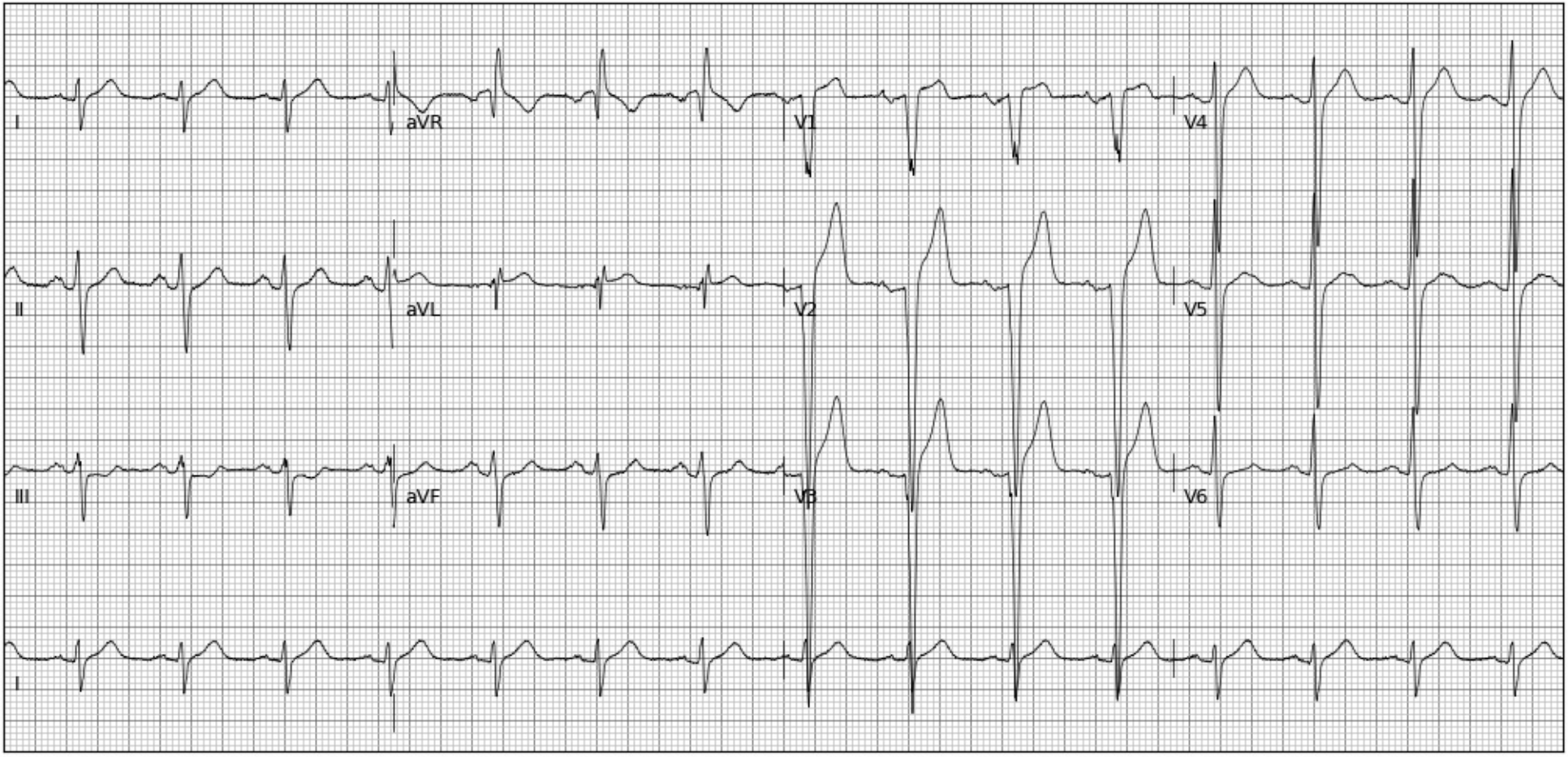
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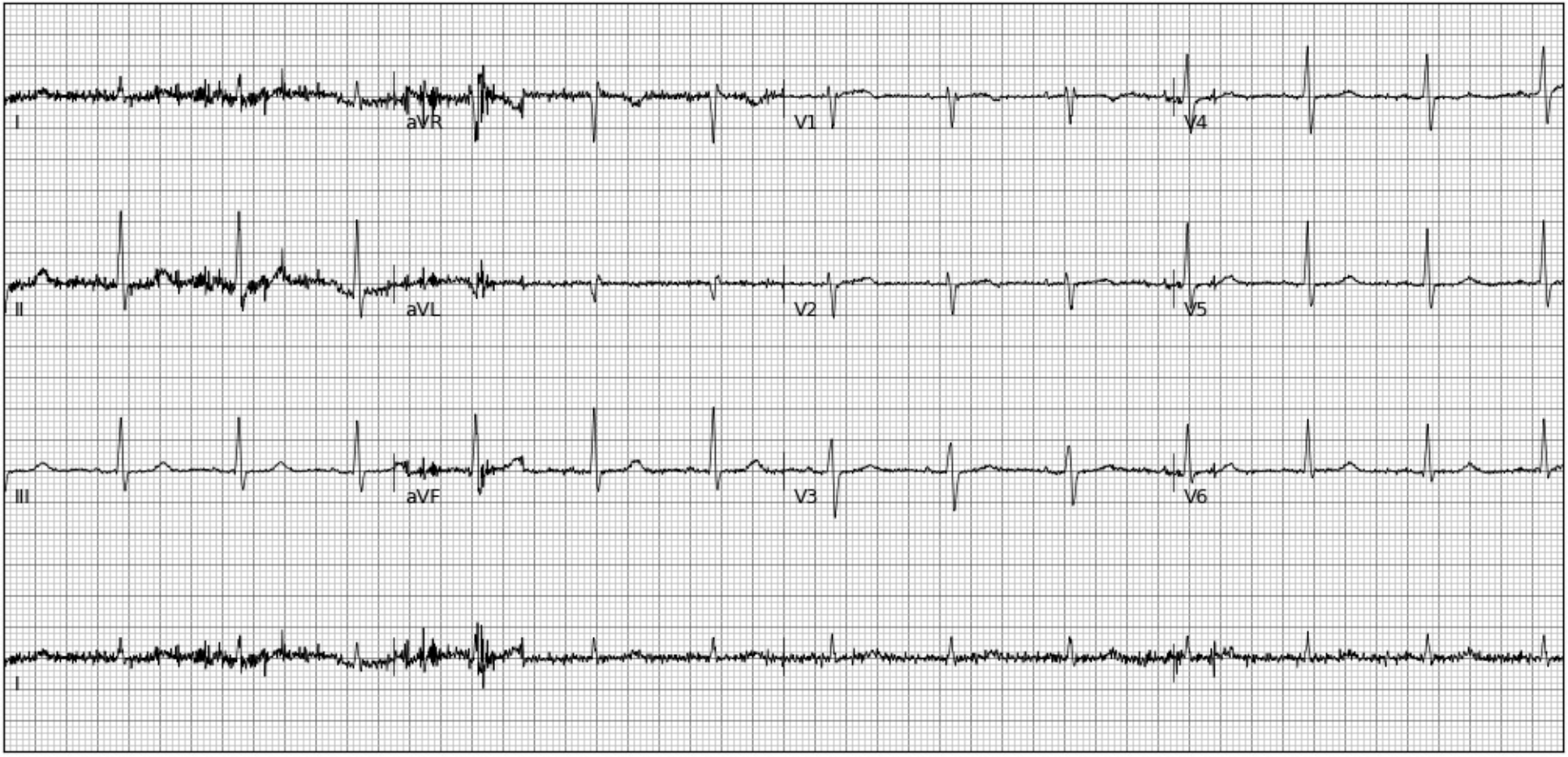
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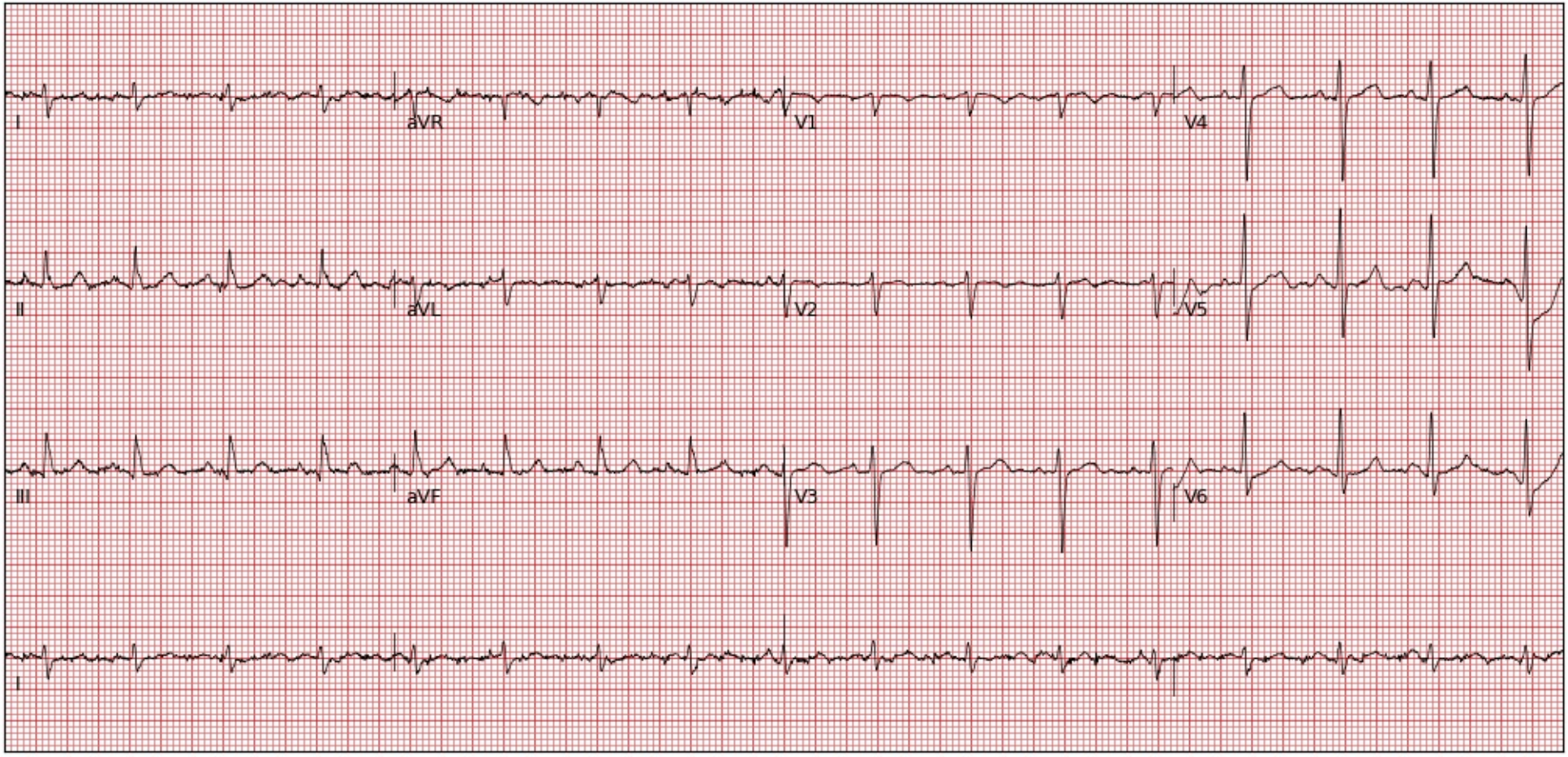
Section 3. Random examples of 25 electrocardiogram images plotted in novel format (Black-on-Red Standard) not encountered during model development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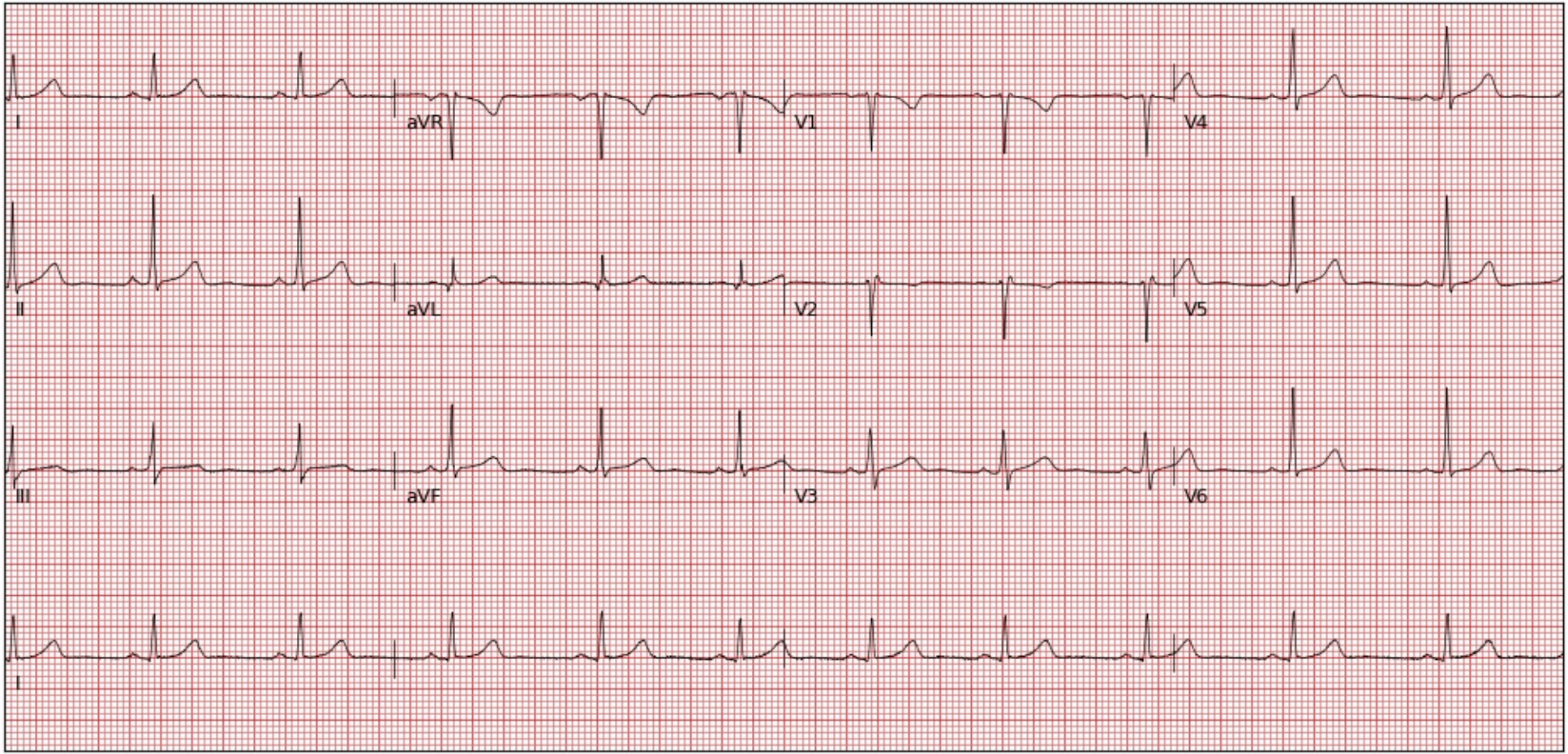
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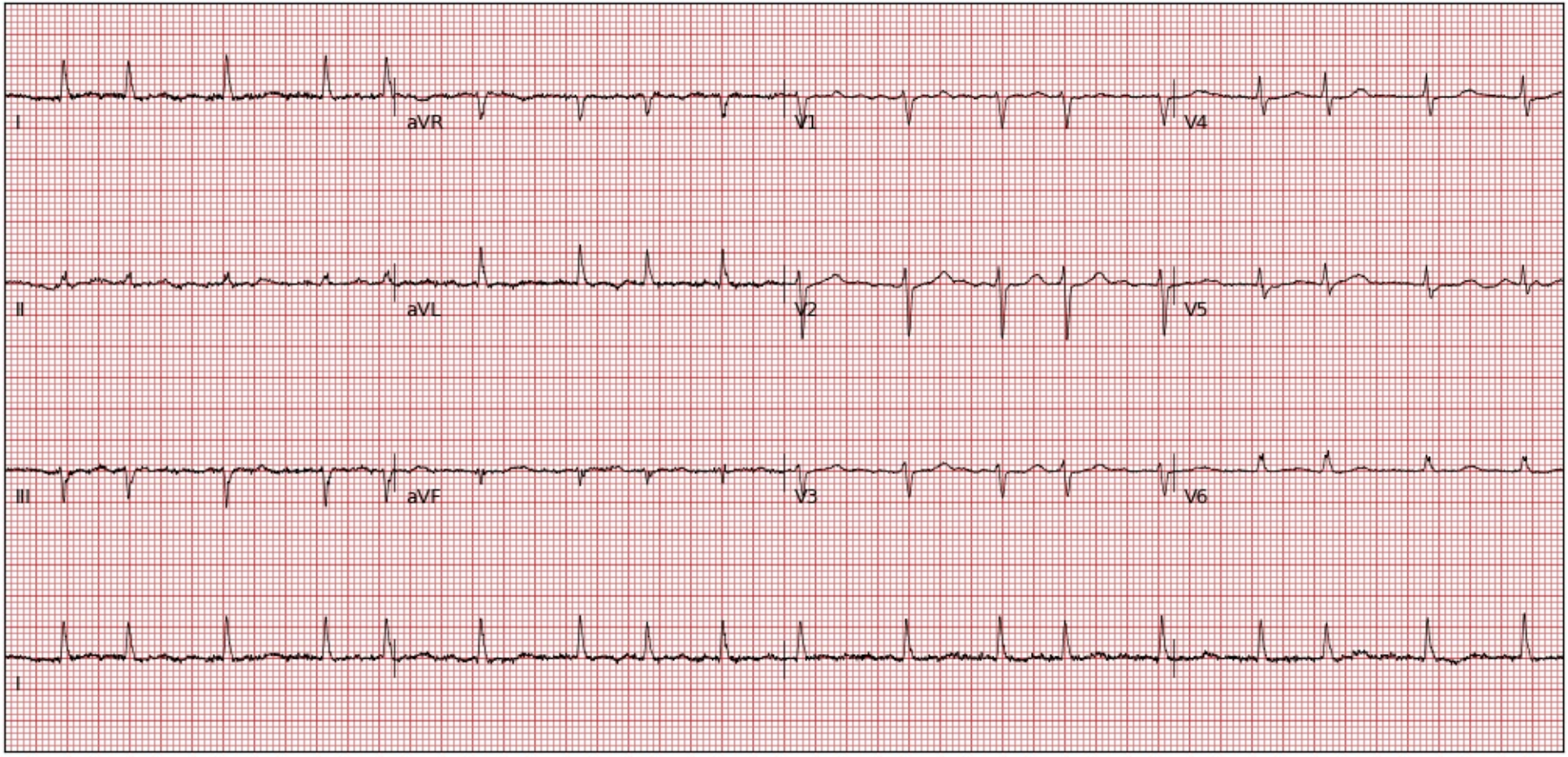
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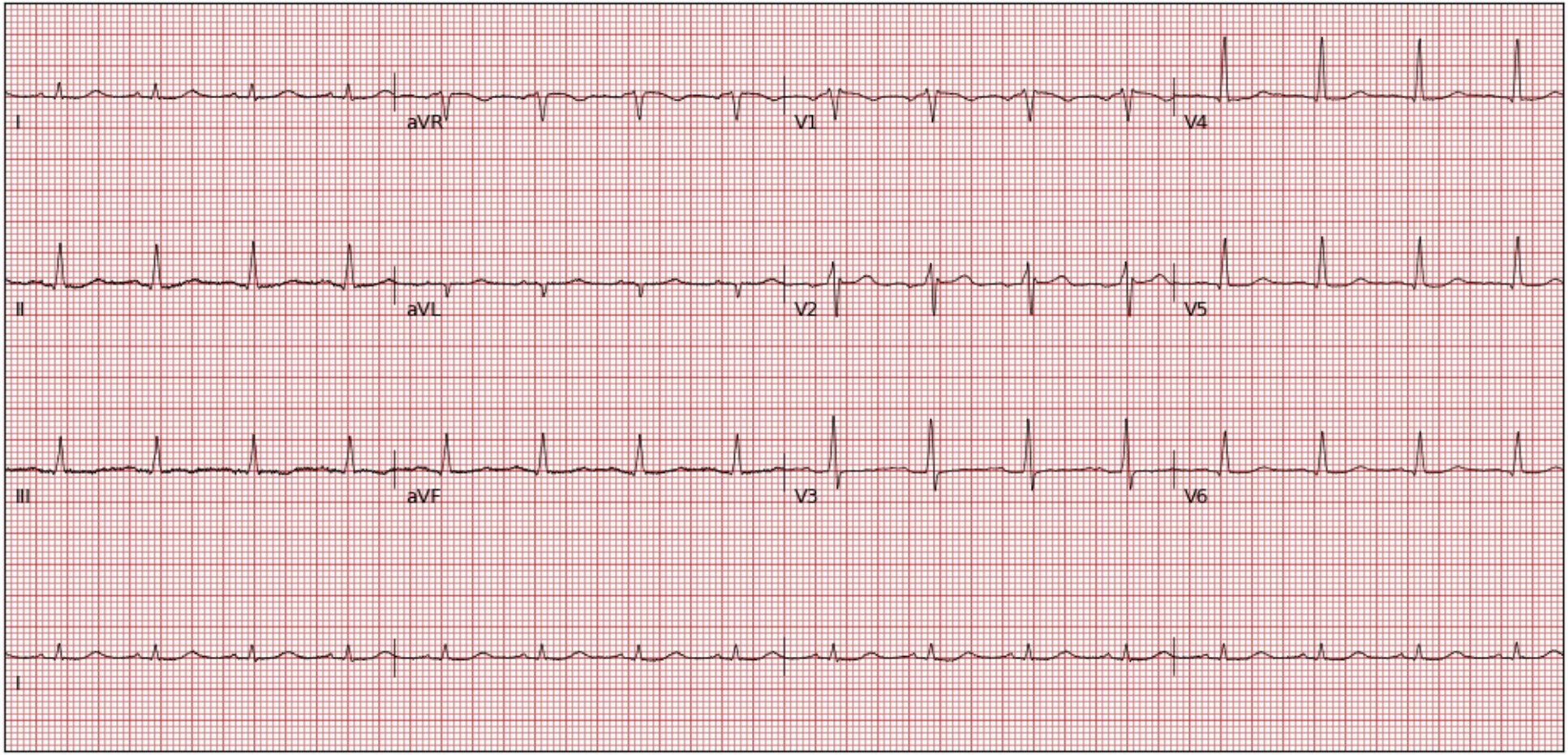
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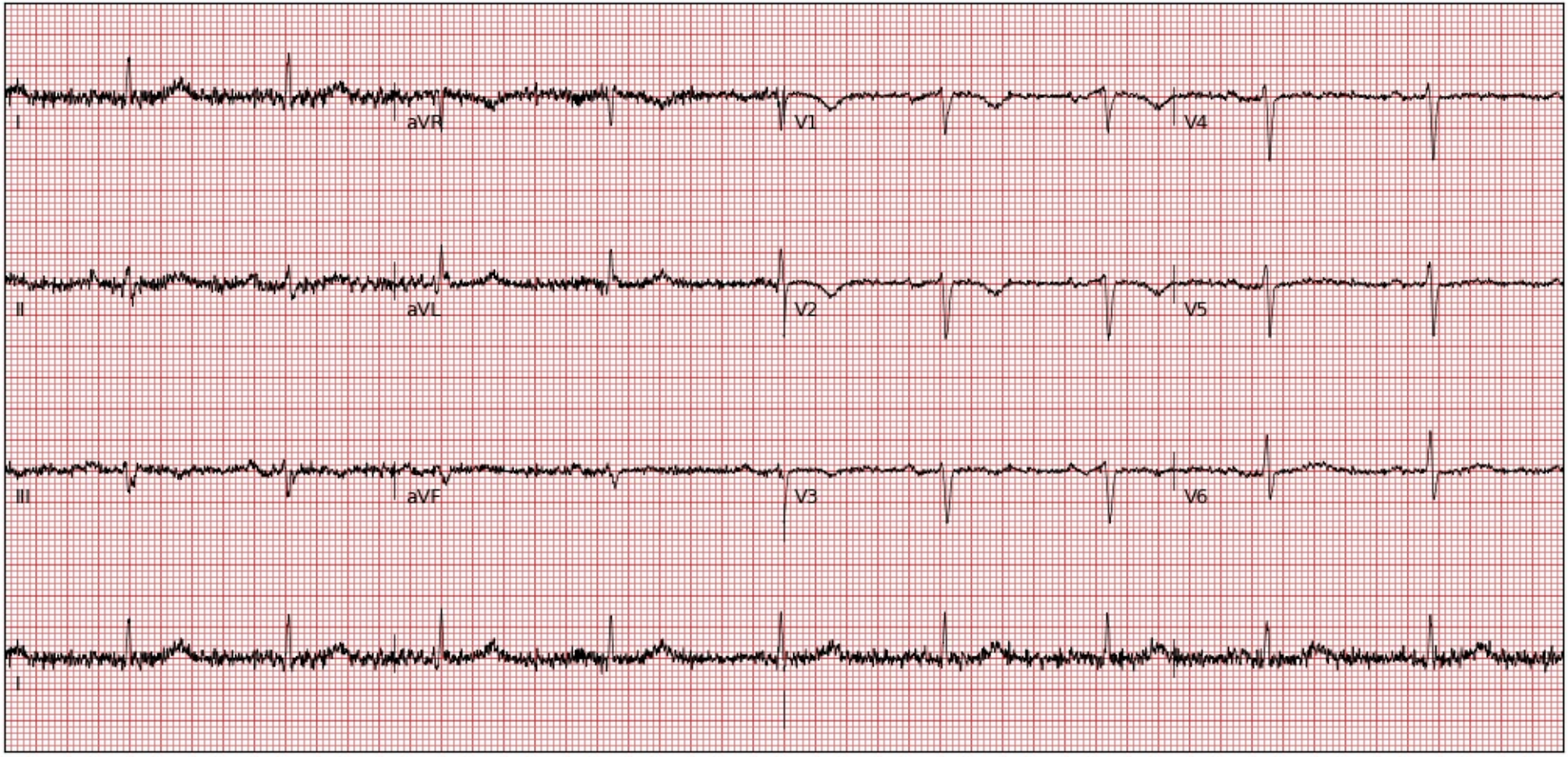
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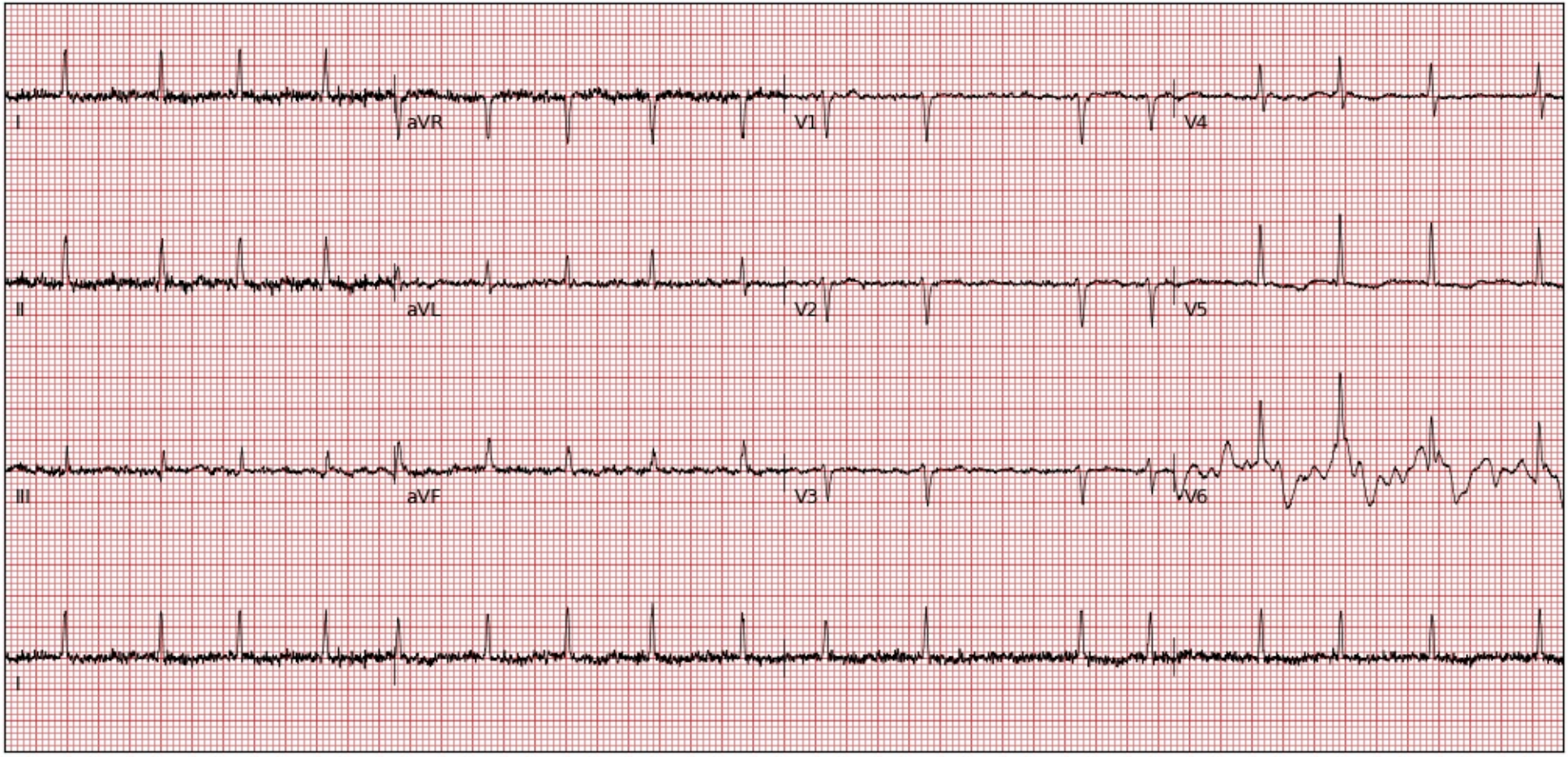
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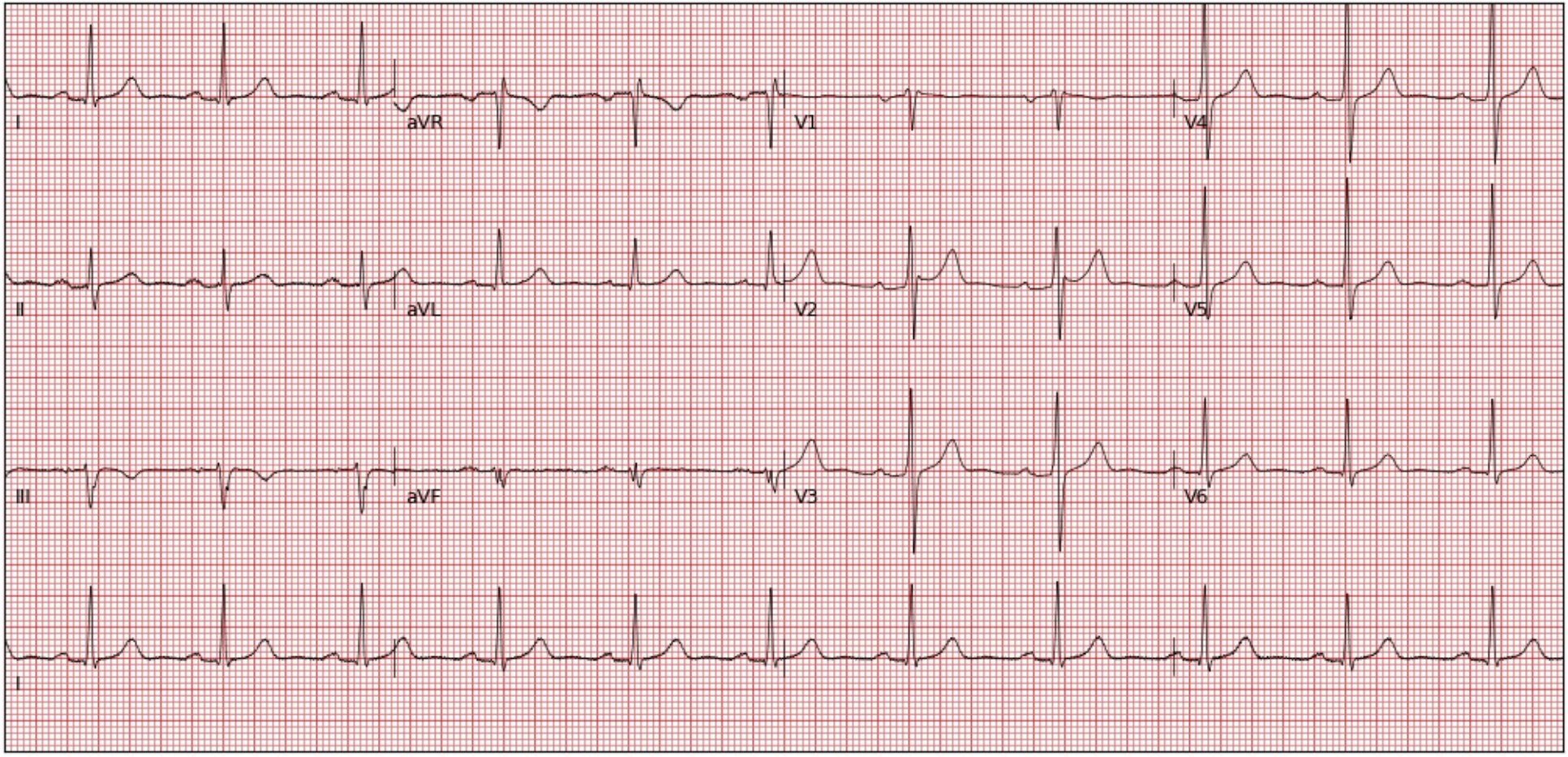
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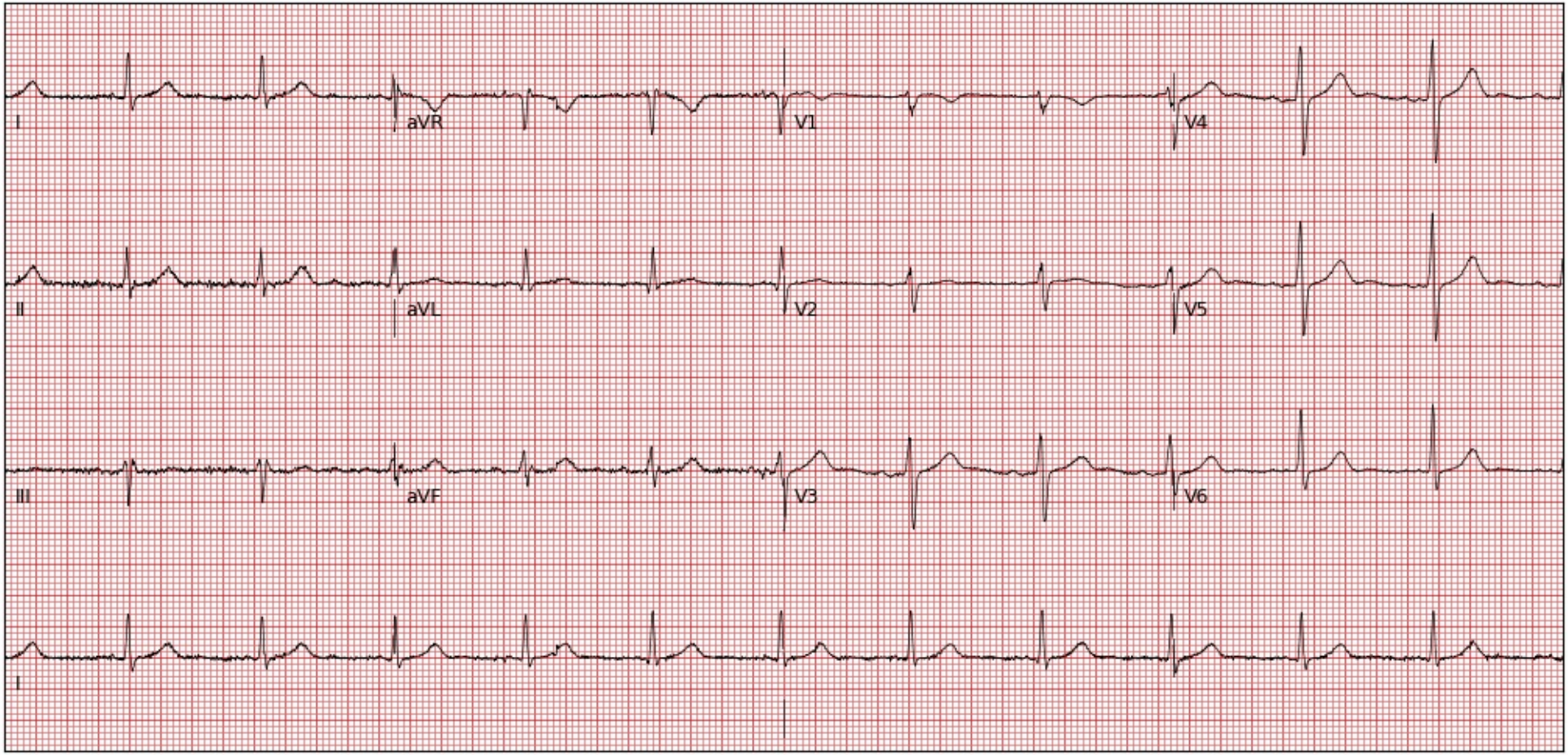
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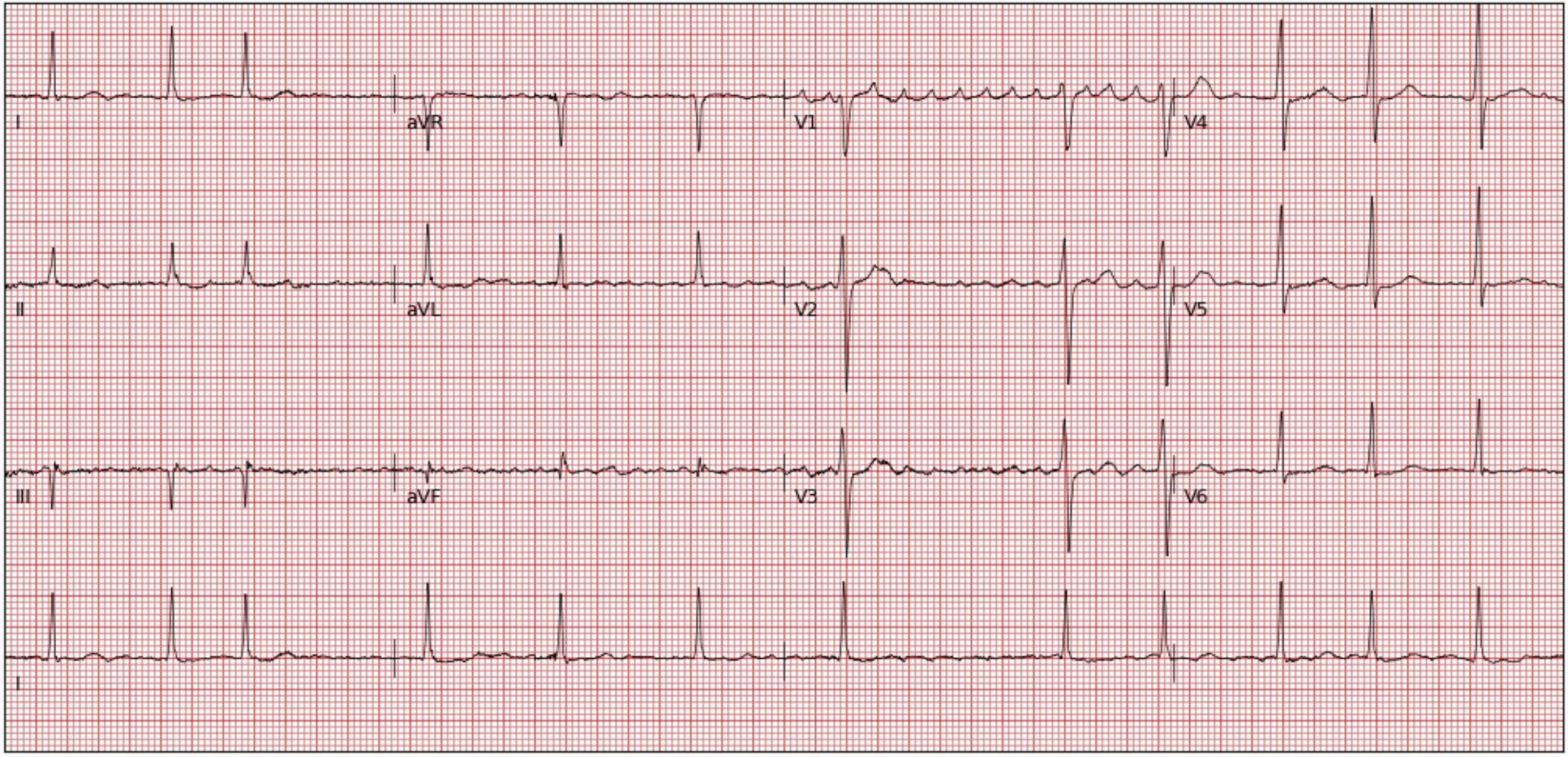
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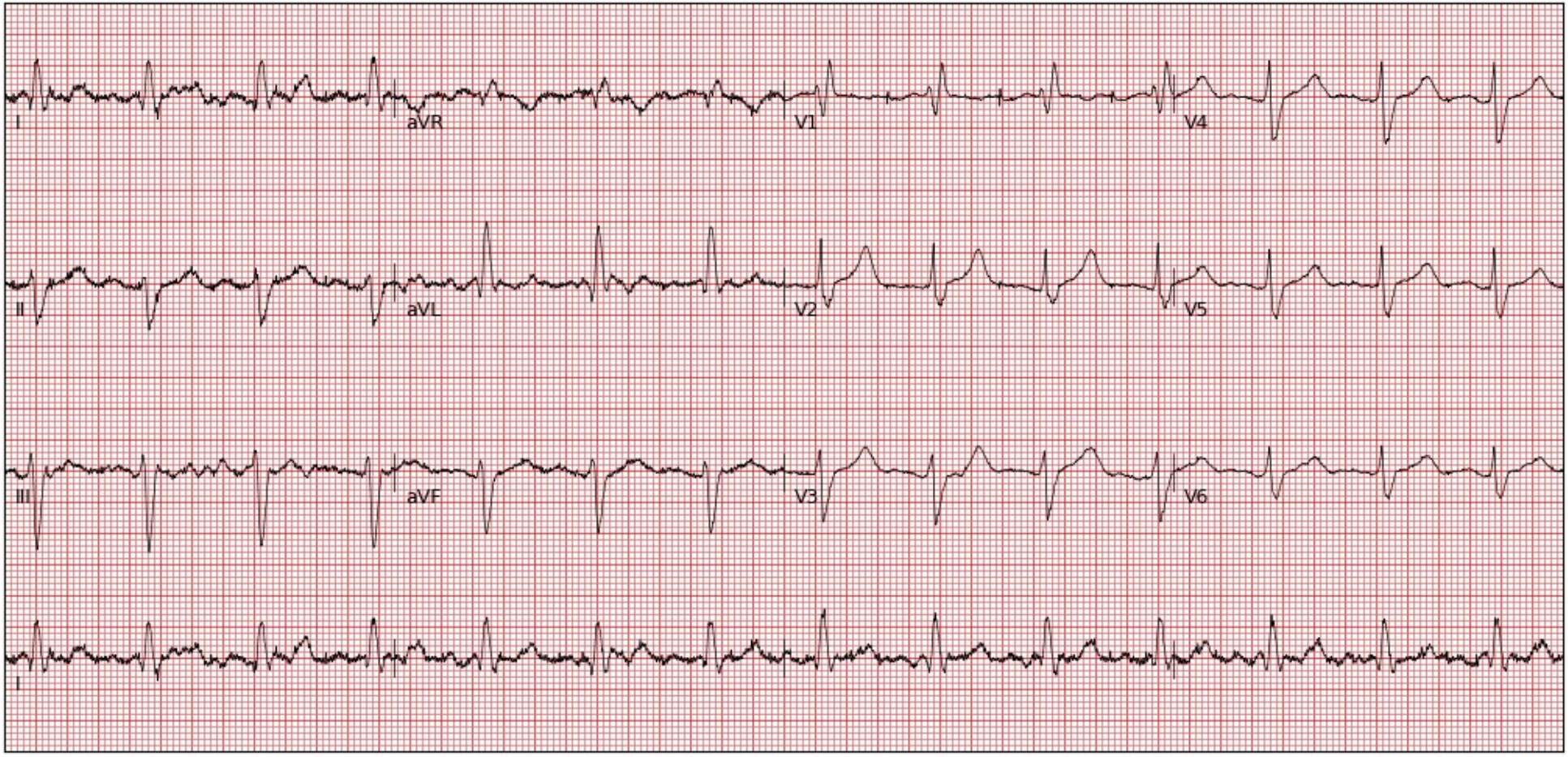
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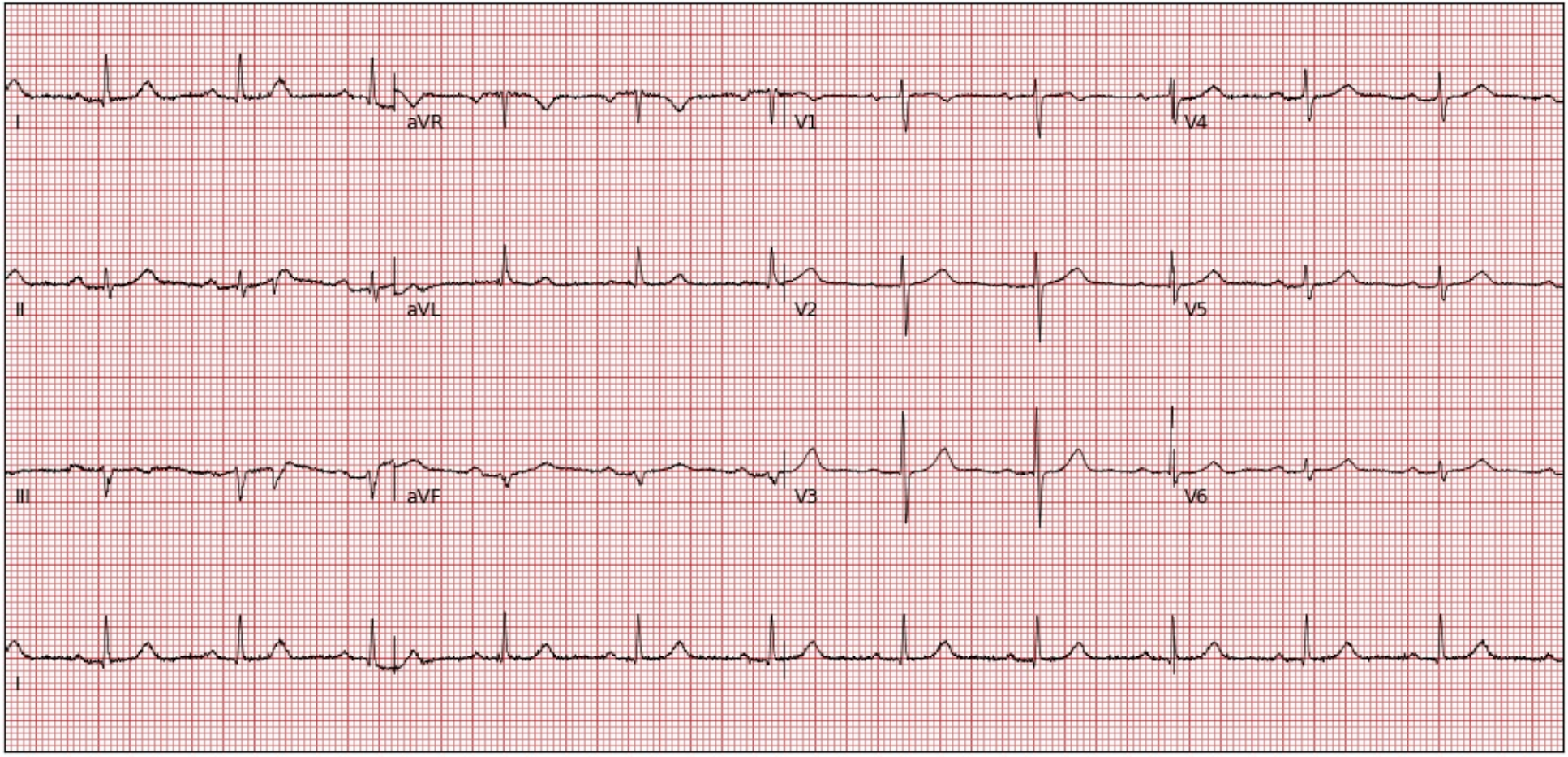
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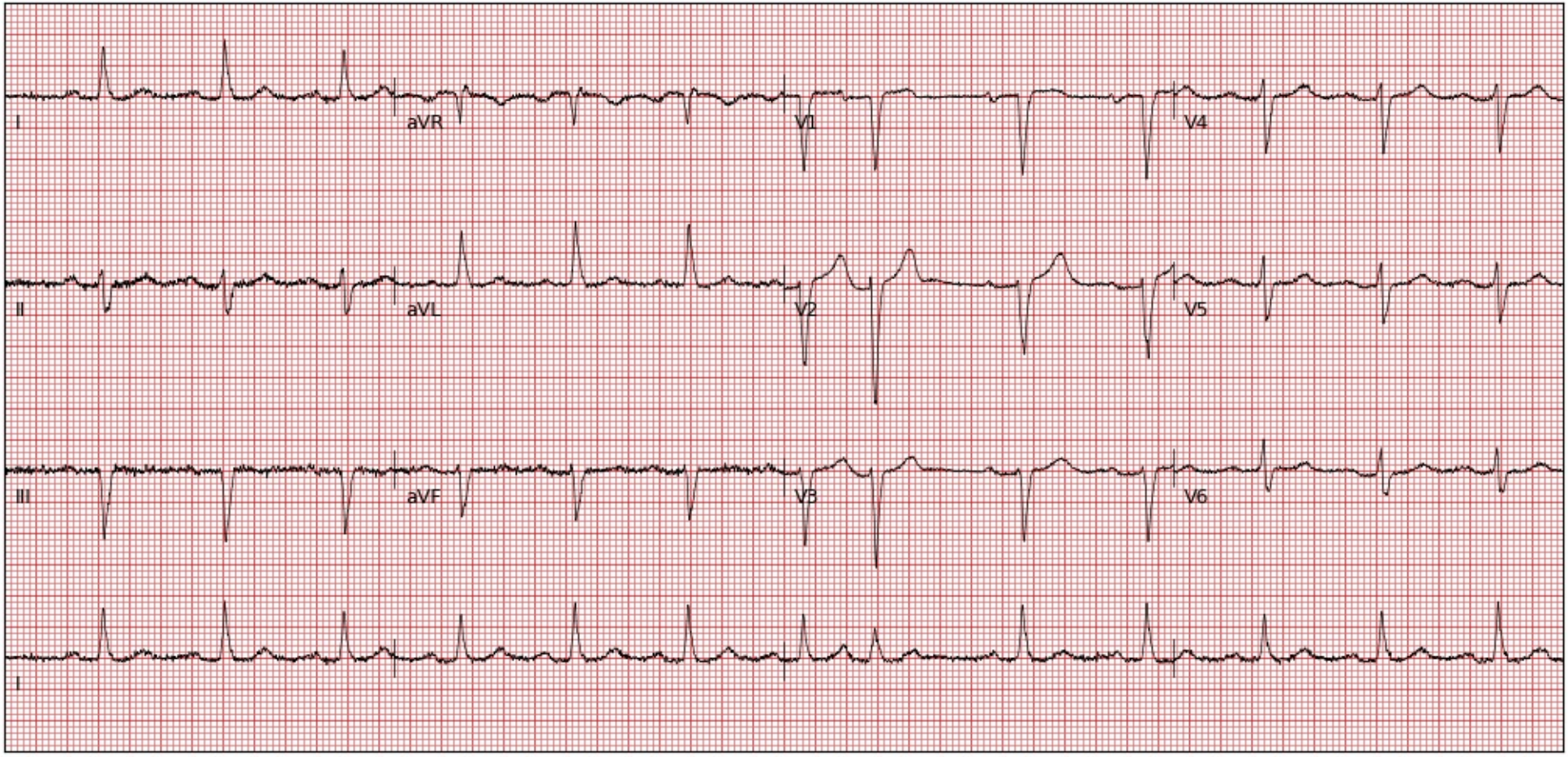
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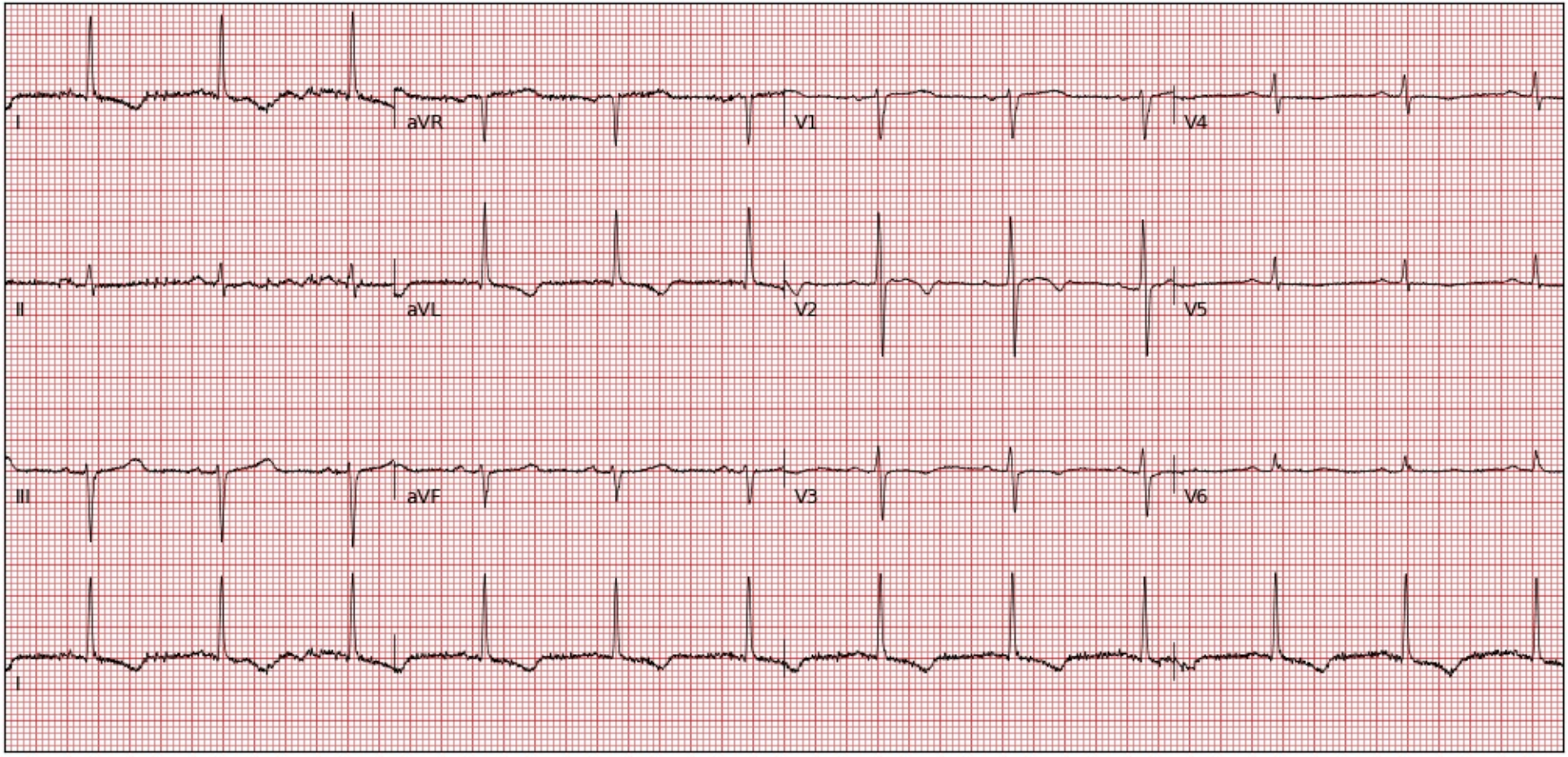
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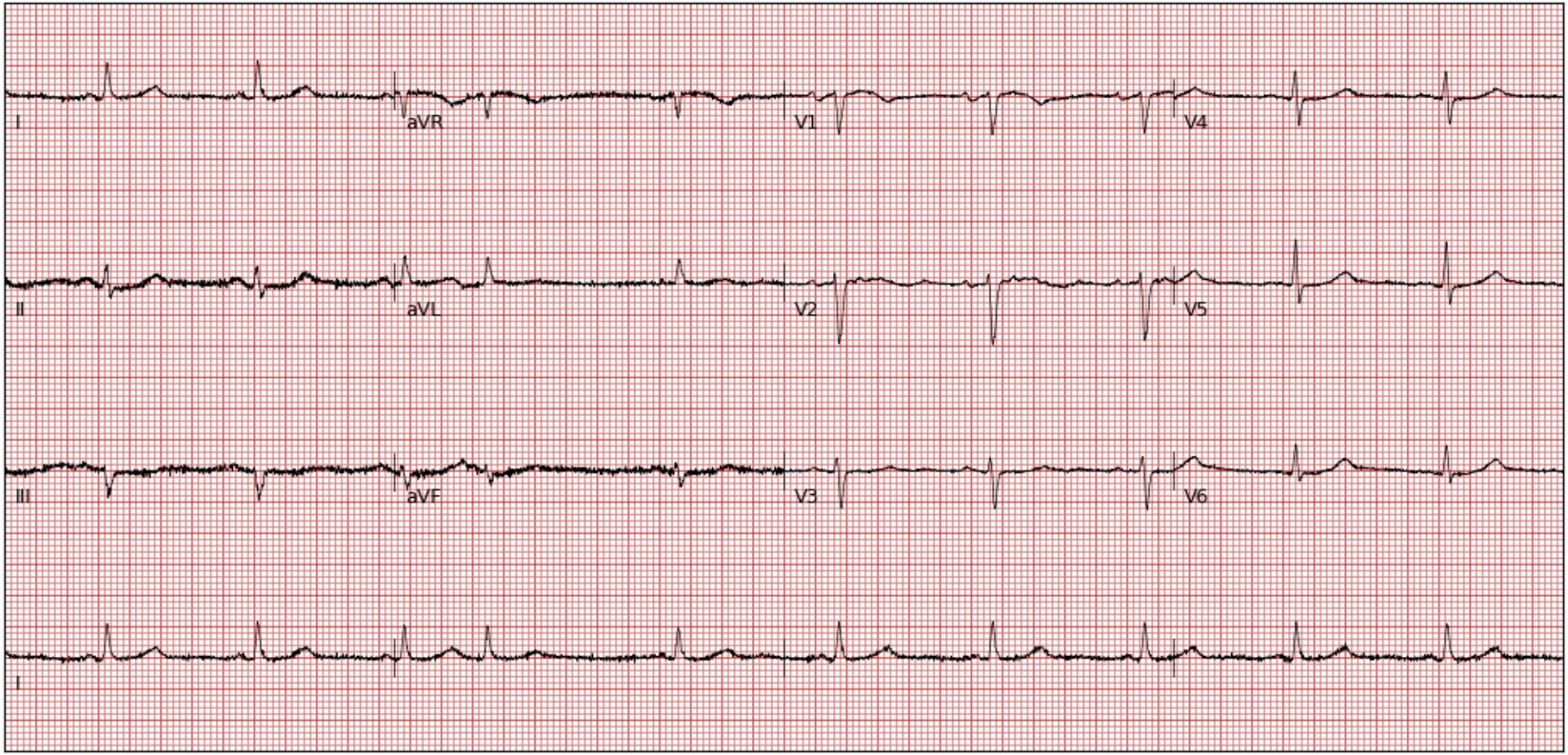
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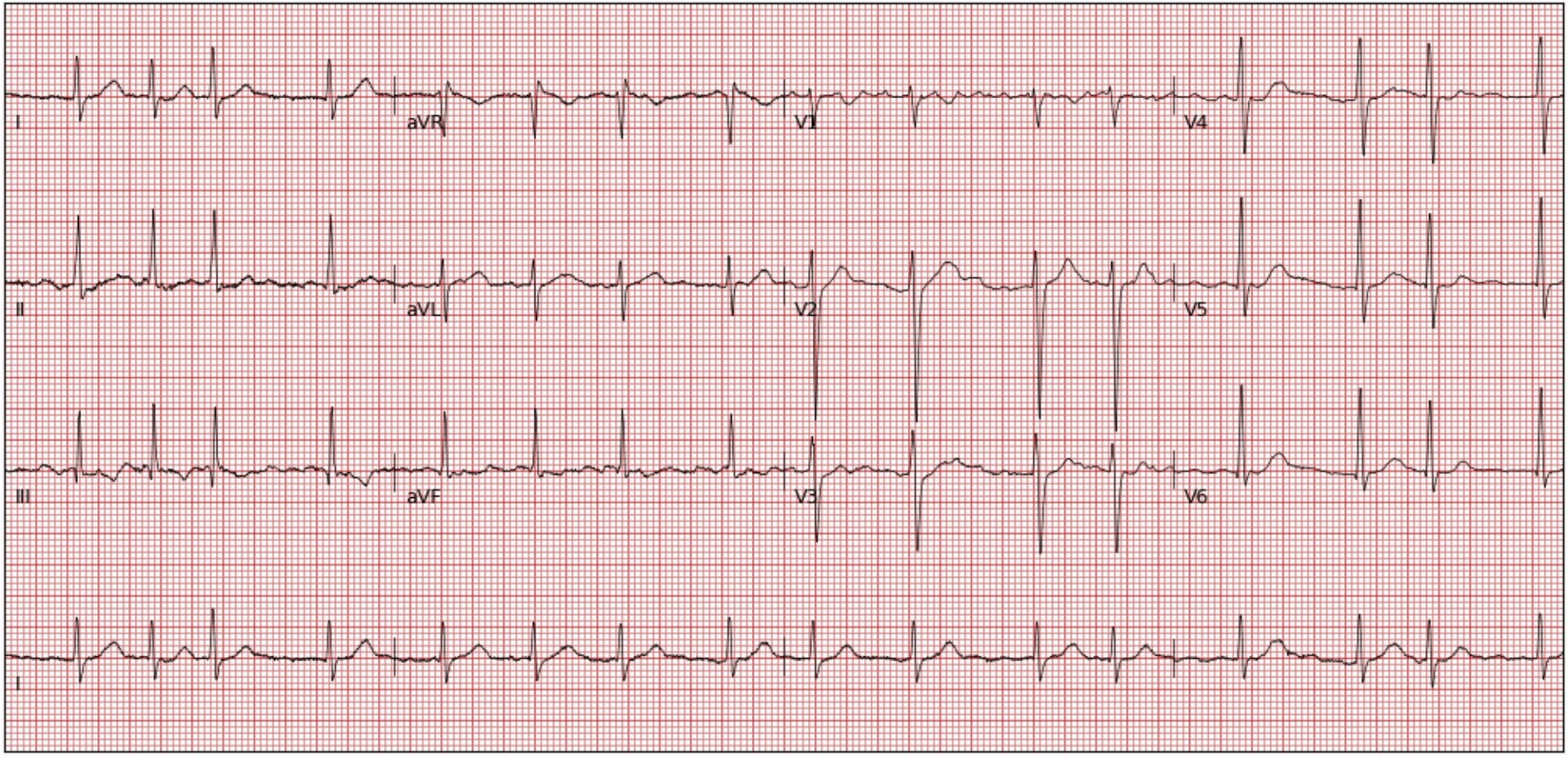
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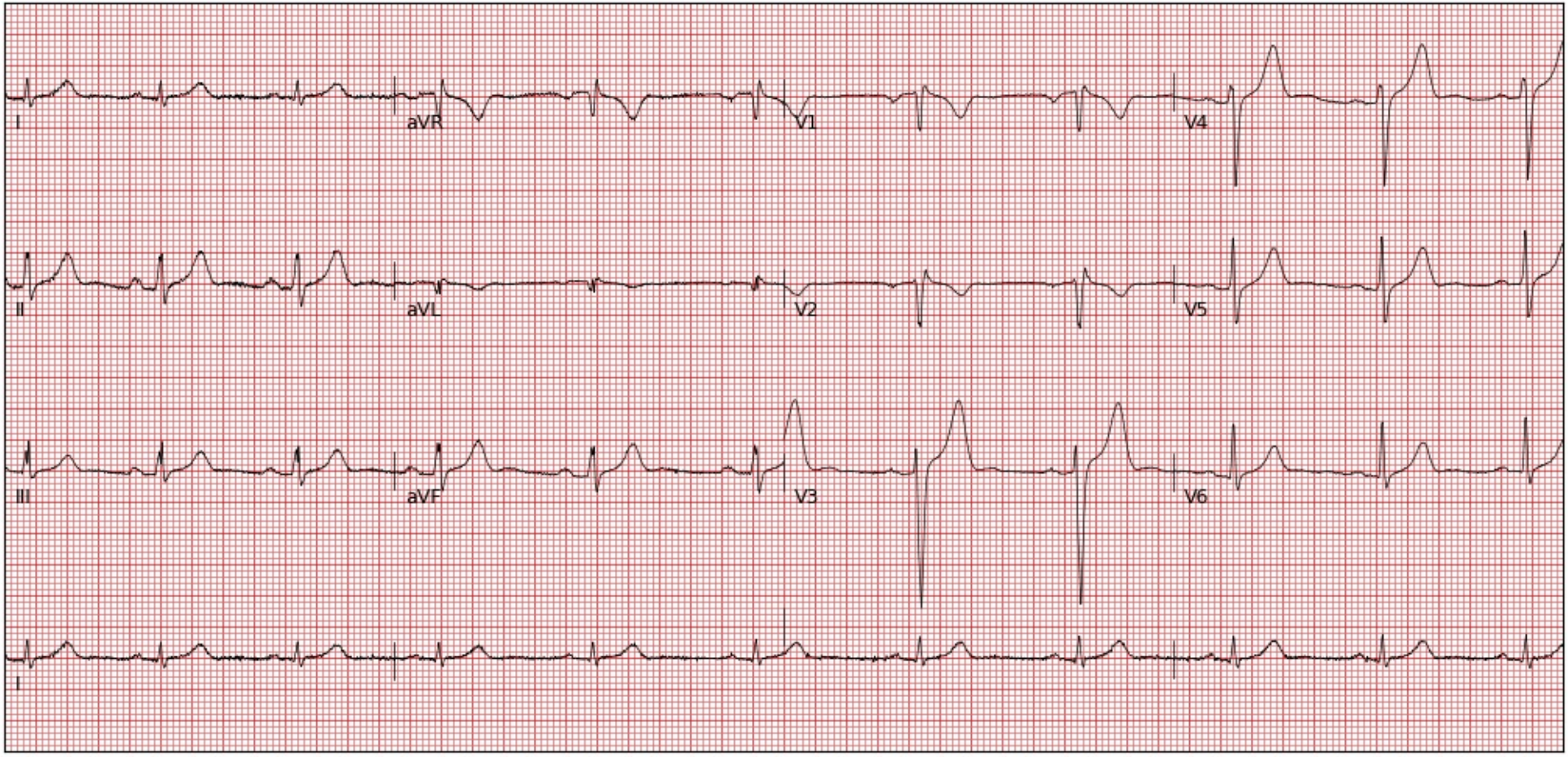
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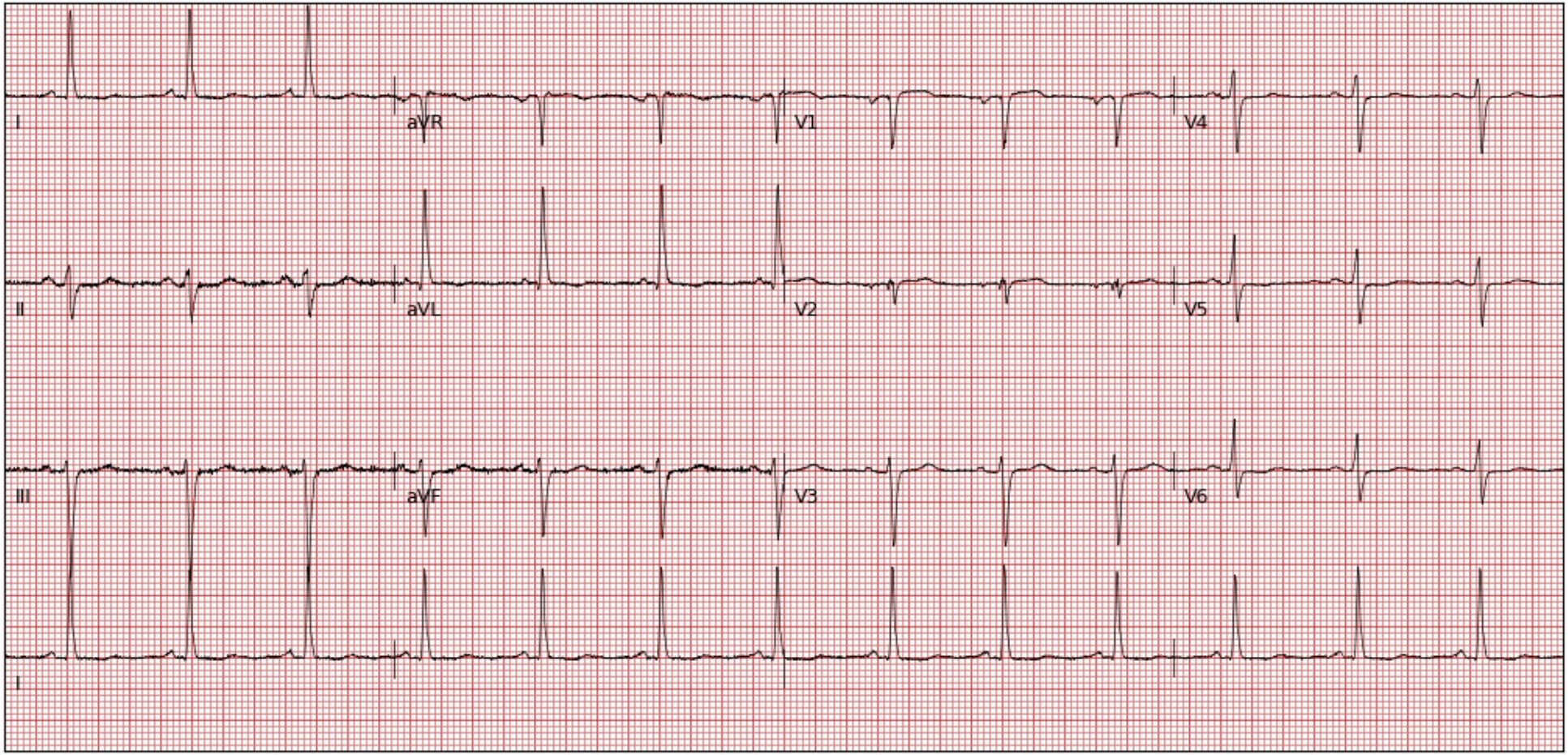
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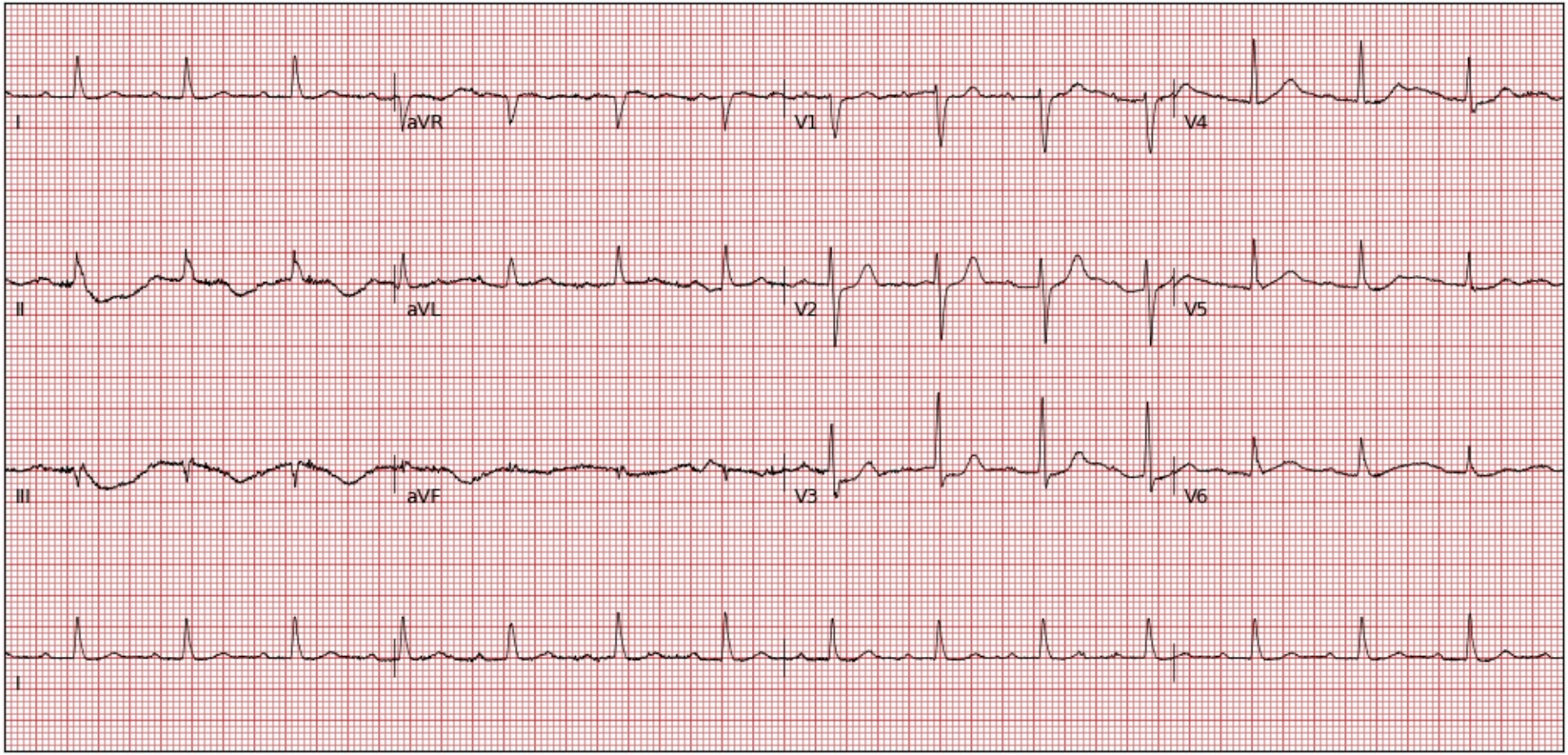
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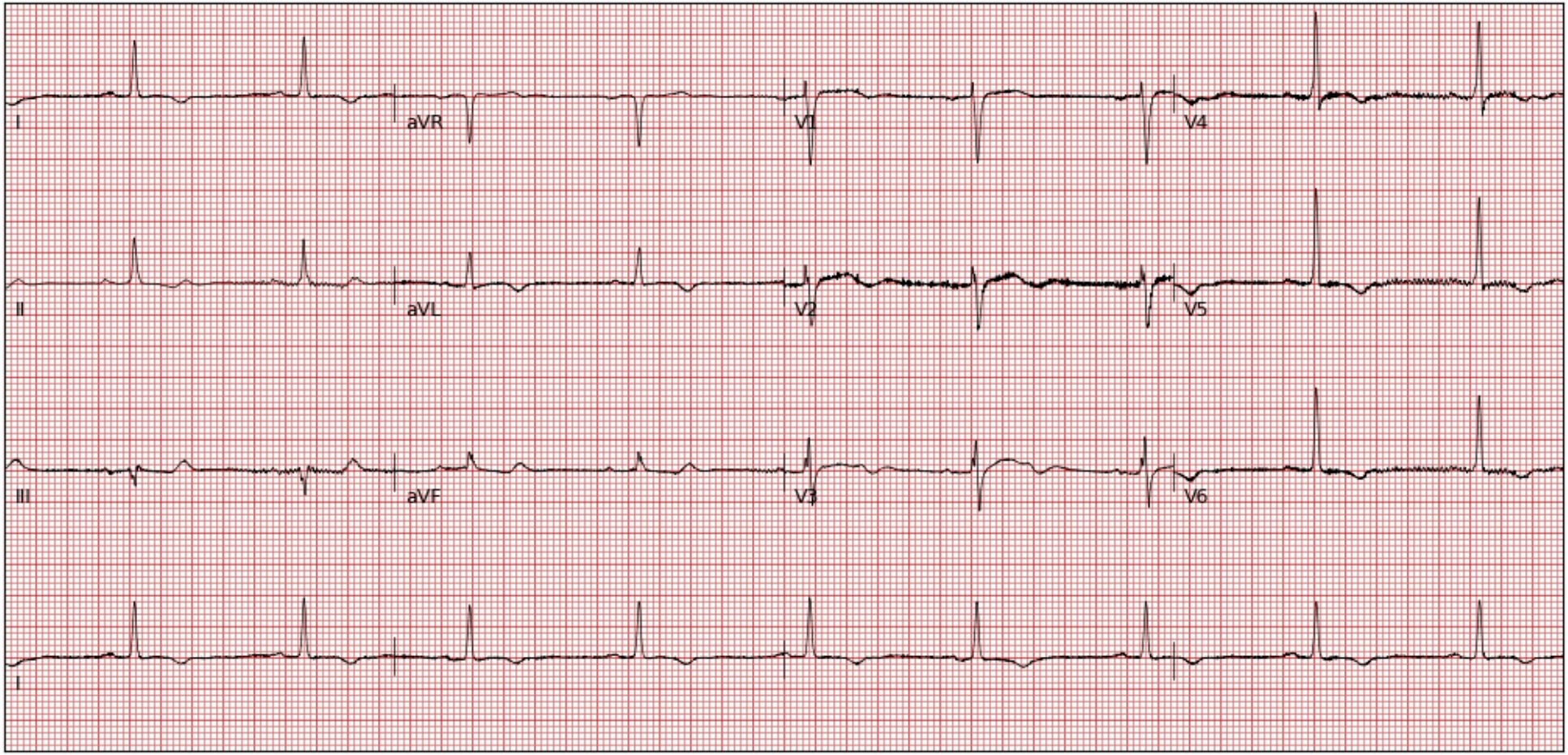
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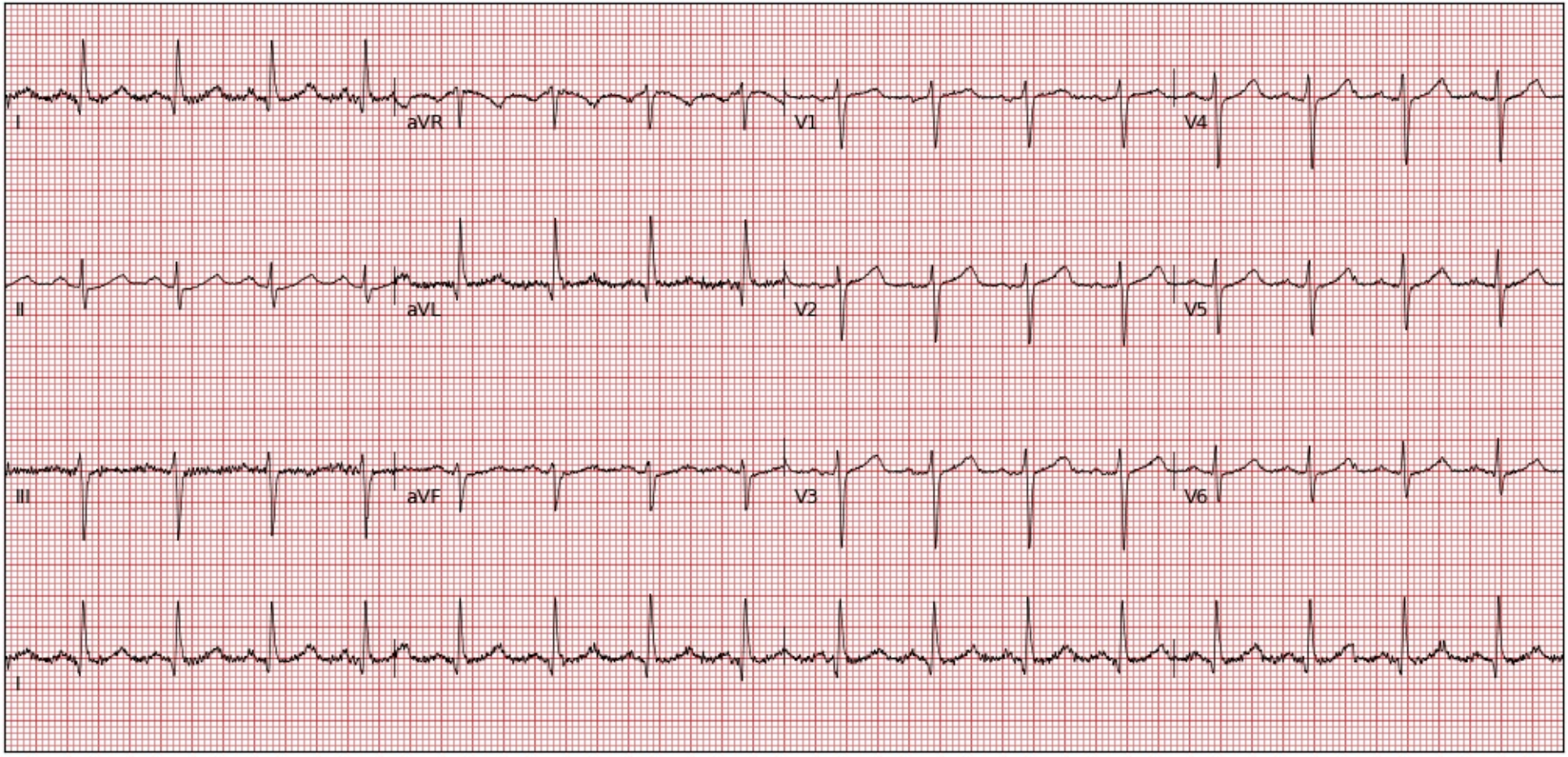
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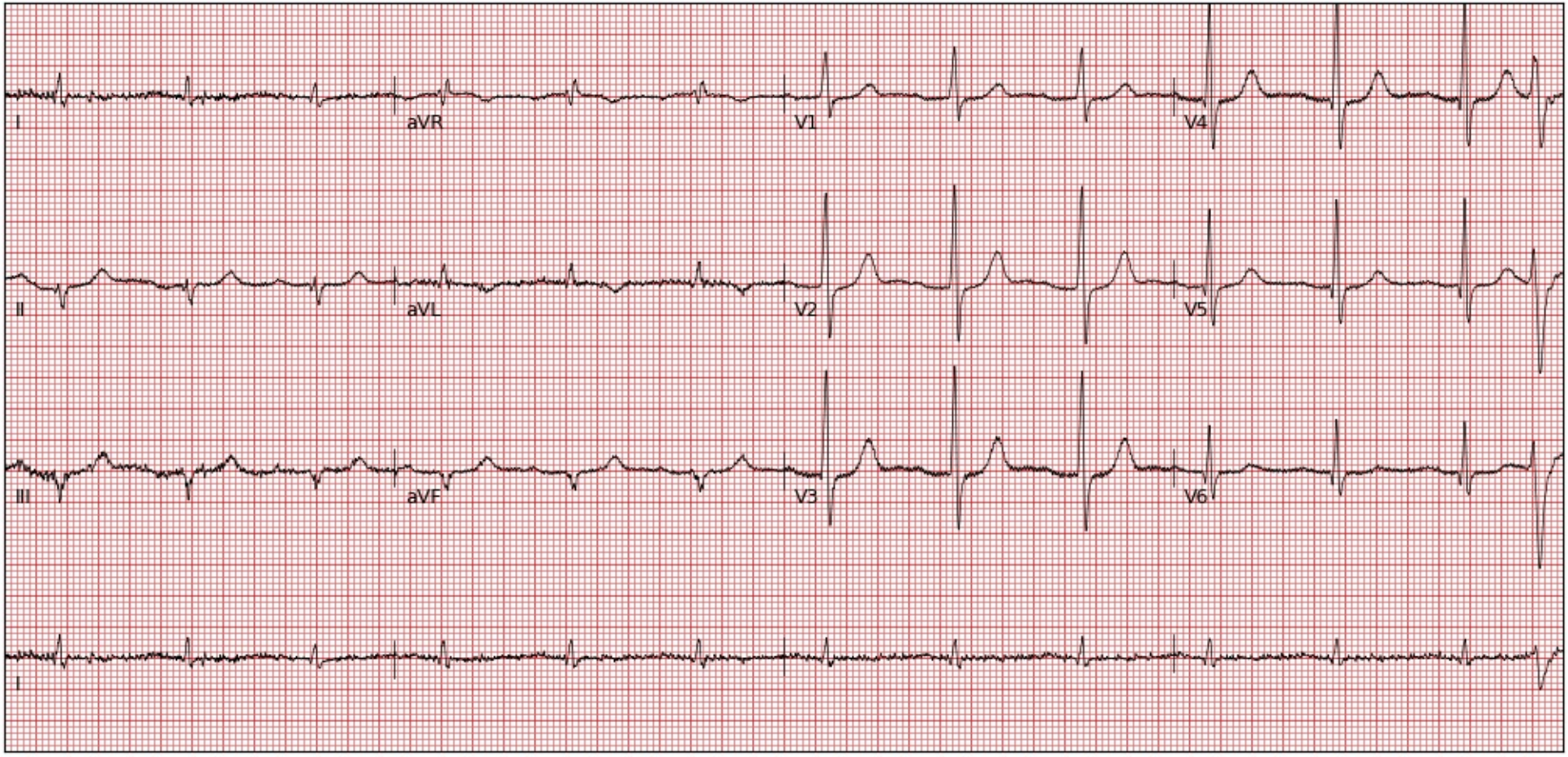
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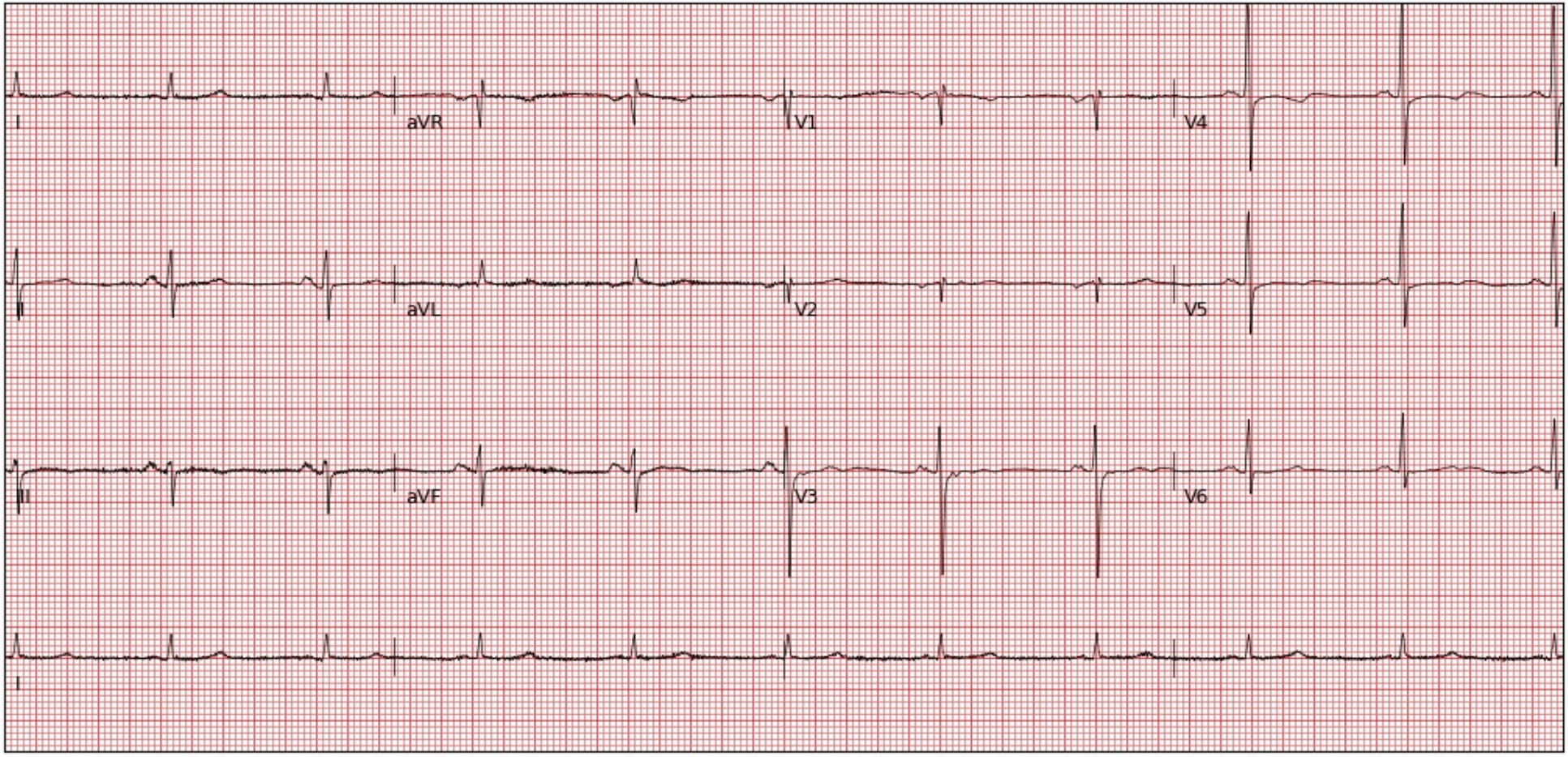
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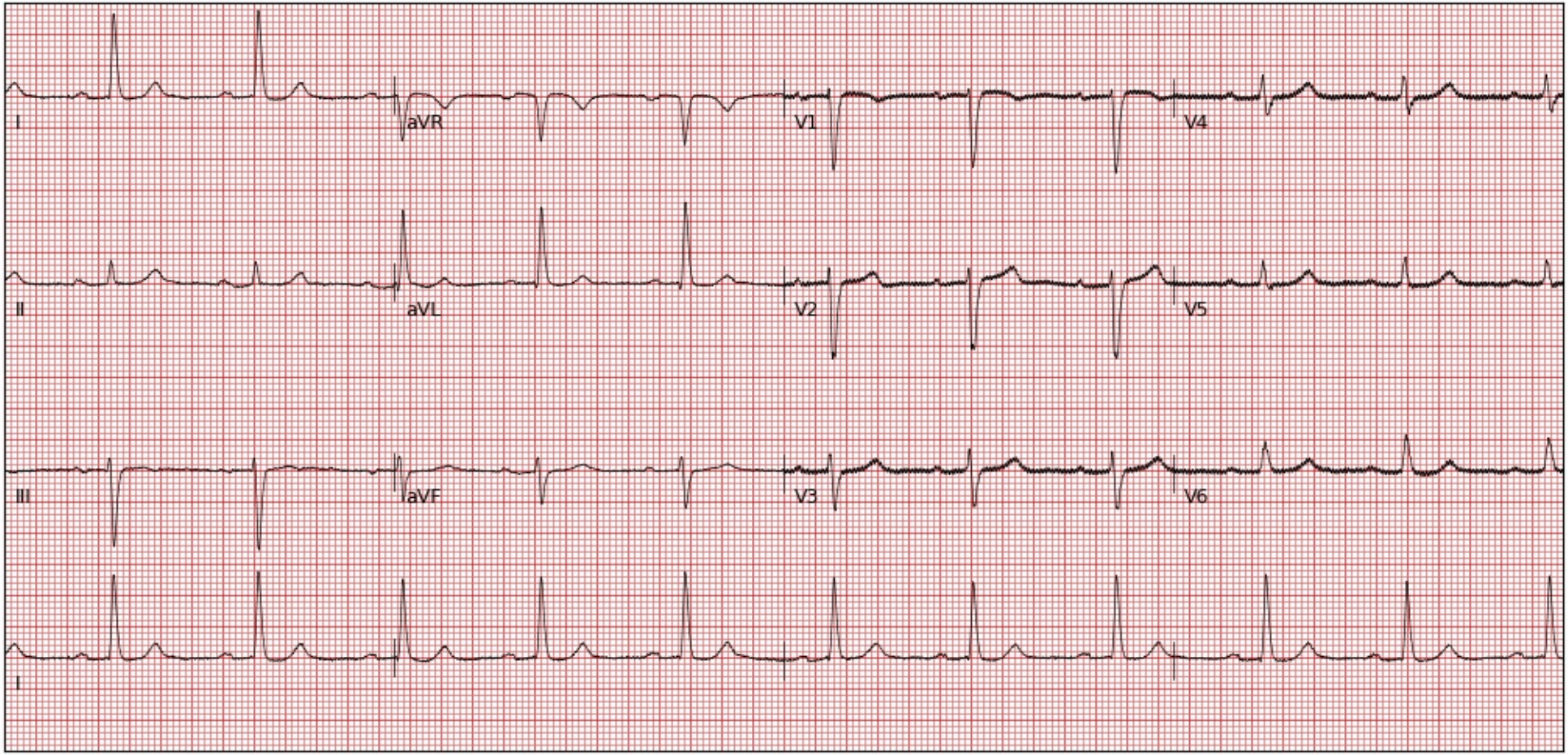
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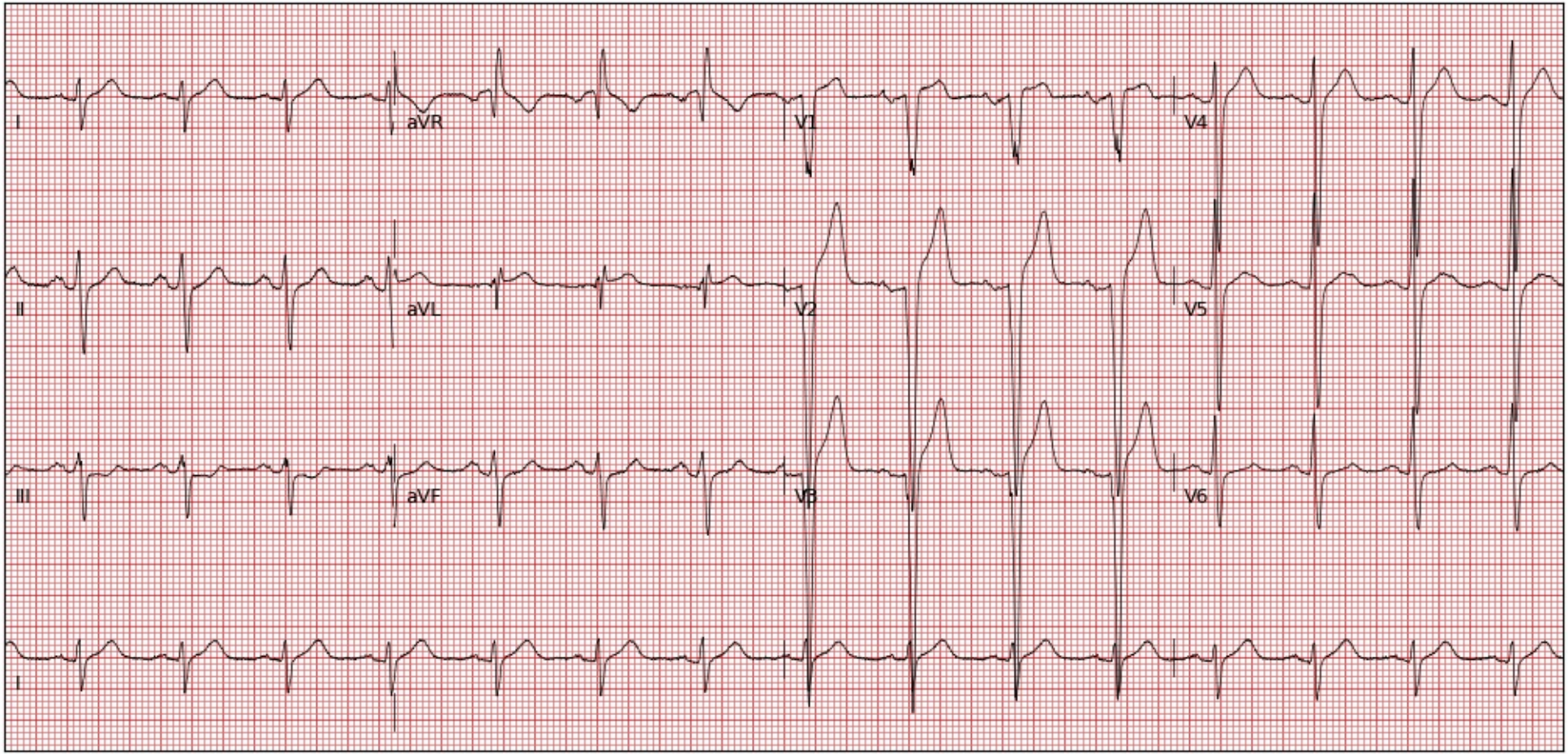
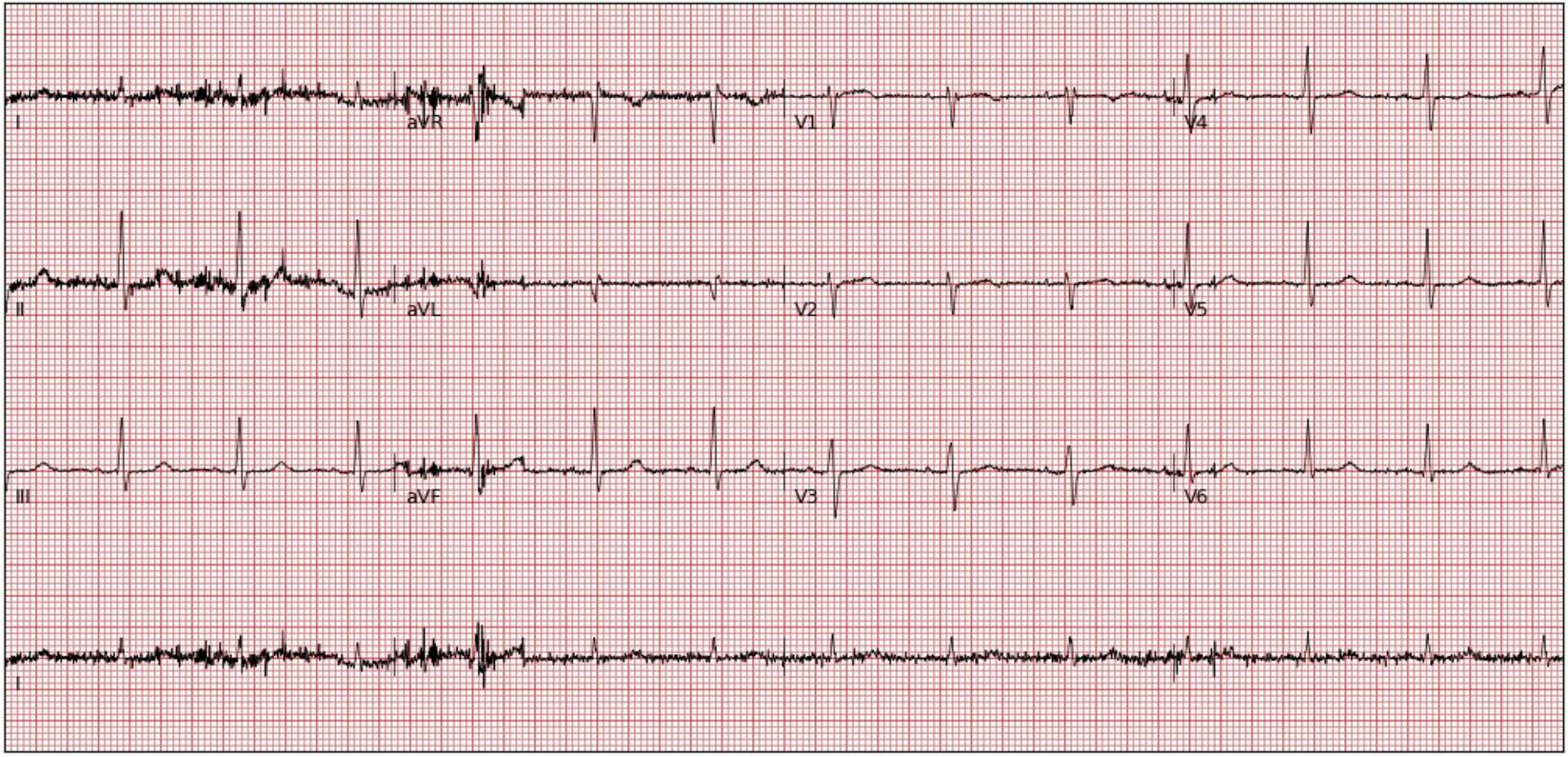
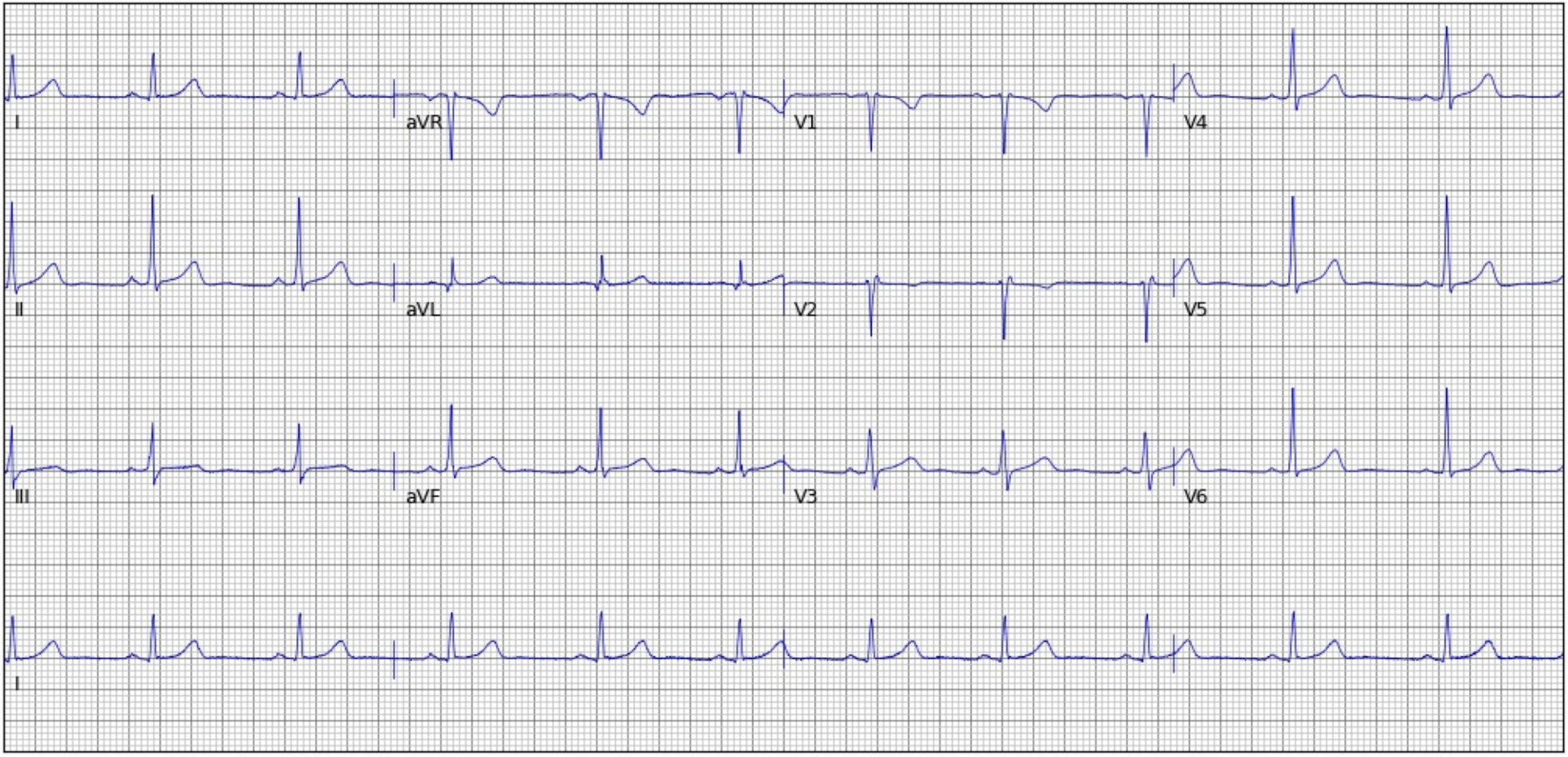
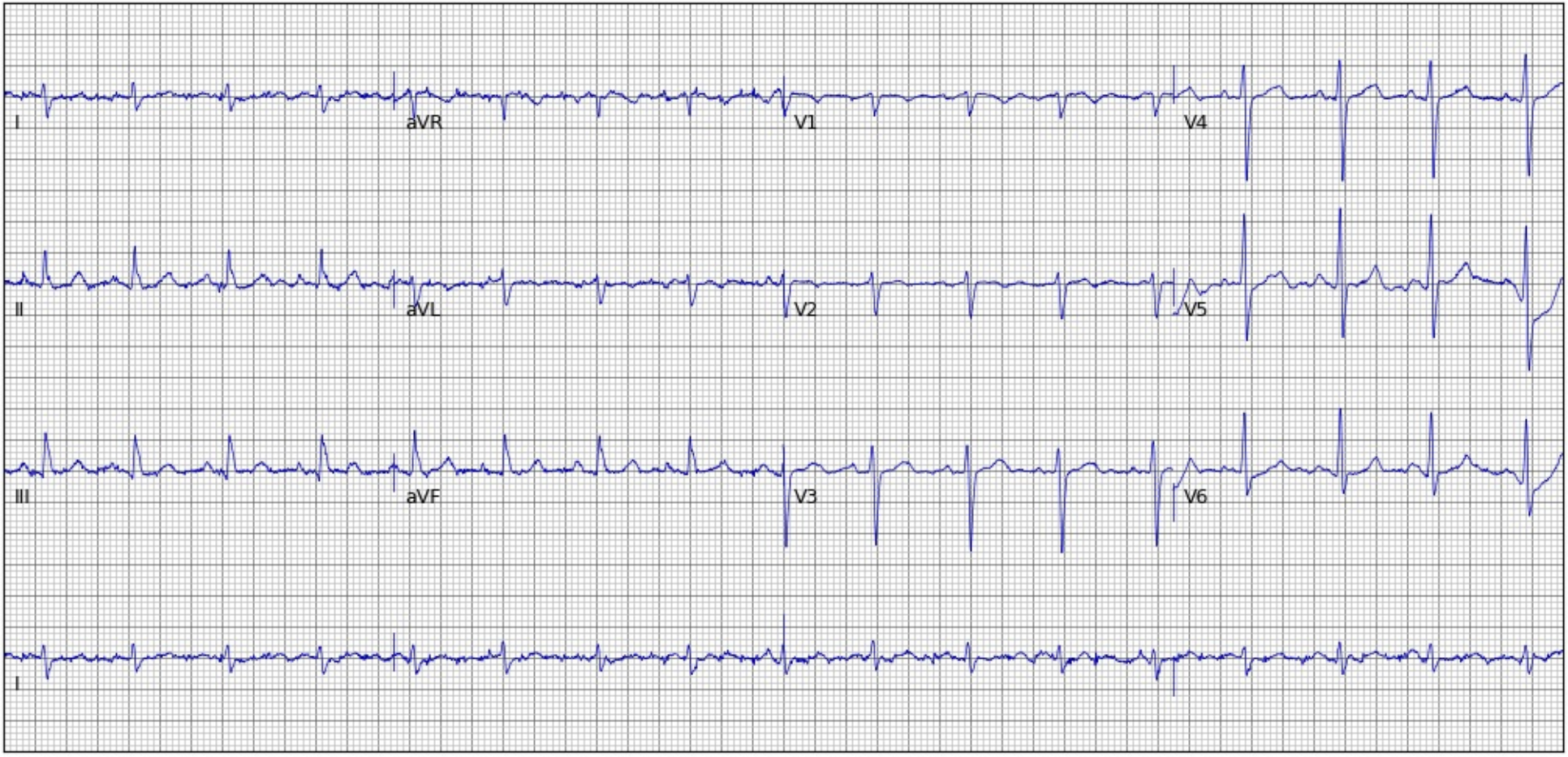
V6
I

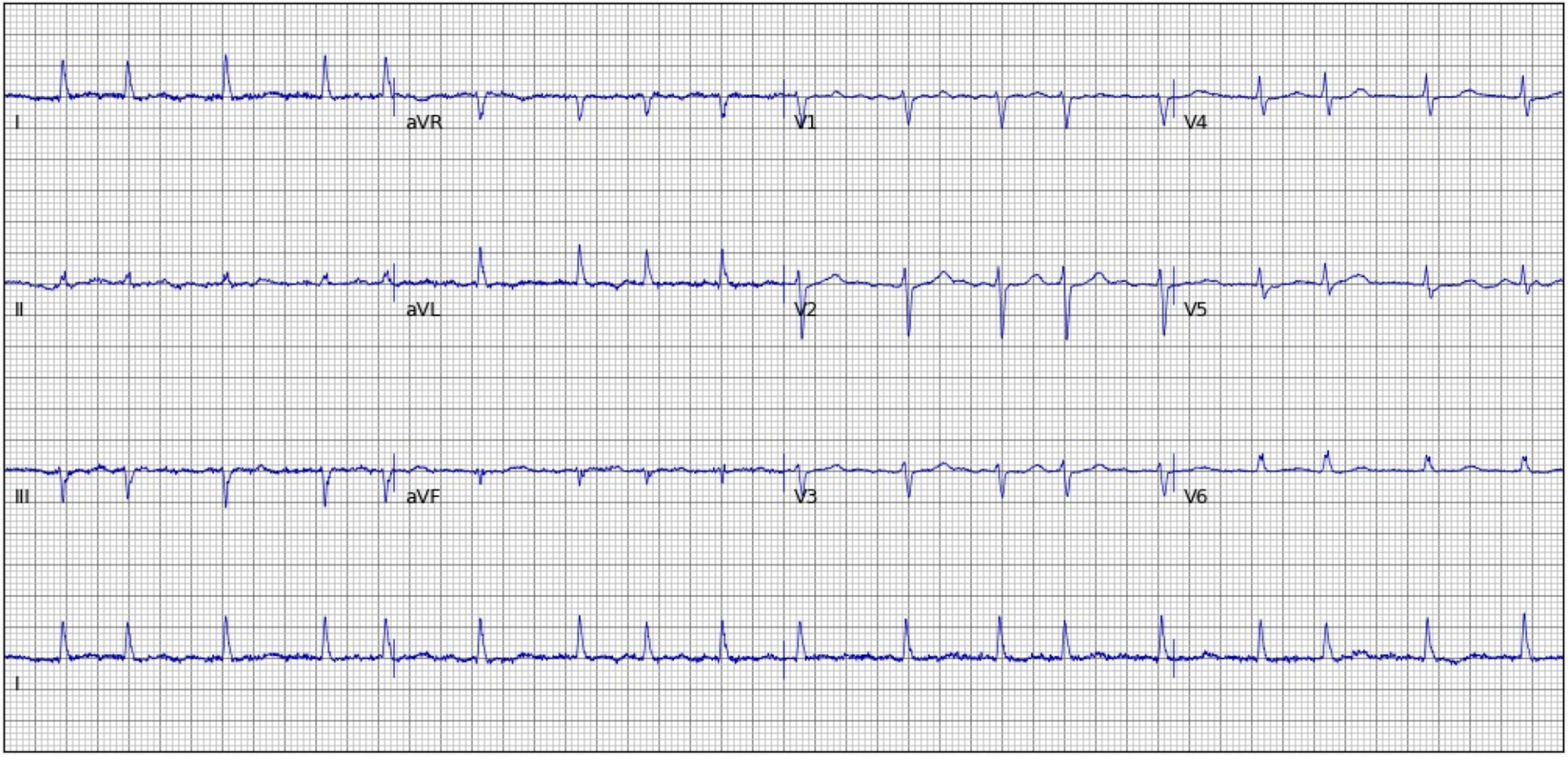

I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
I


I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
I

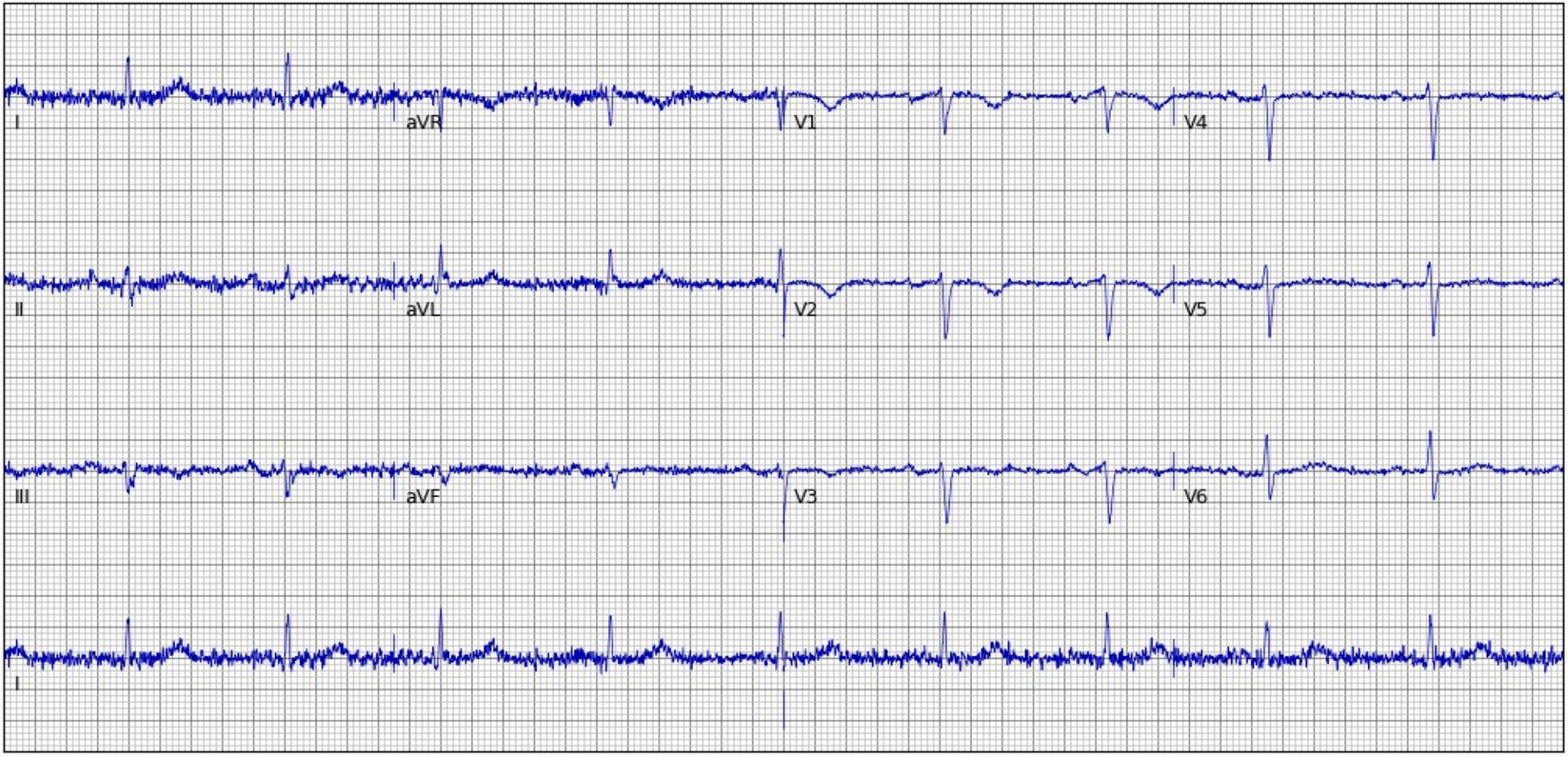
Section 4. Random examples of 25 electrocardiogram images plotted in novel format (Blue-on-Black Standard) not encountered during model development


I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
I

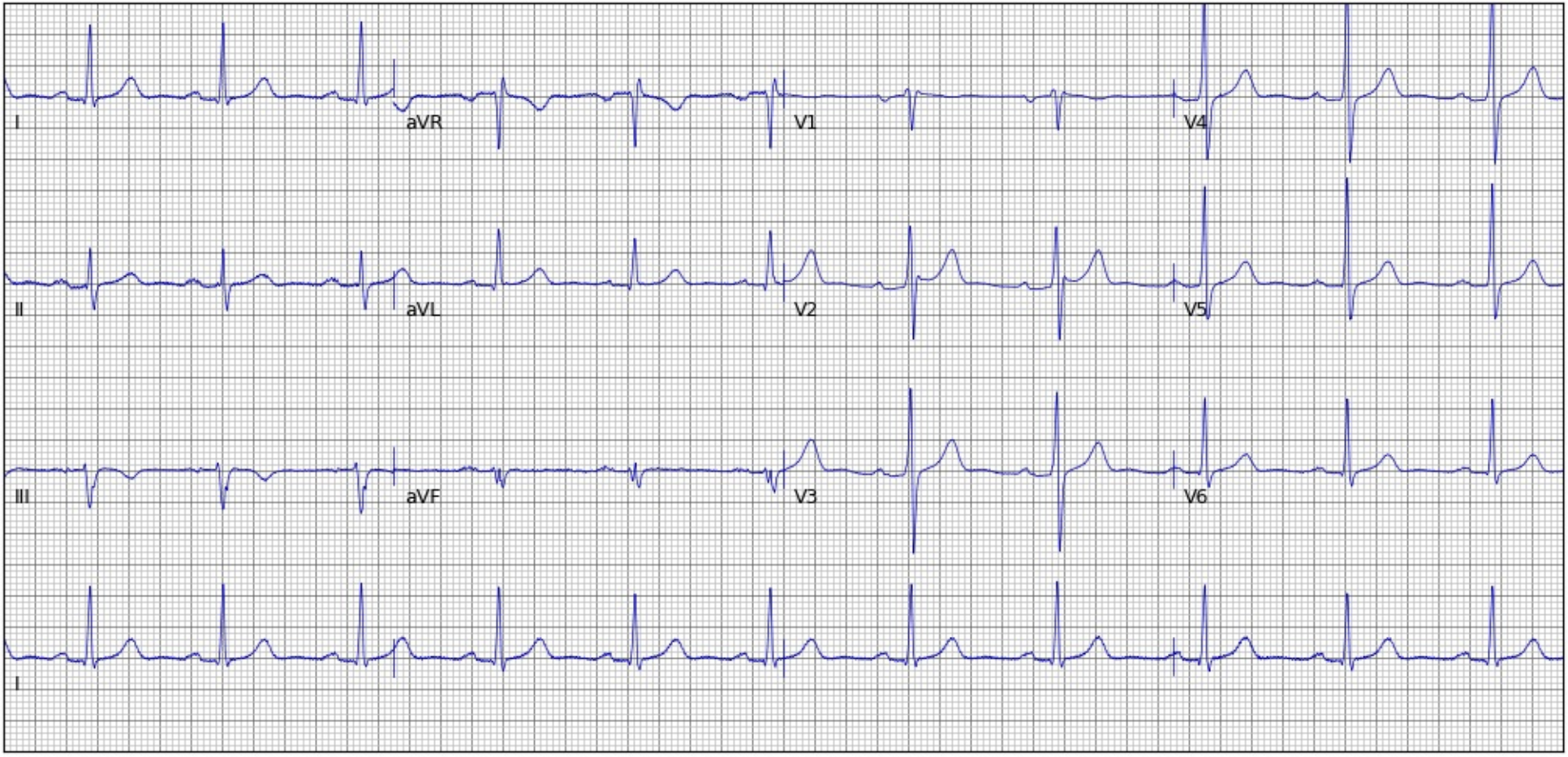

I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
I

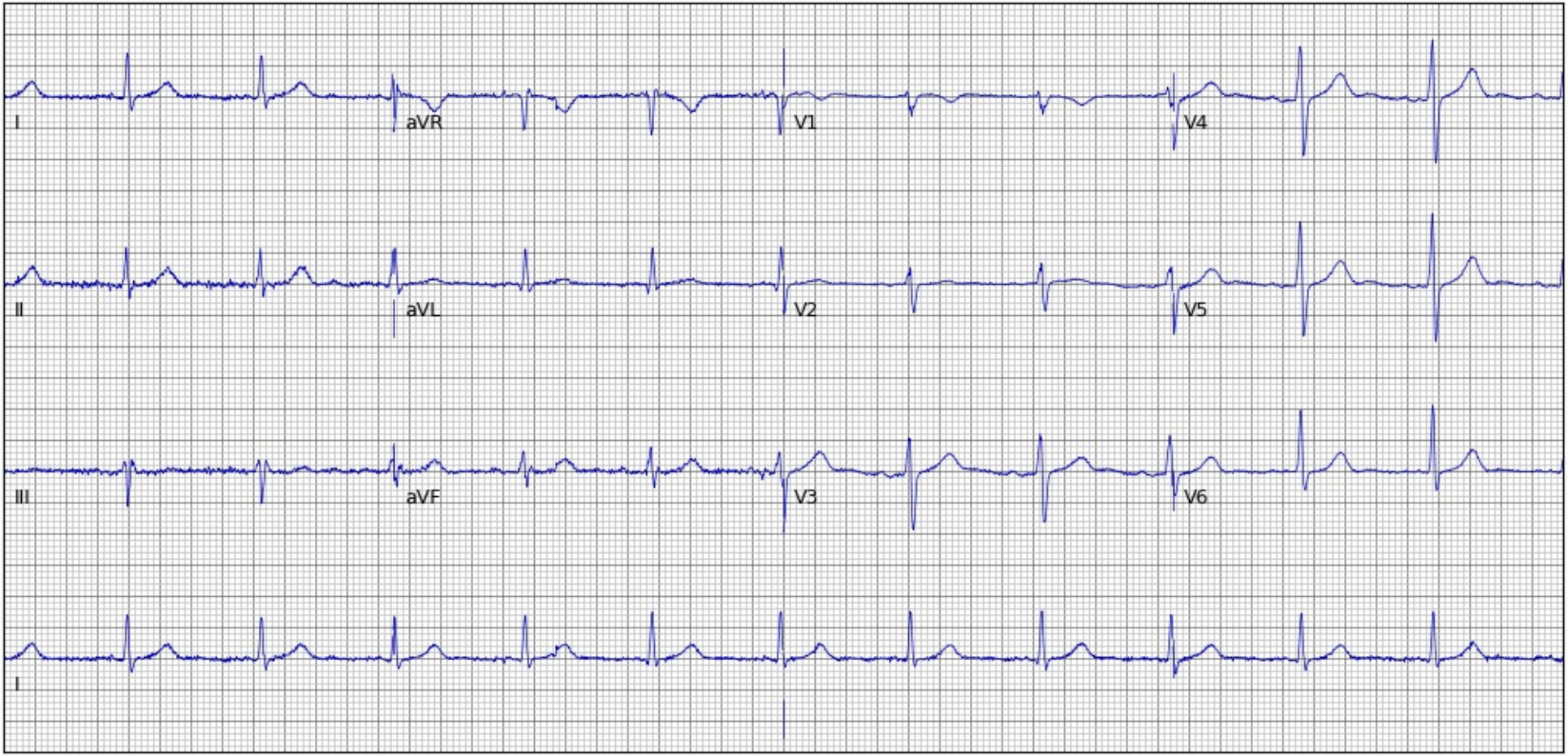

I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
I

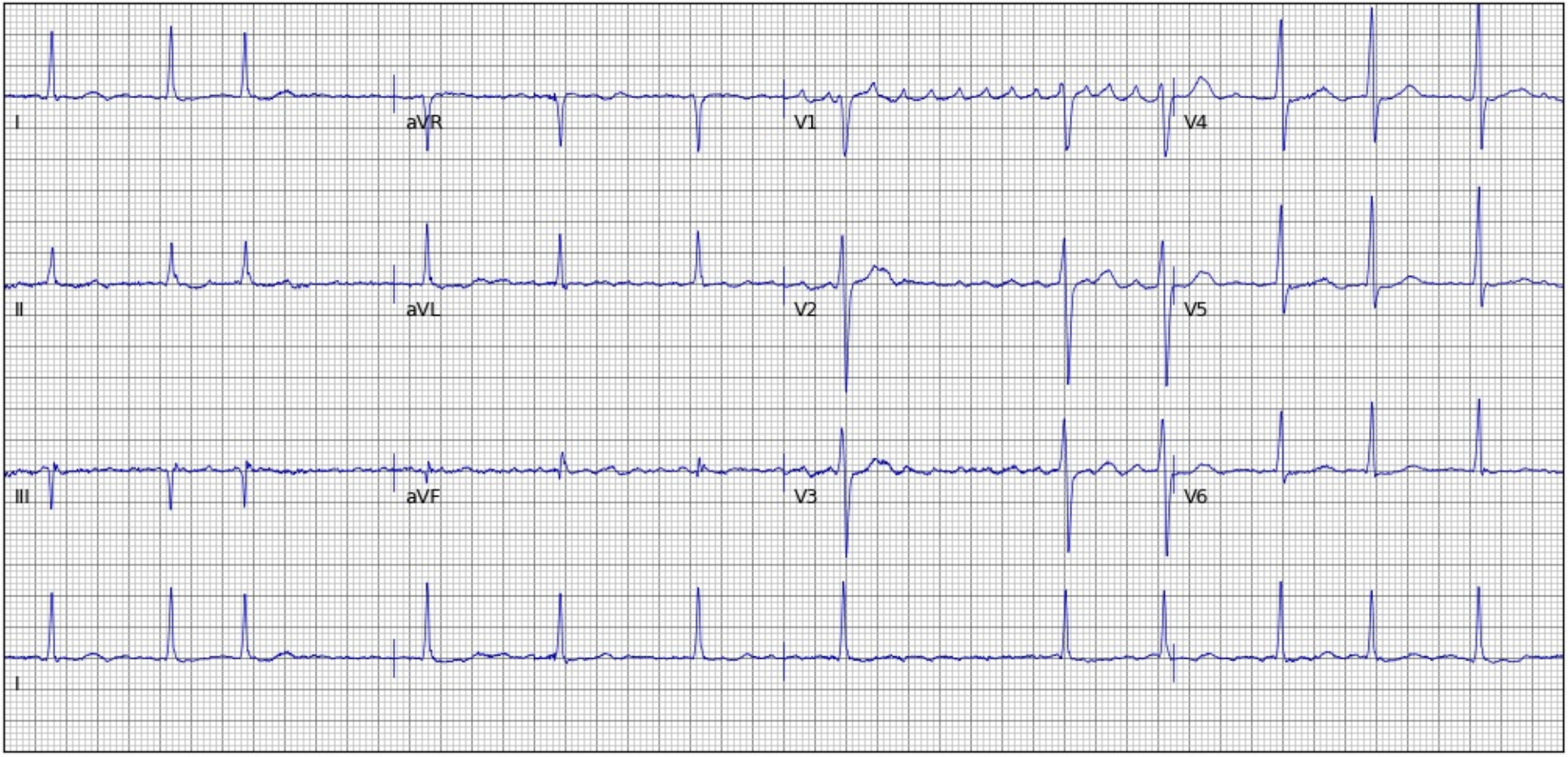

I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
I


I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
I

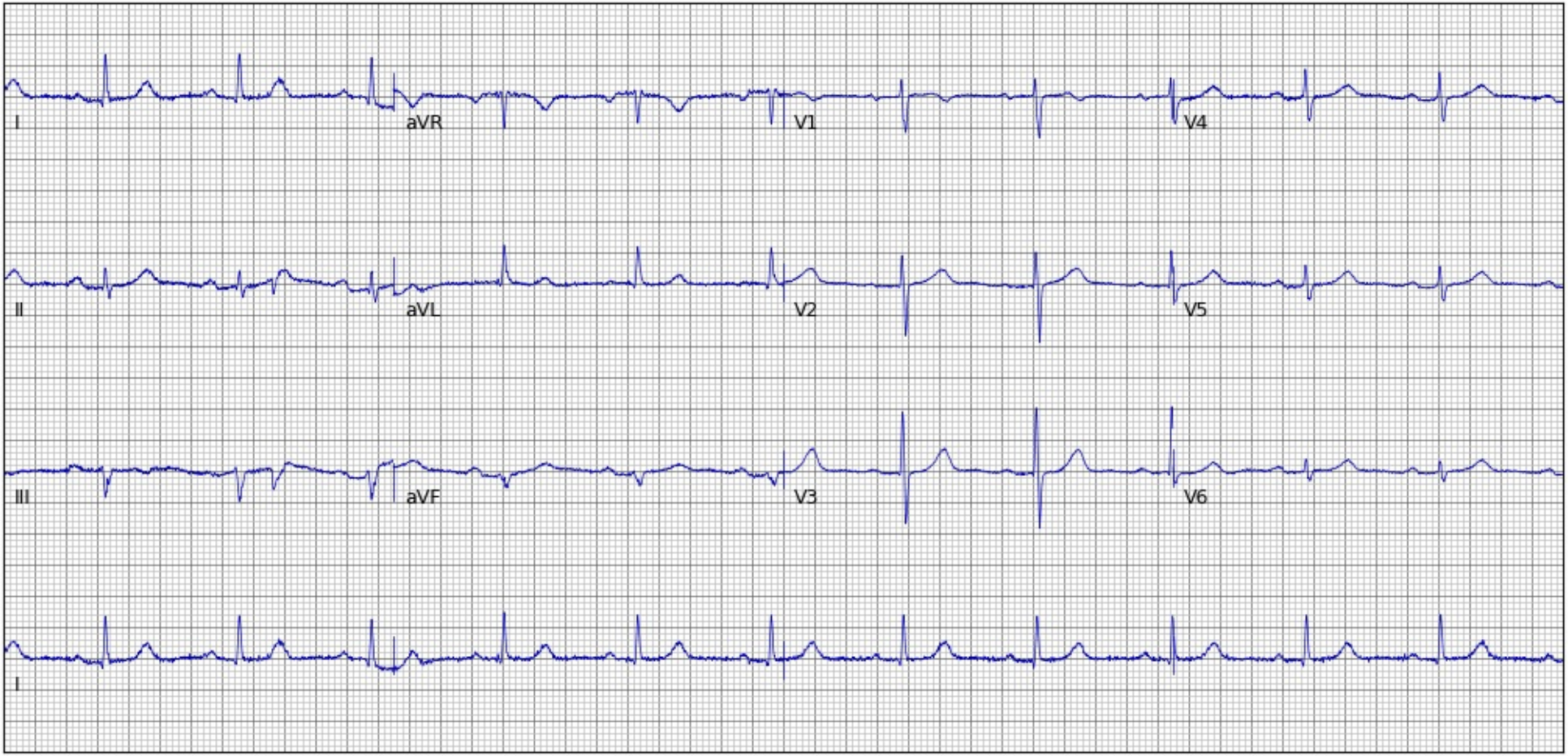

I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
I


I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
I

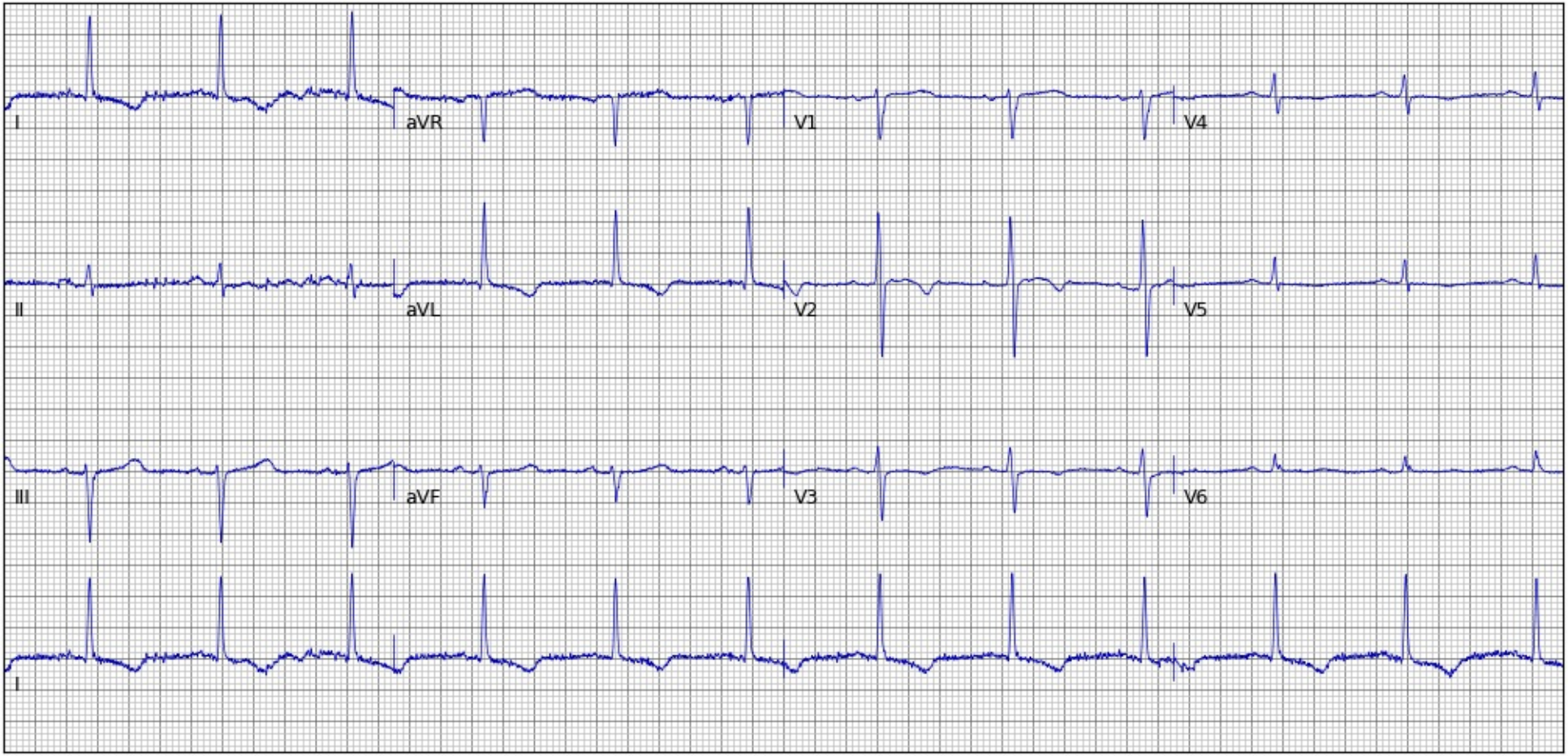

I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
I


I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
I

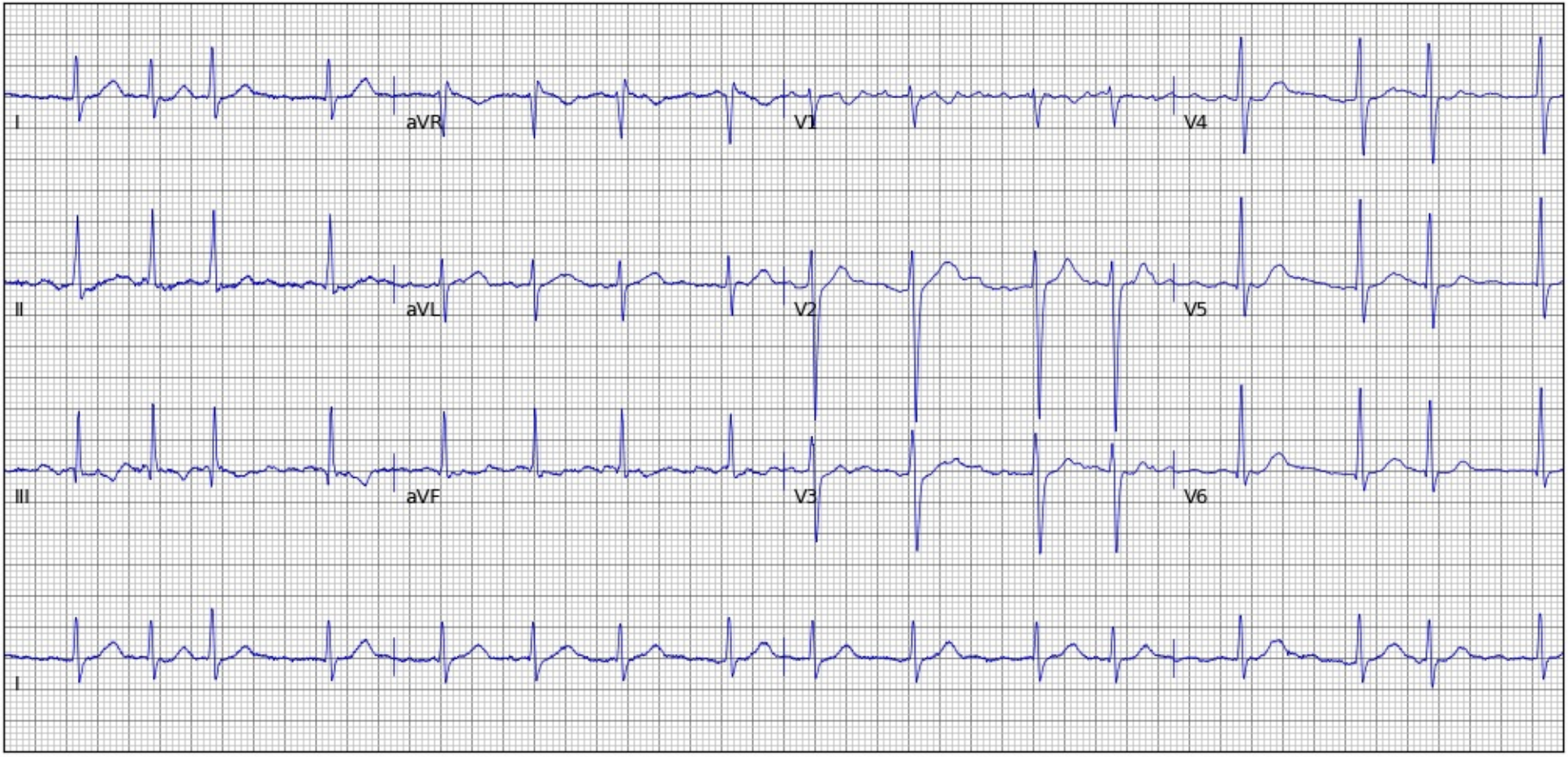

I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
I

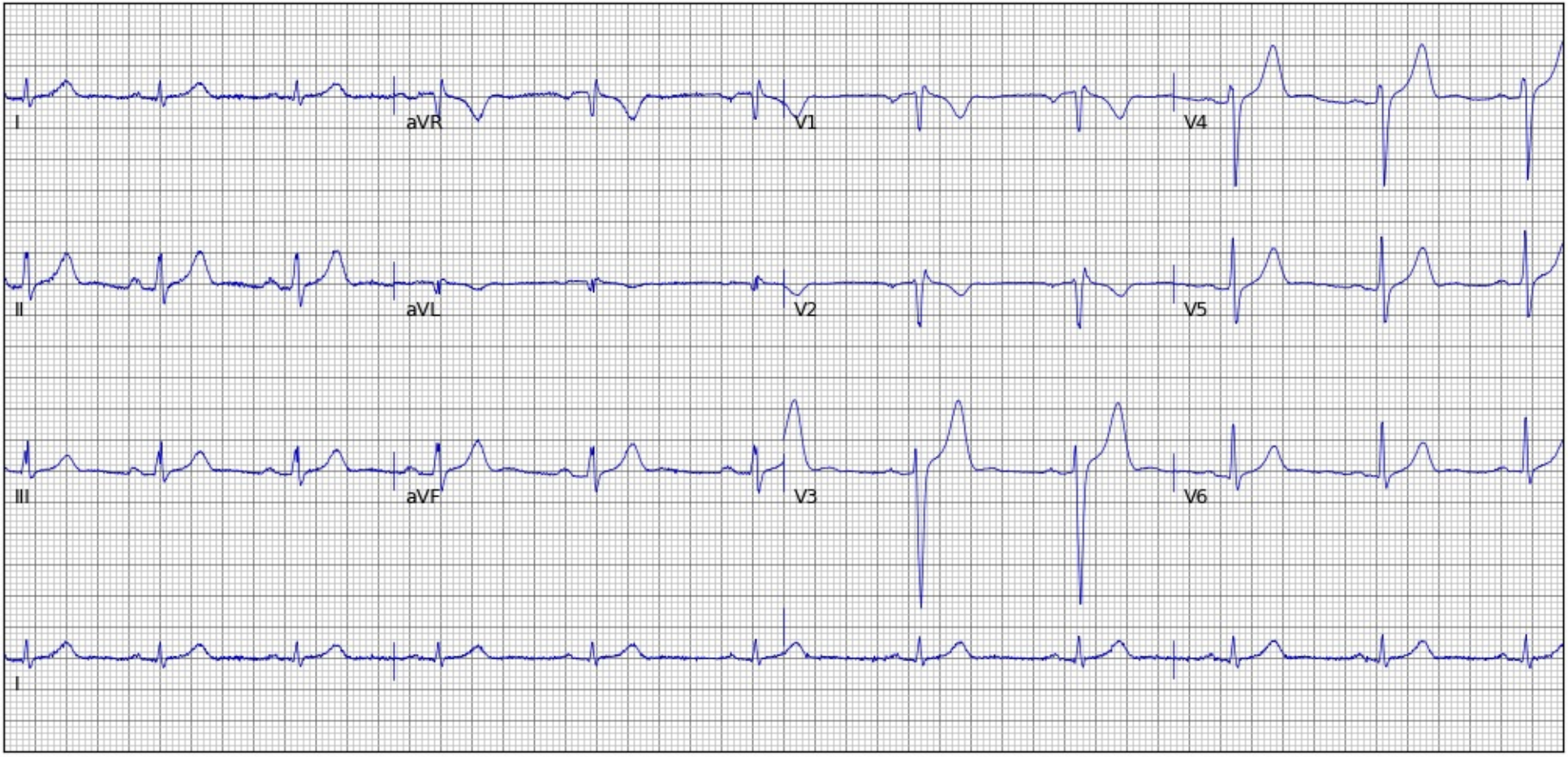

I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
I

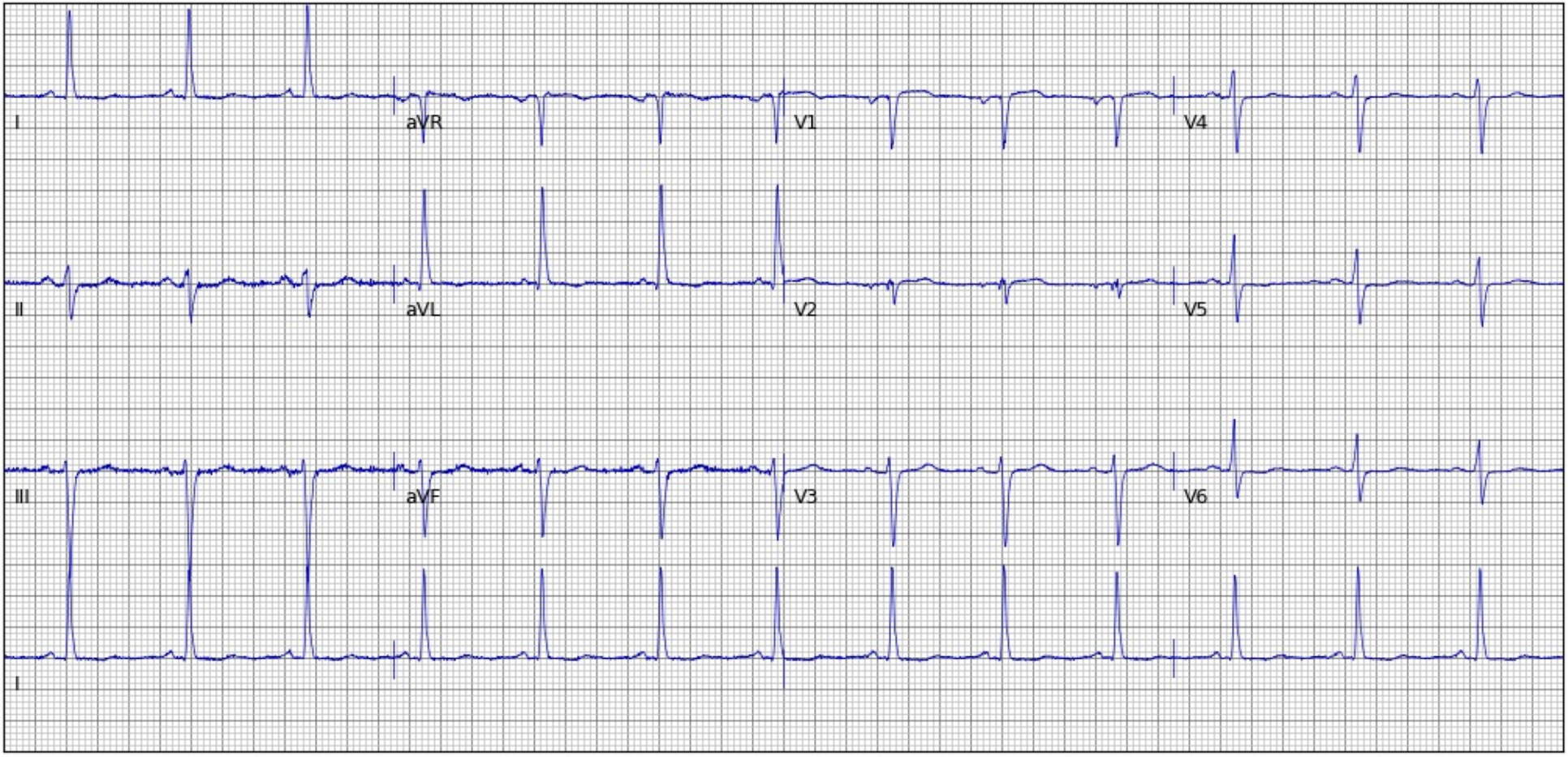

I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
I


I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
I

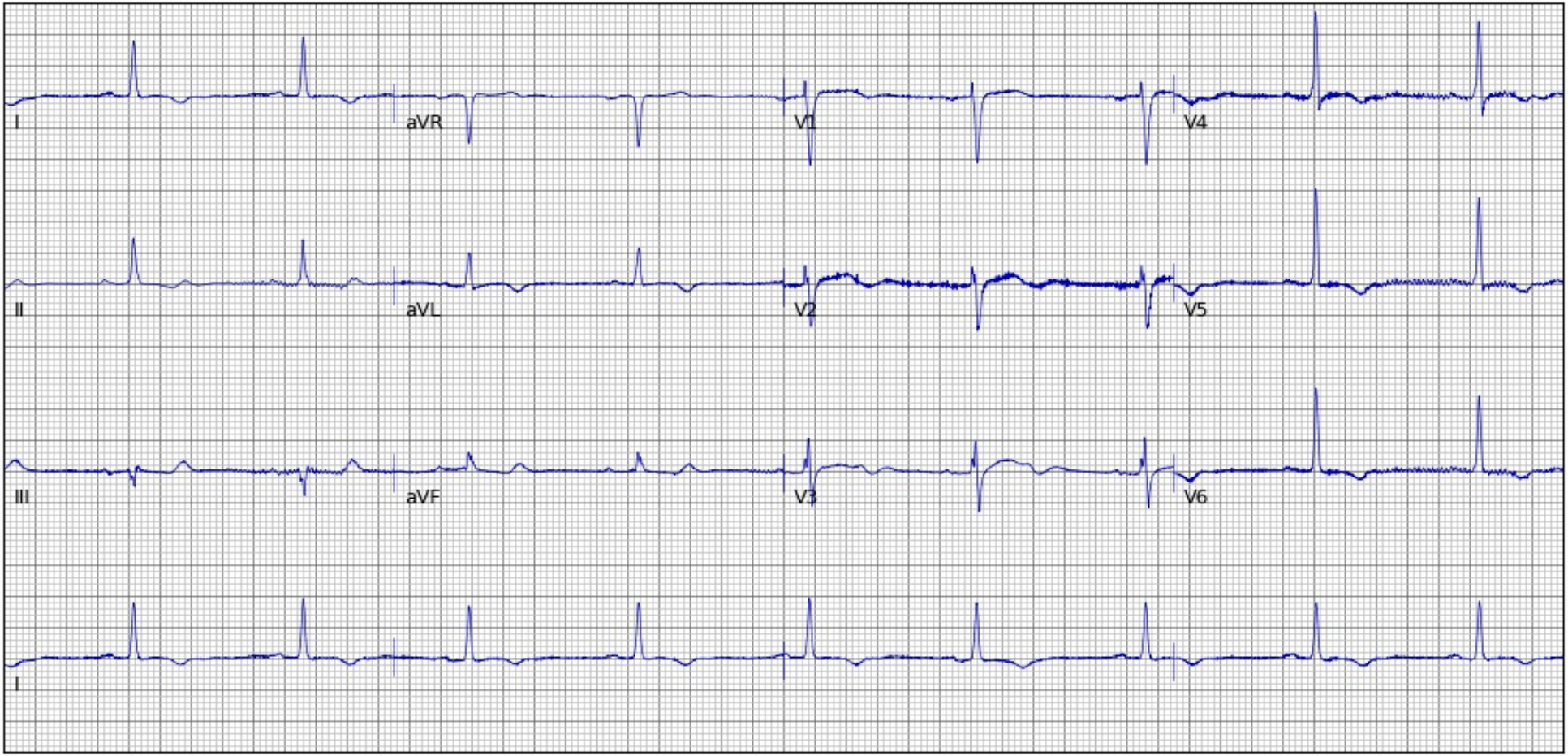

I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
I

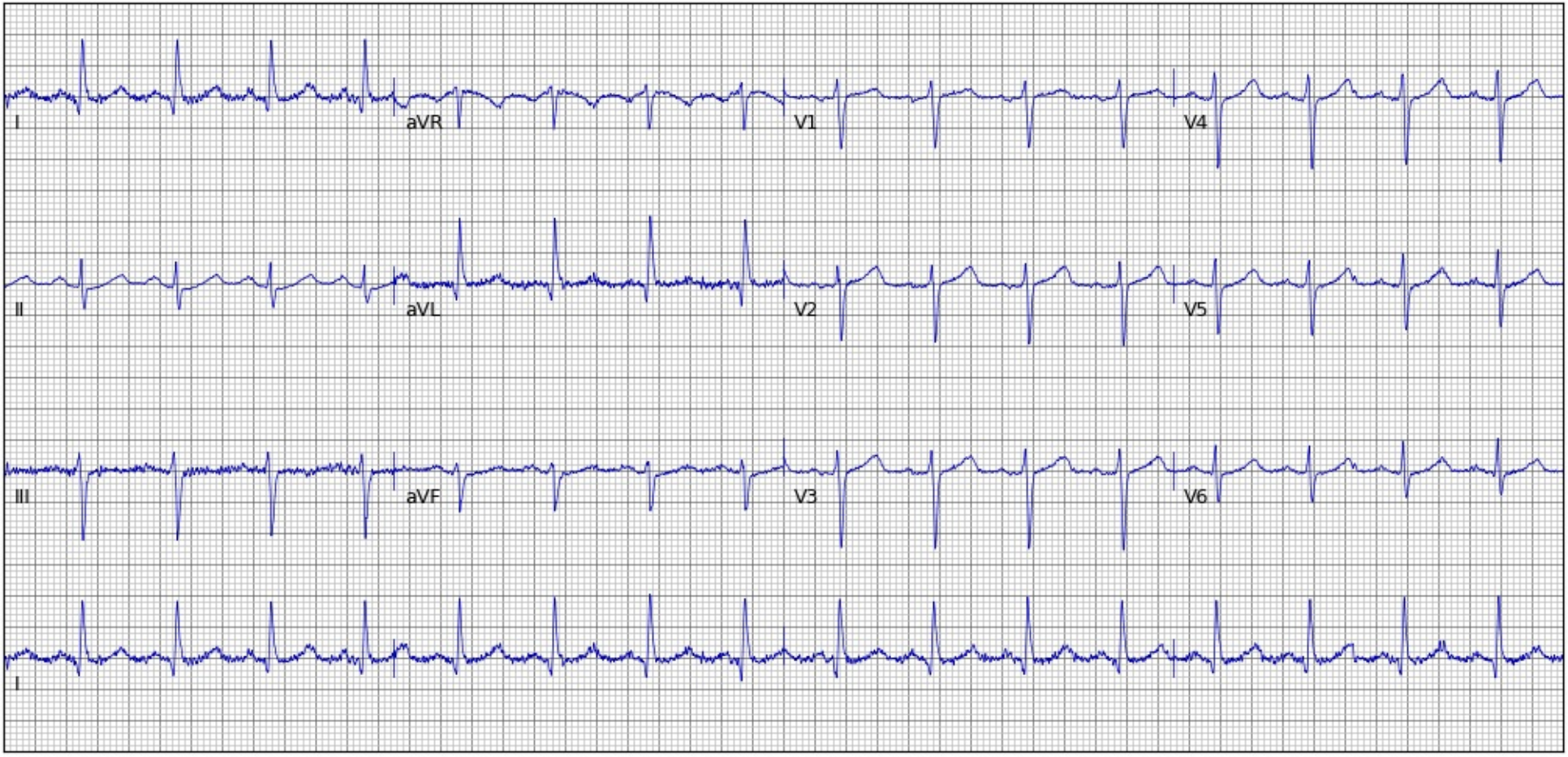

I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
I

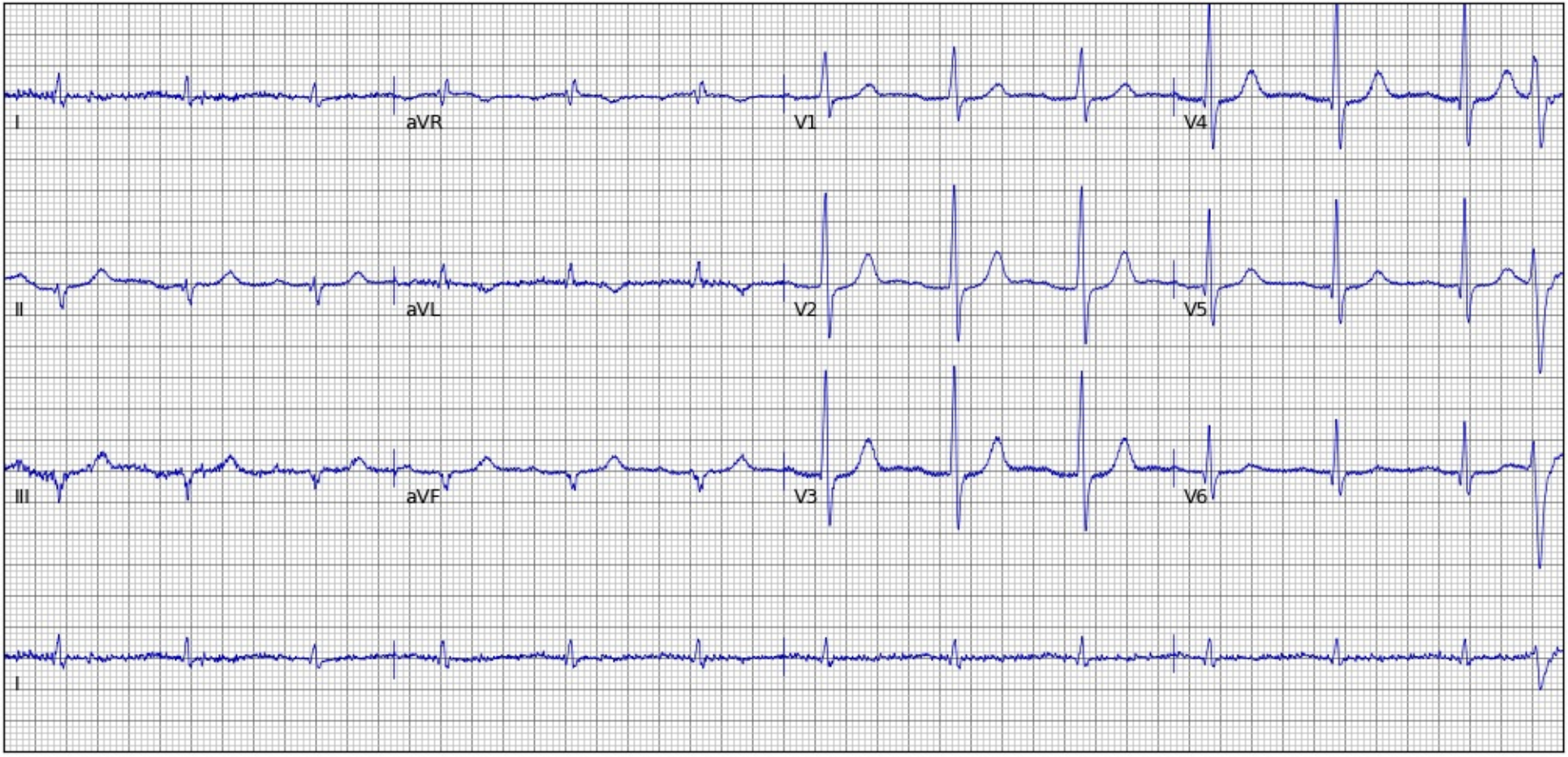

I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
I

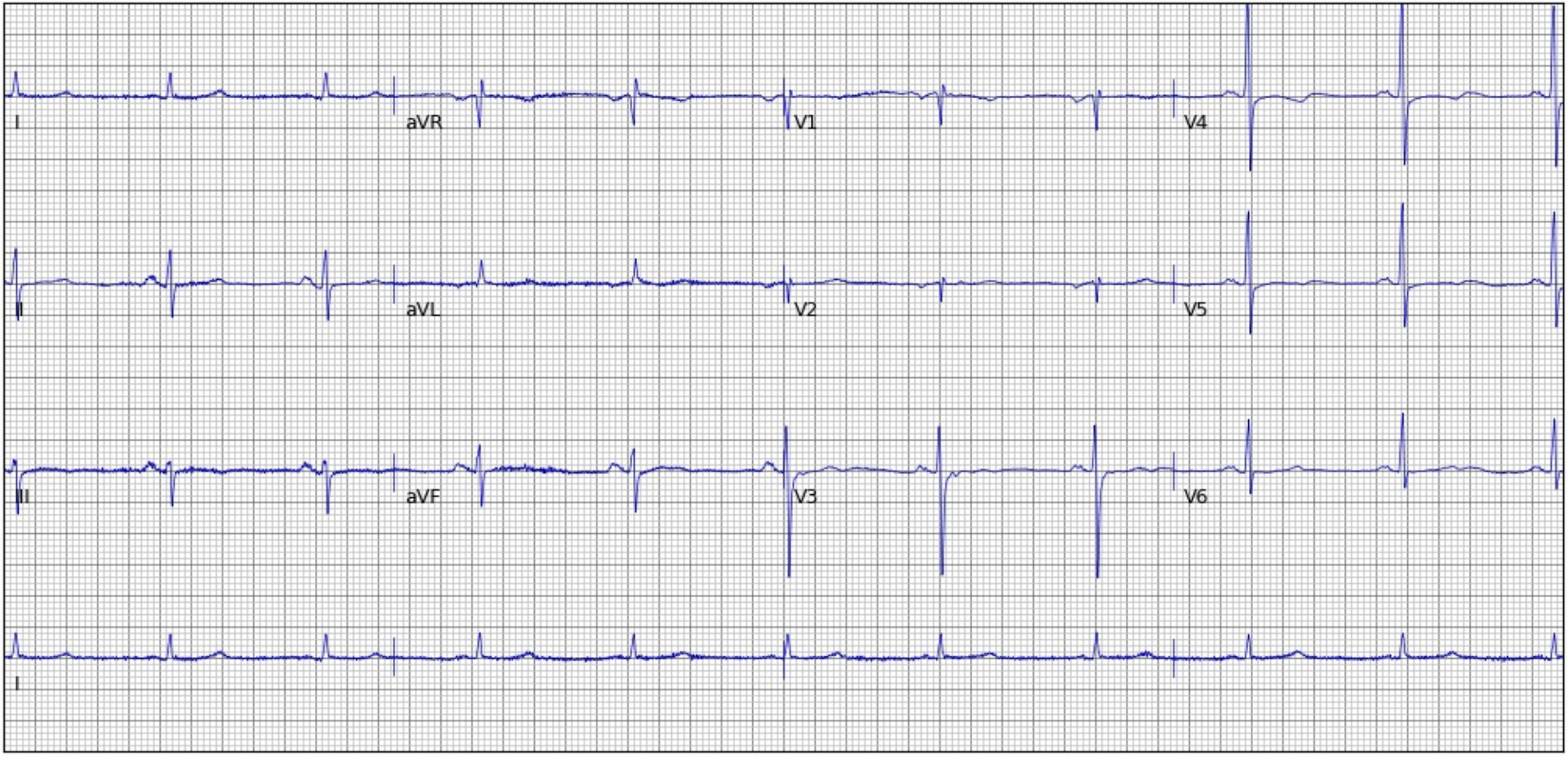

I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
I

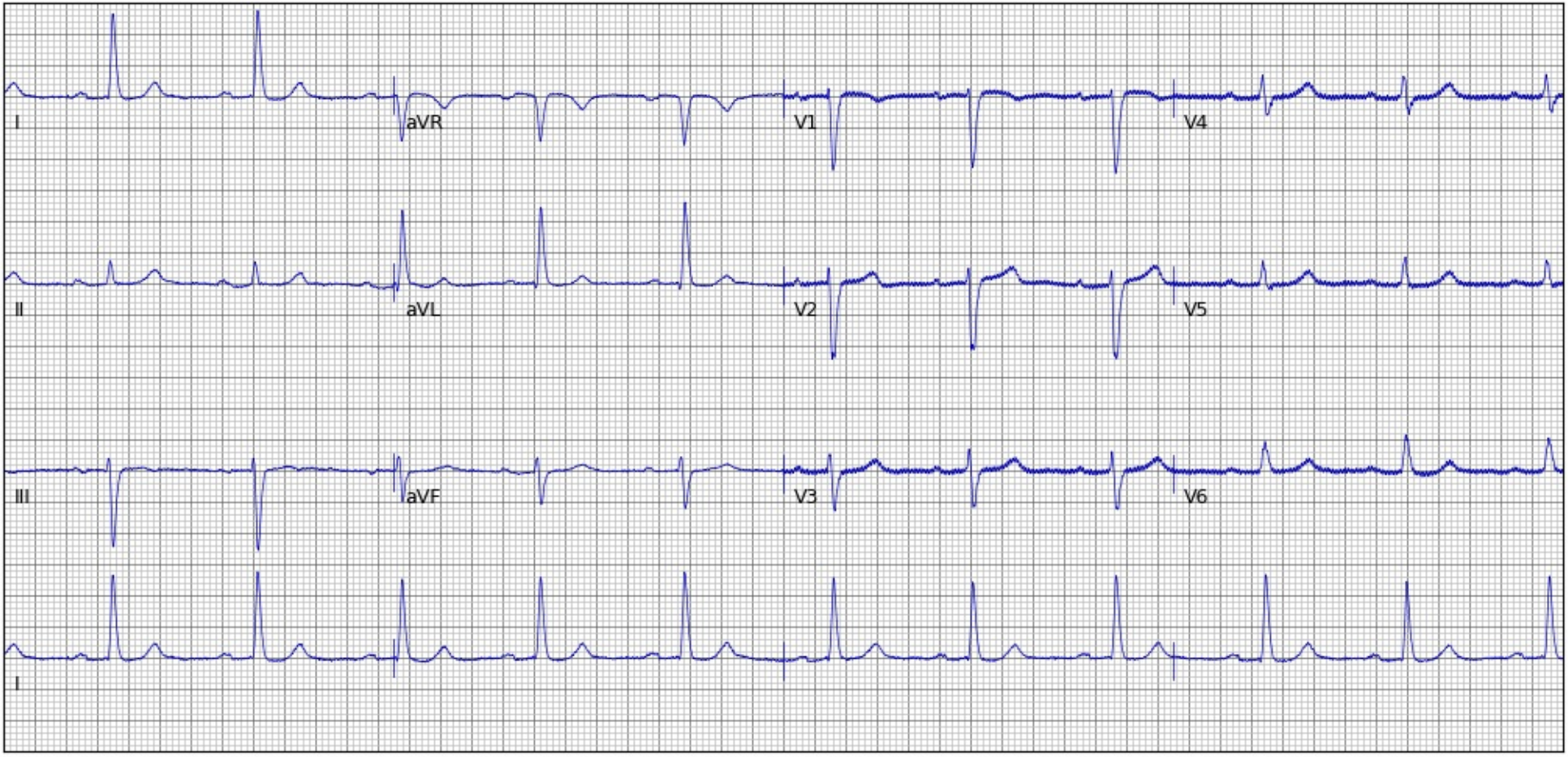

I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
I

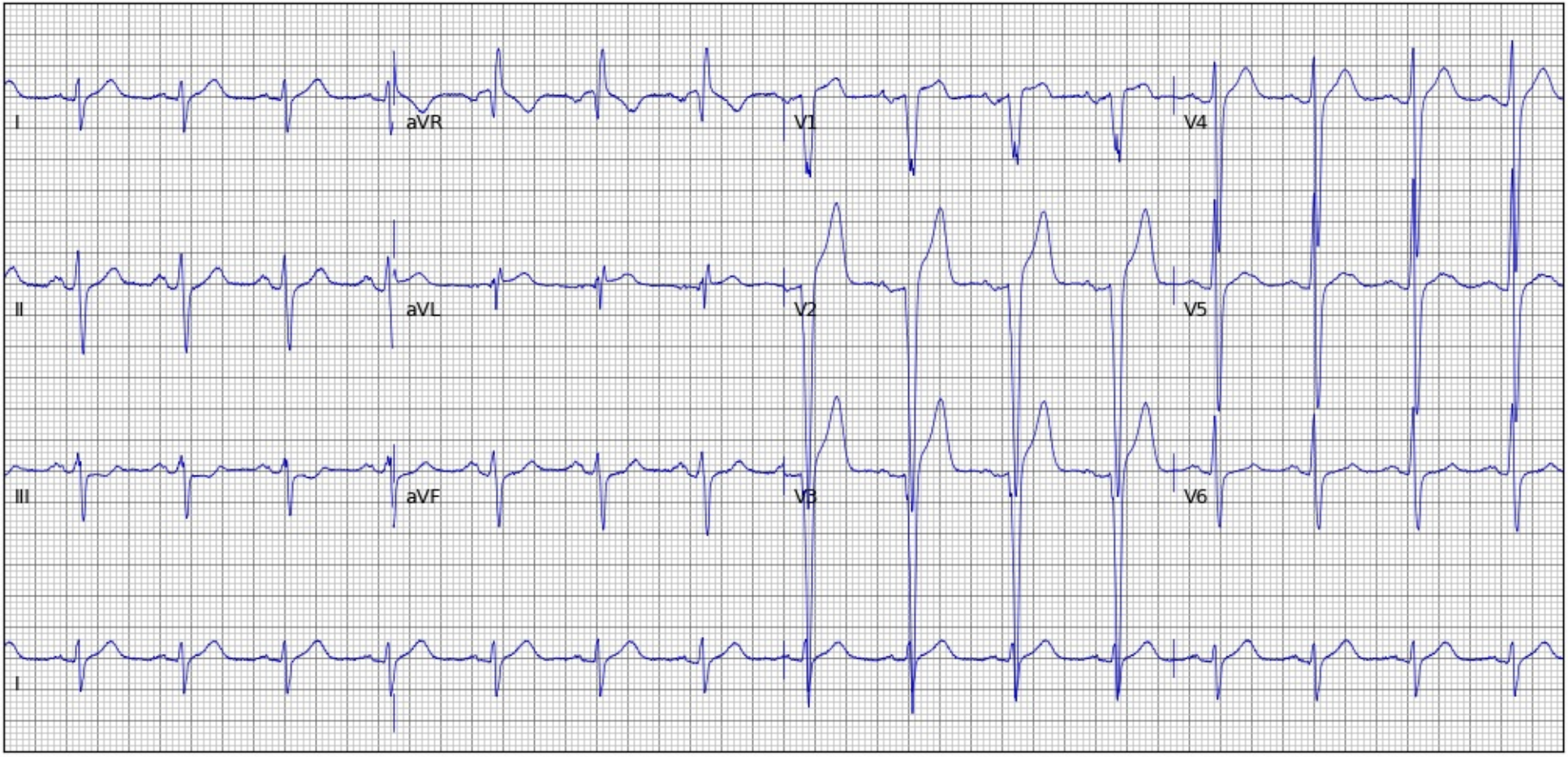

I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
I


I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
I


I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
I

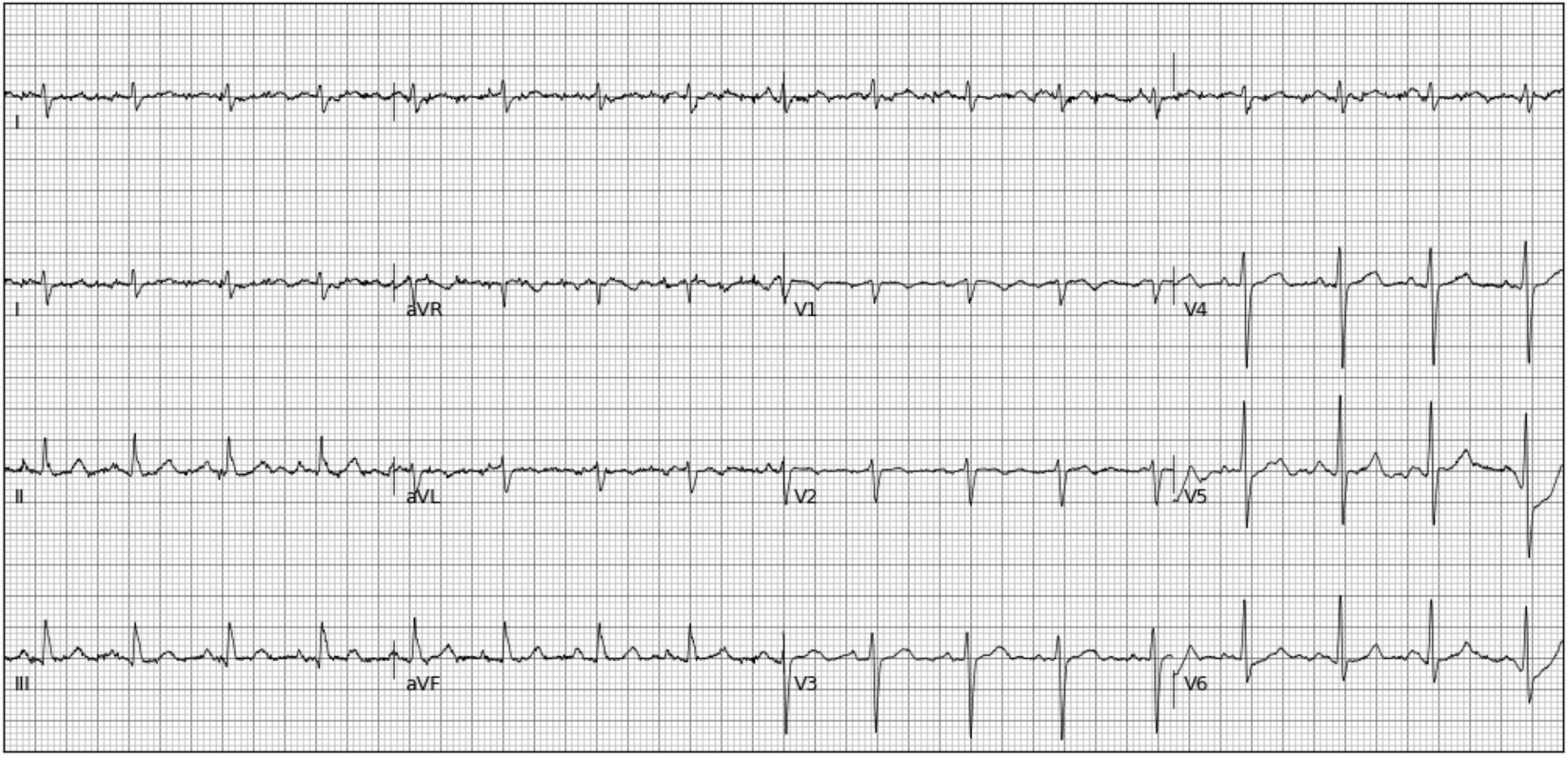

I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
I

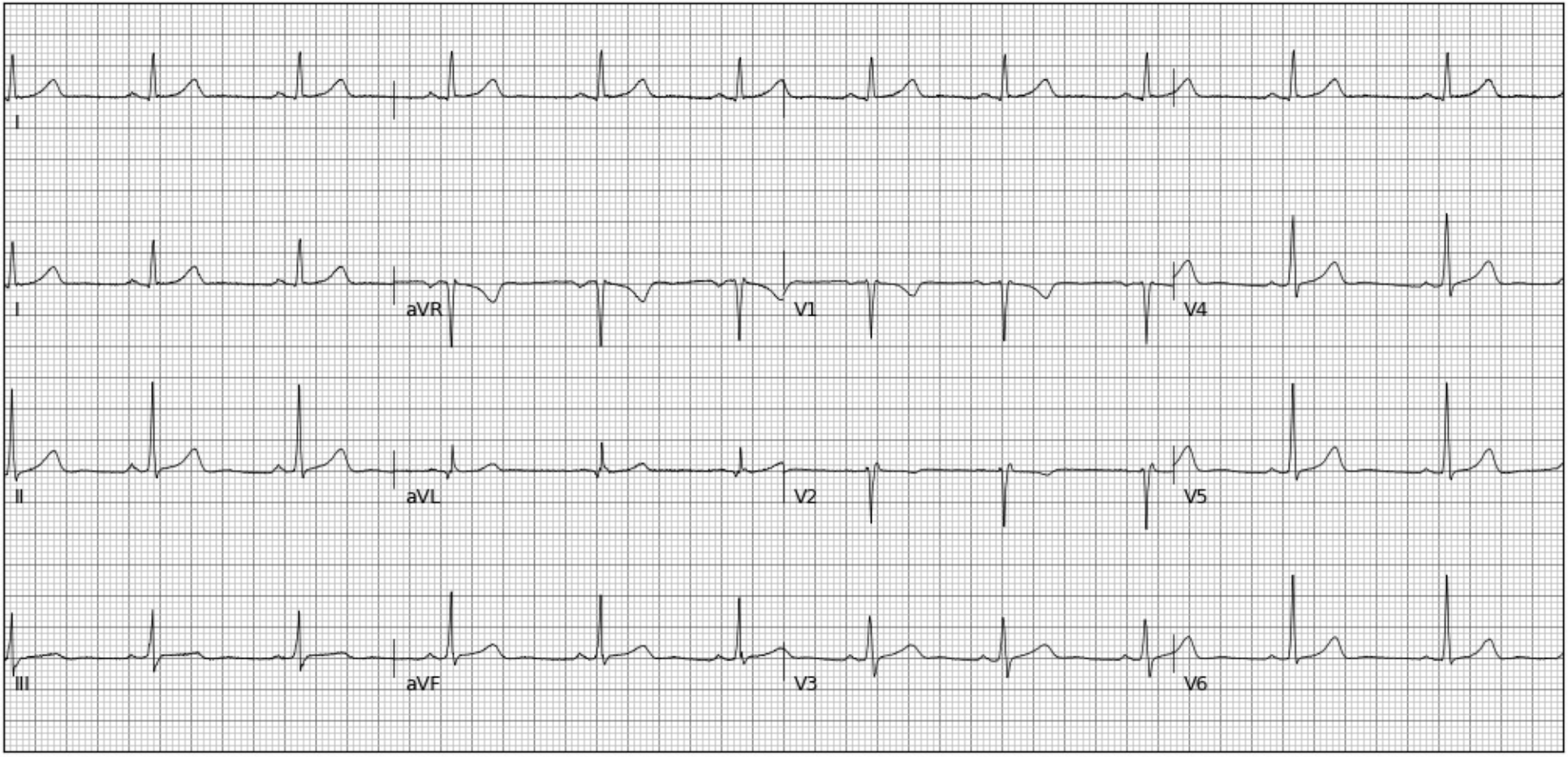

I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
I

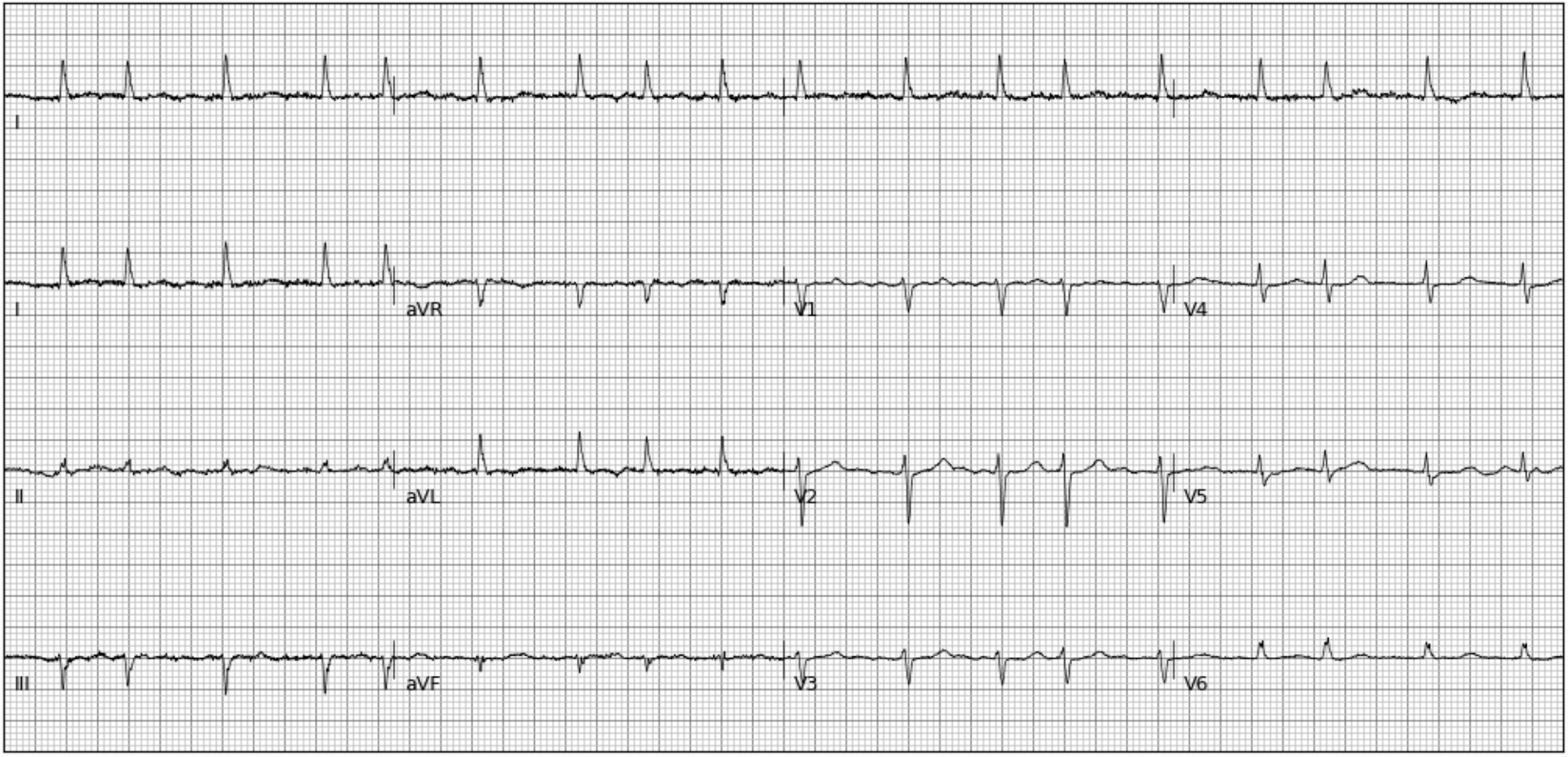

I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
I

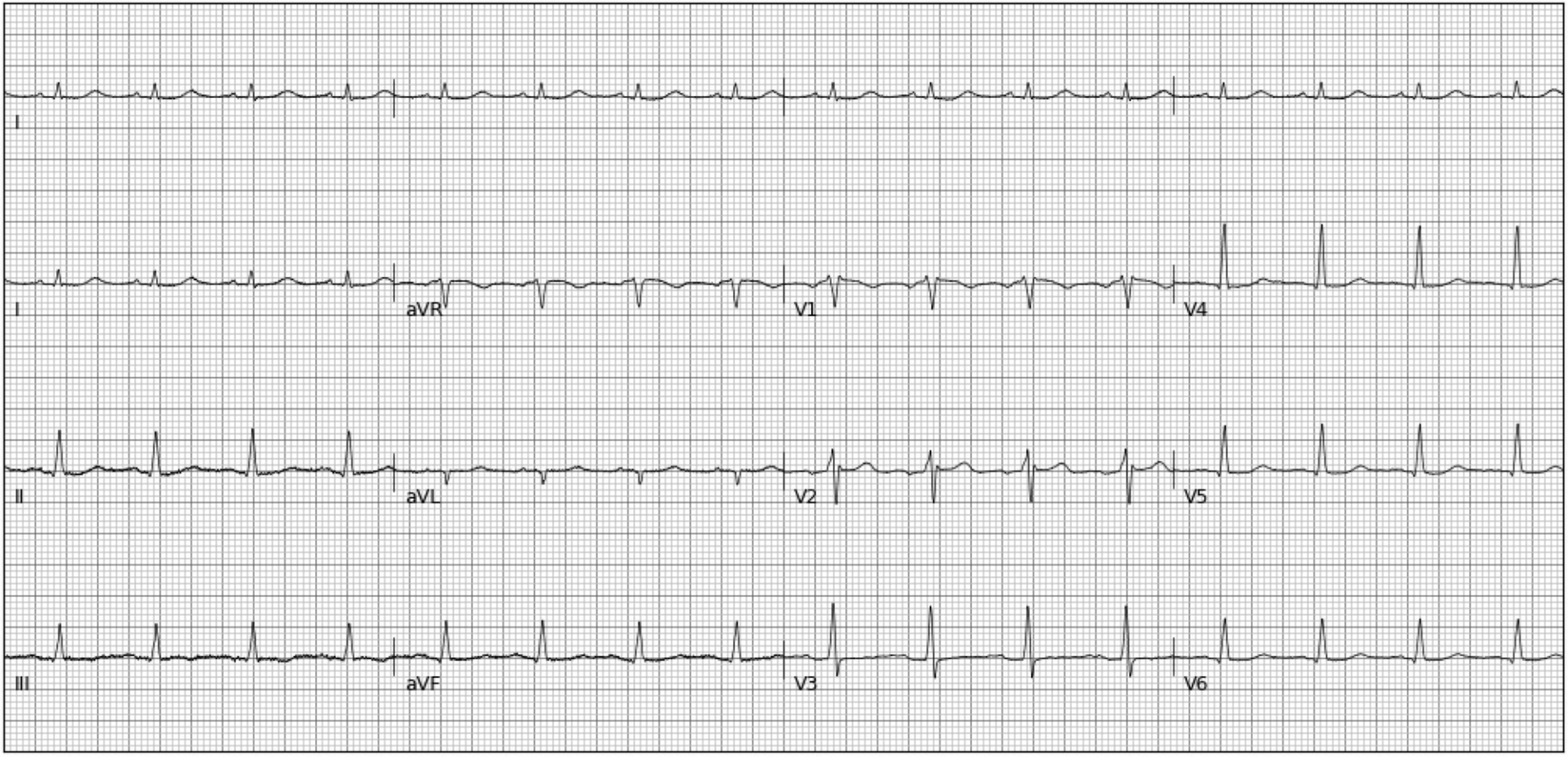

I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6
I

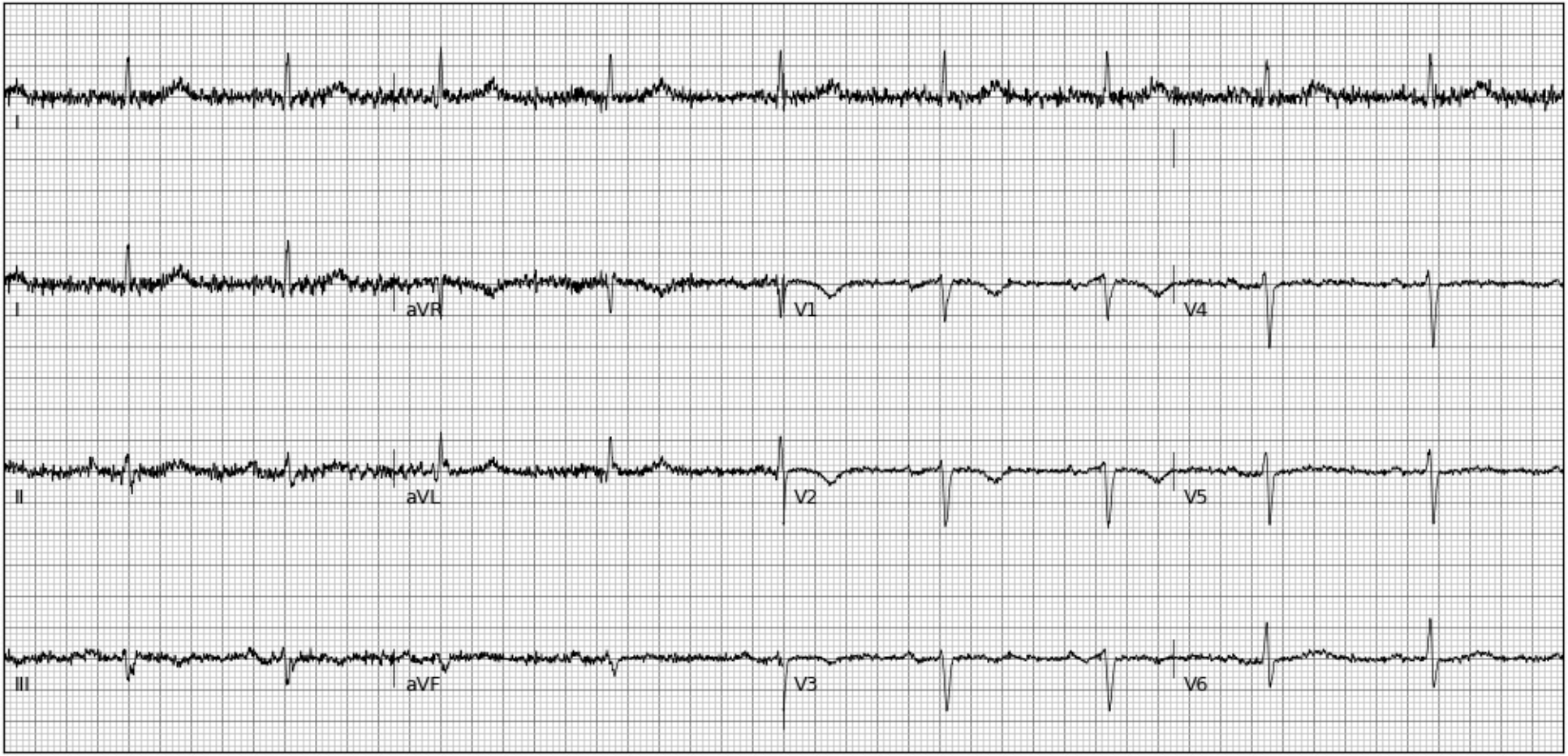
Section 5. Random examples of 25 electrocardiogram images plotted in novel format (Black-on-Black Rhythm-on-top) not encountered during model development

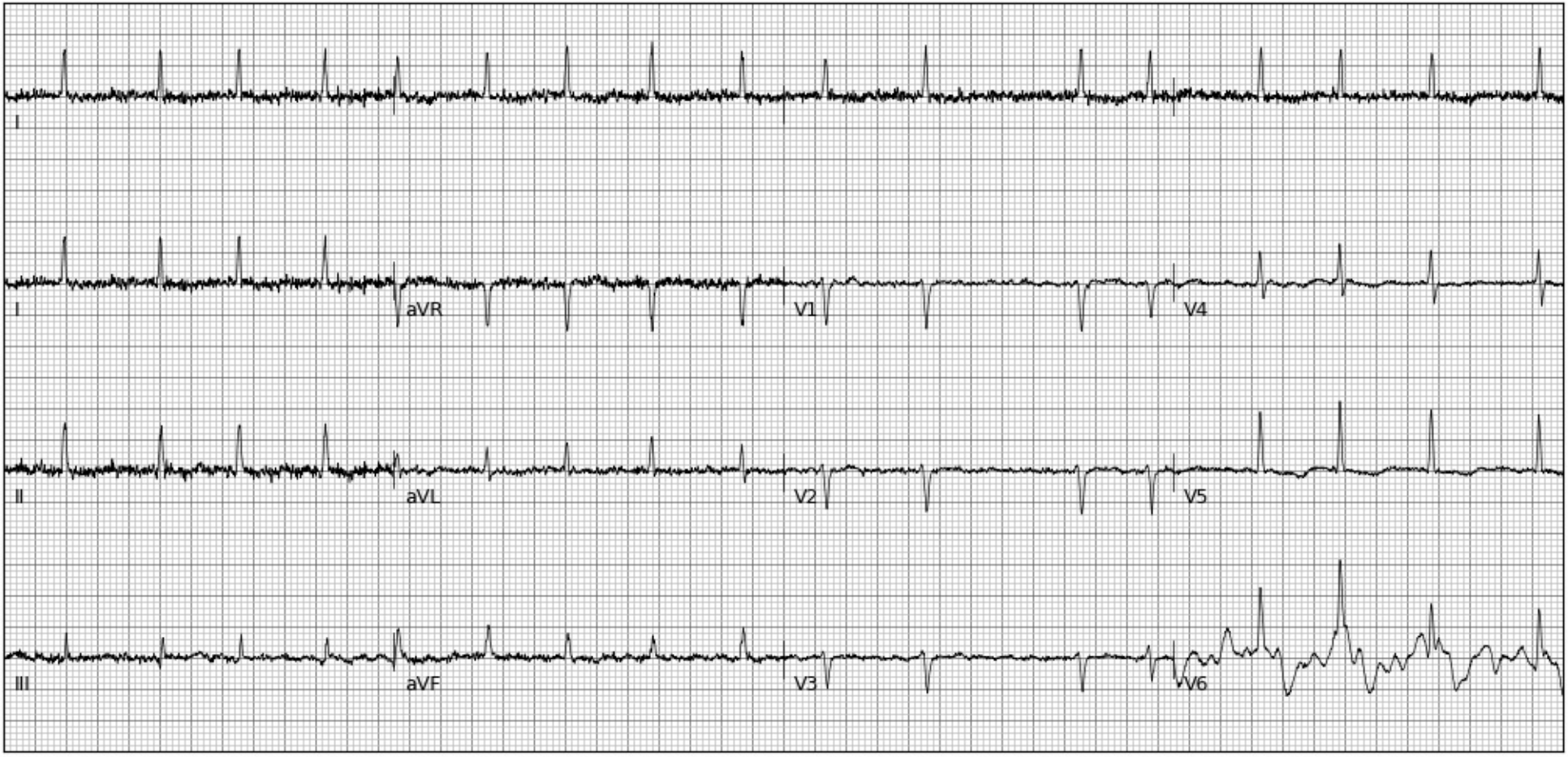

I
I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6

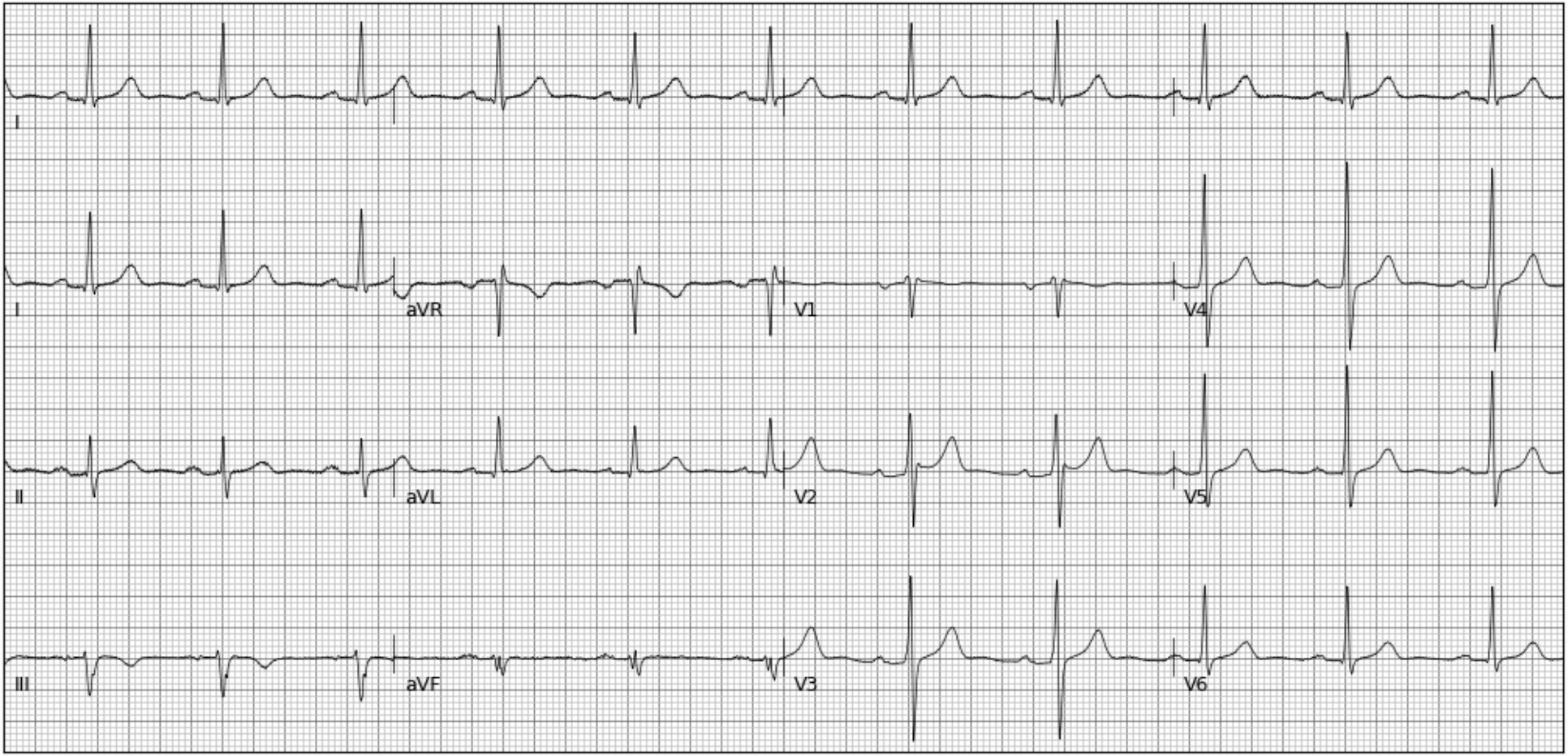

I
I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6

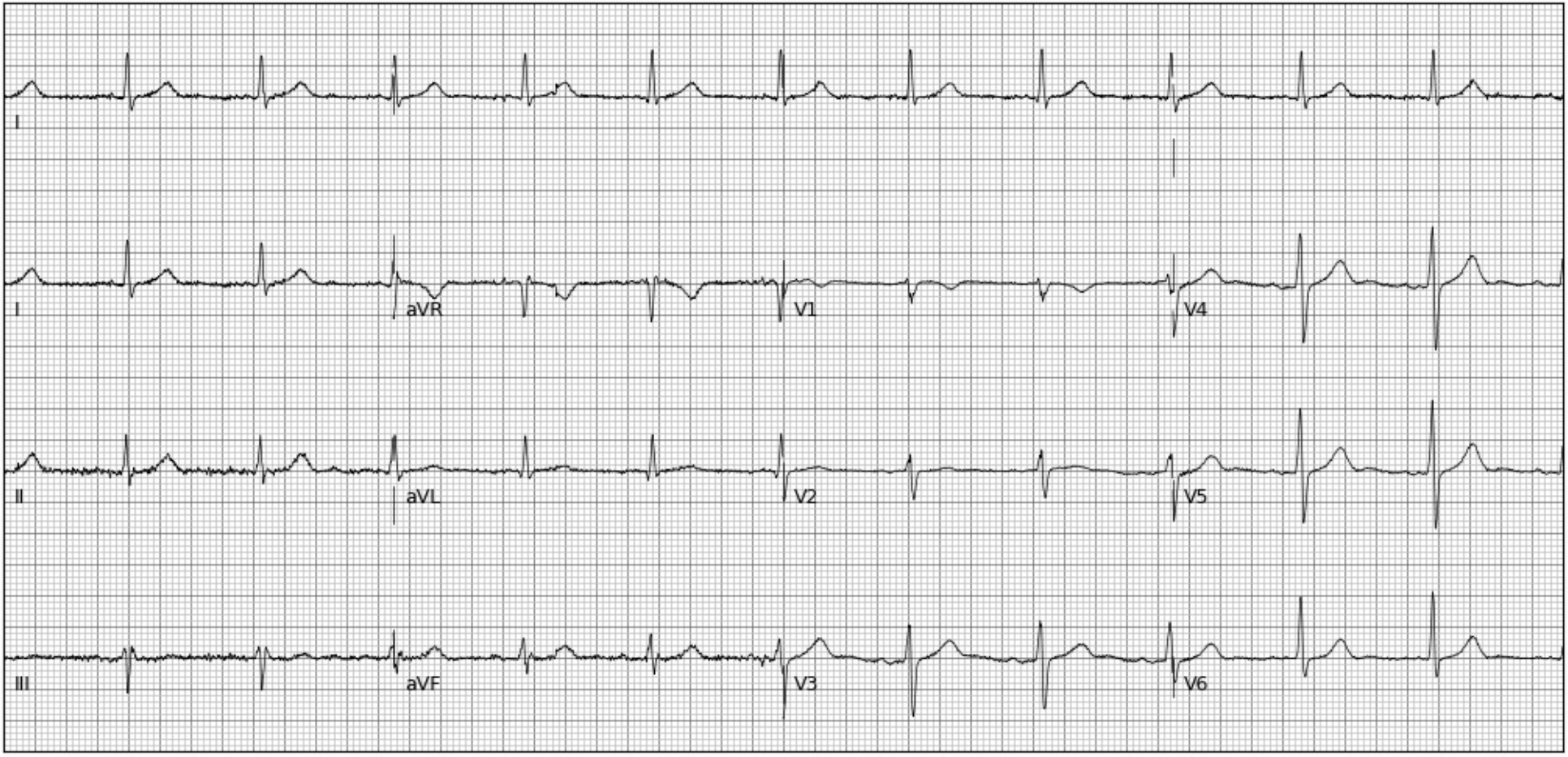

I
I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6

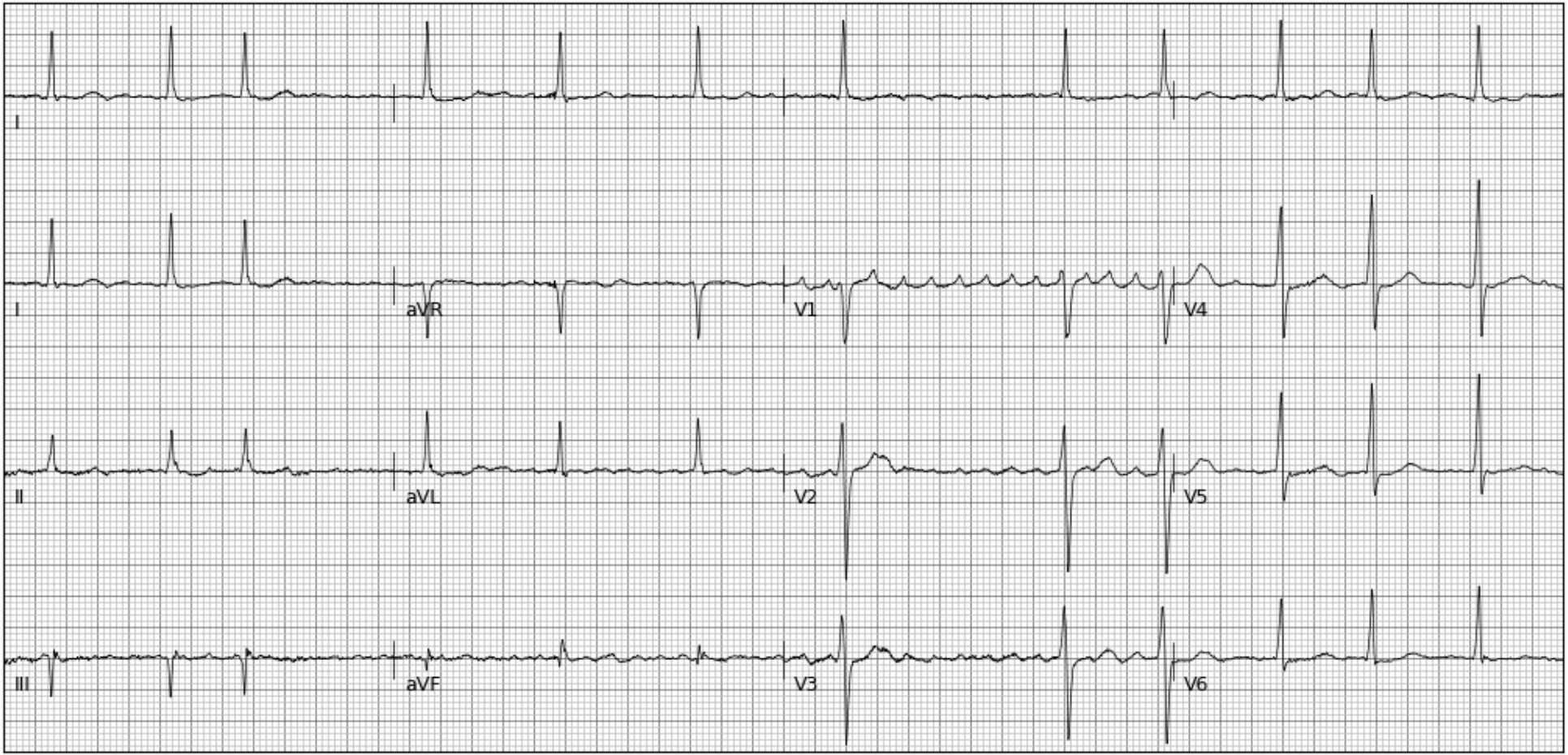

I
I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6

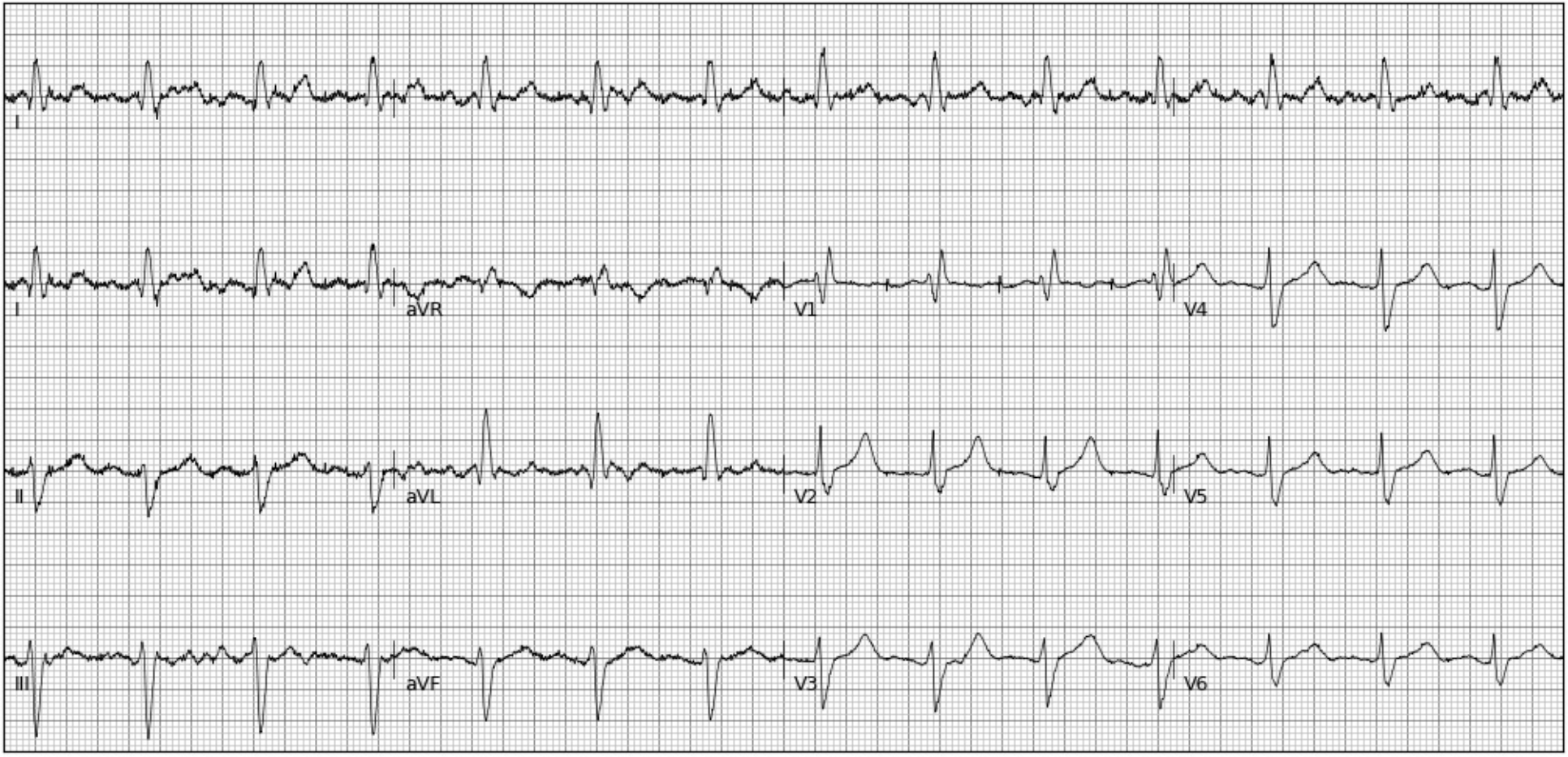

I
I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6

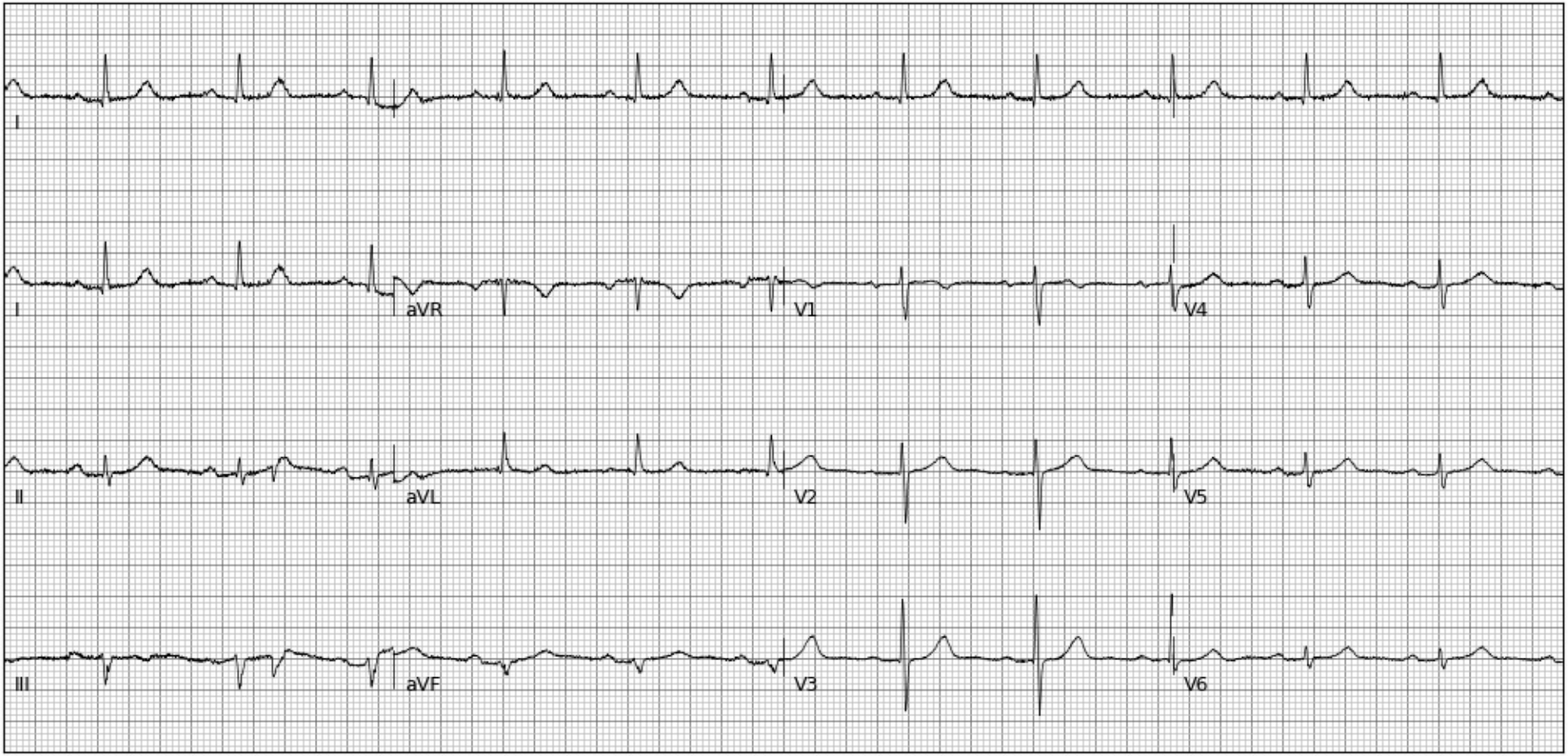

I
I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6

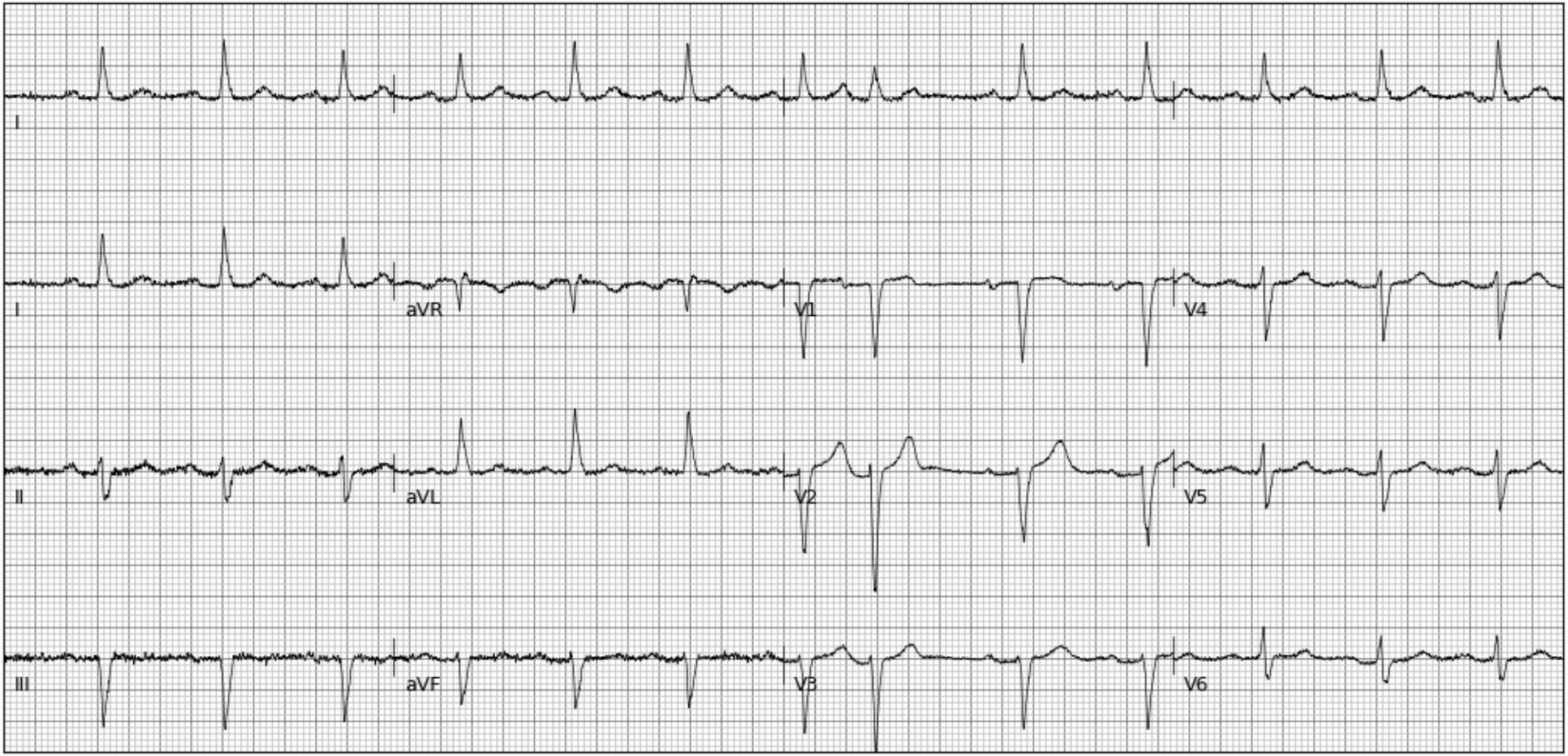

I
I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6

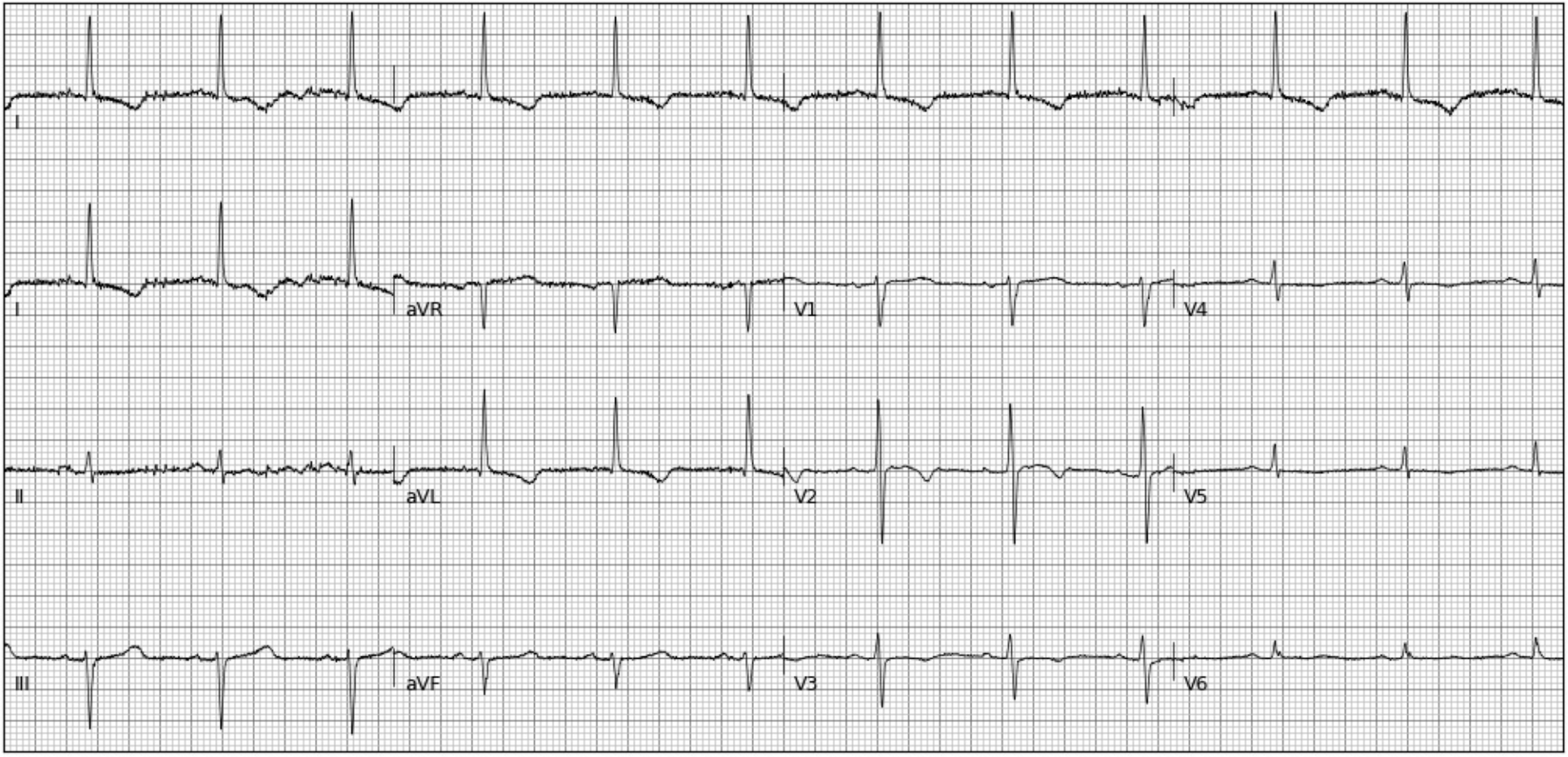

I
I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6

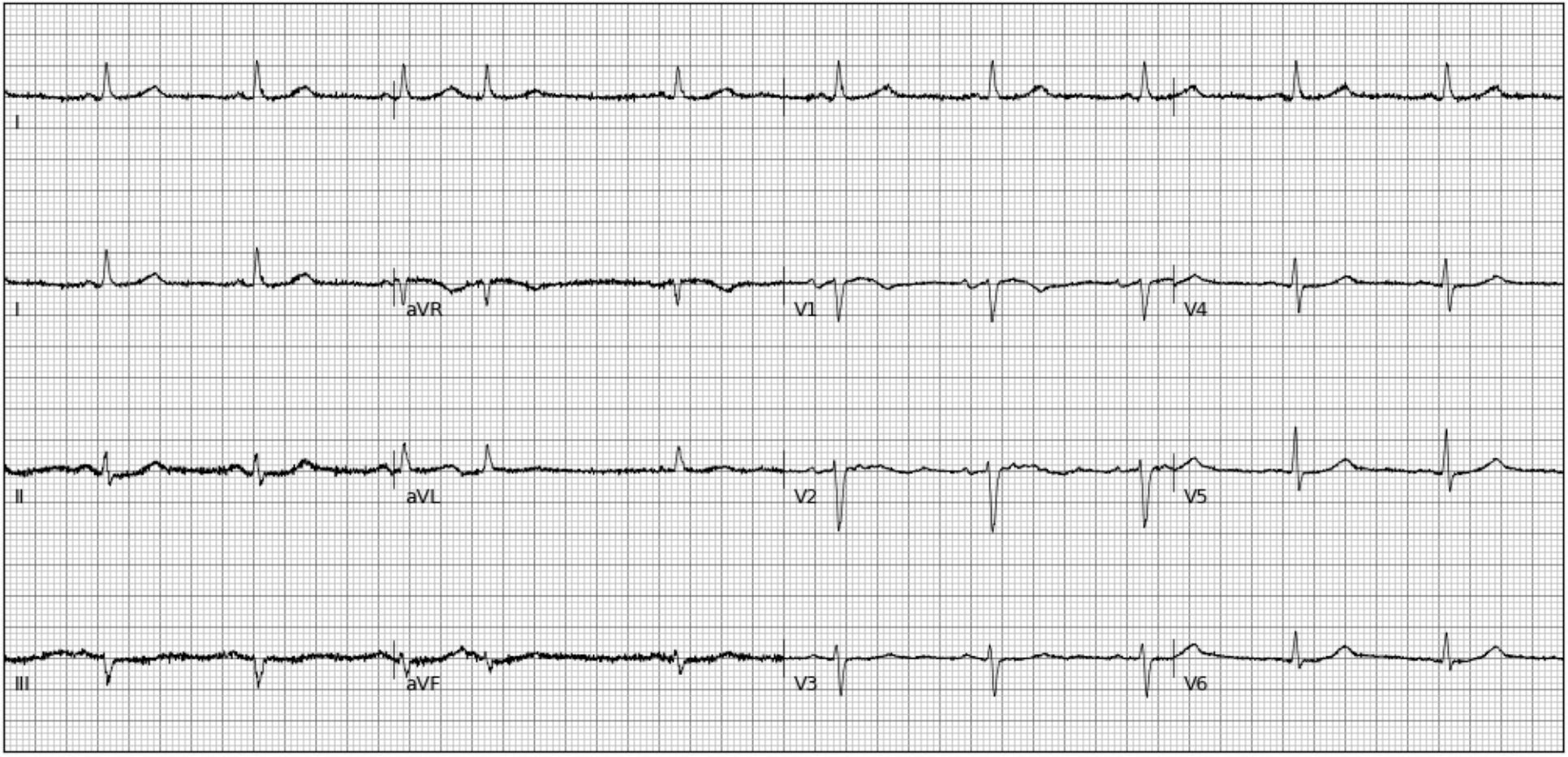

I
I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6

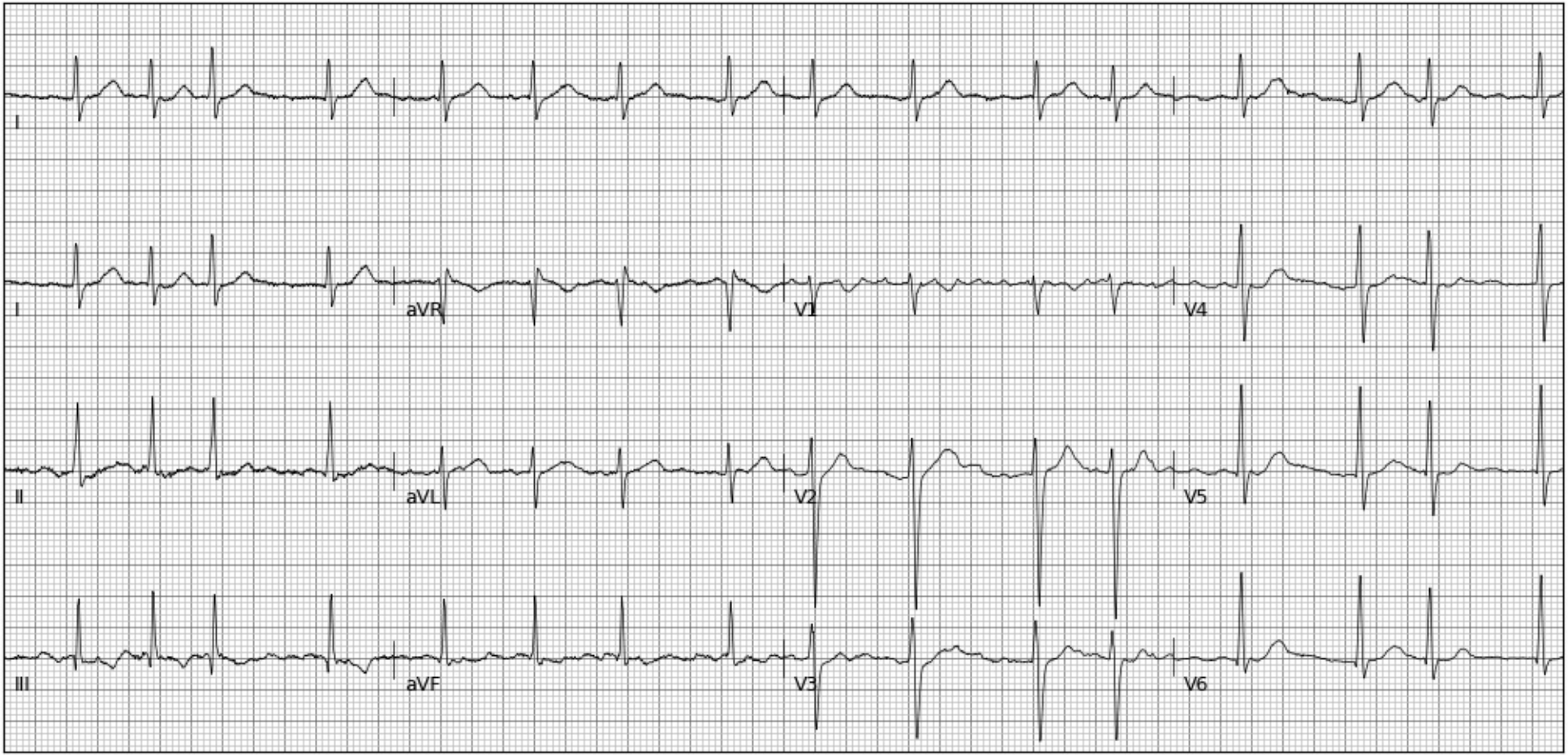

I
I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6

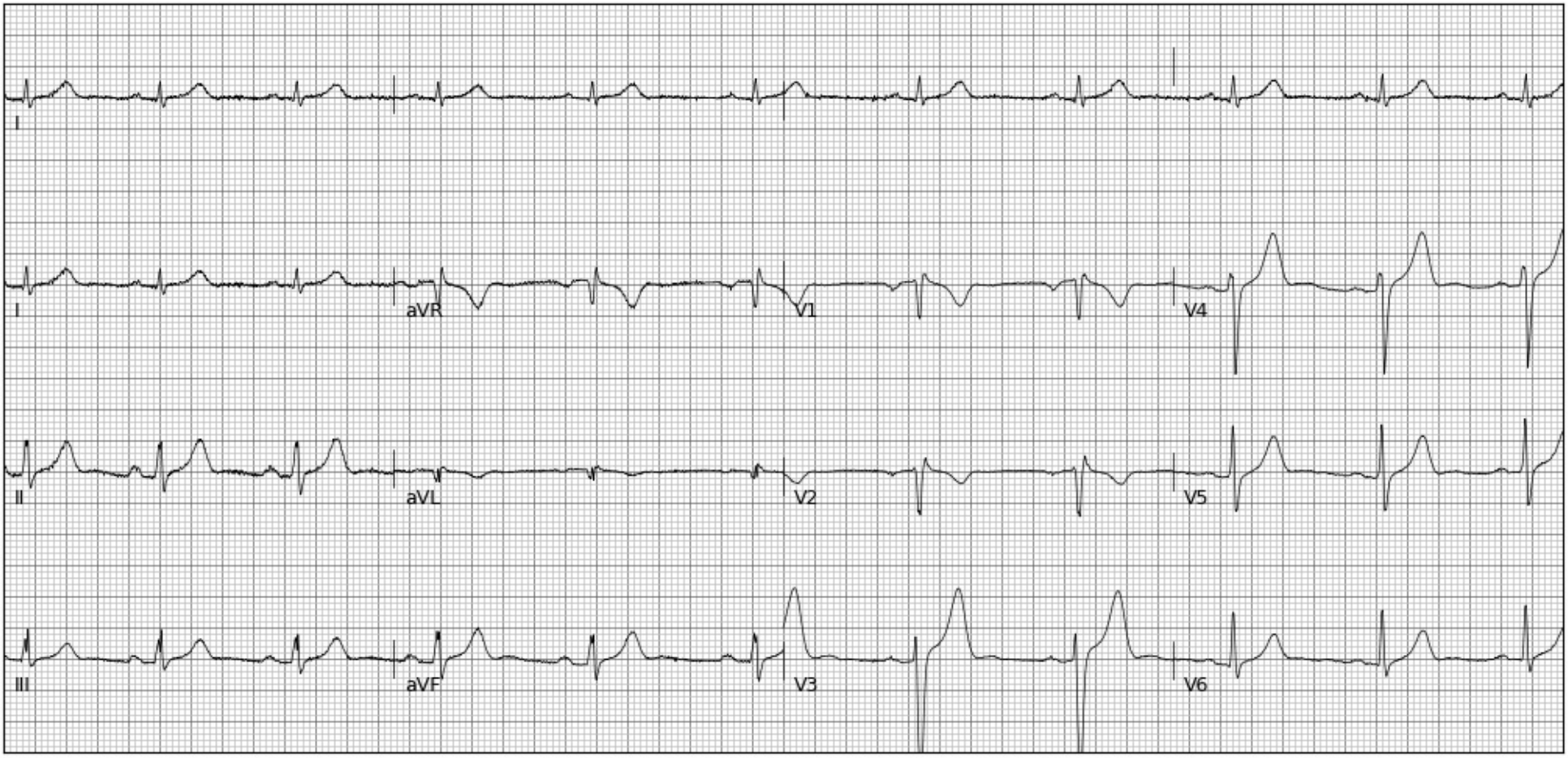

I
I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6

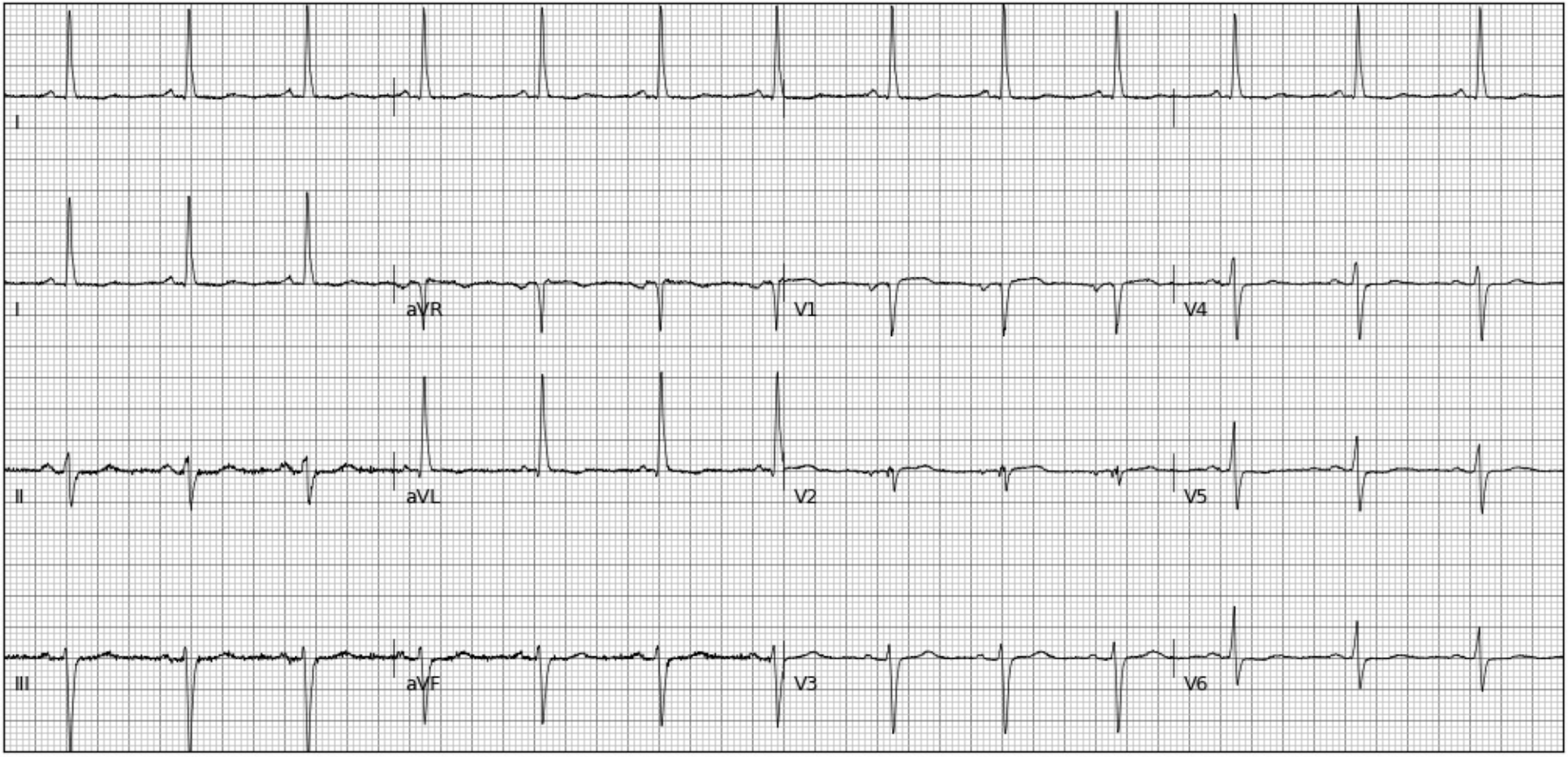

I
I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6

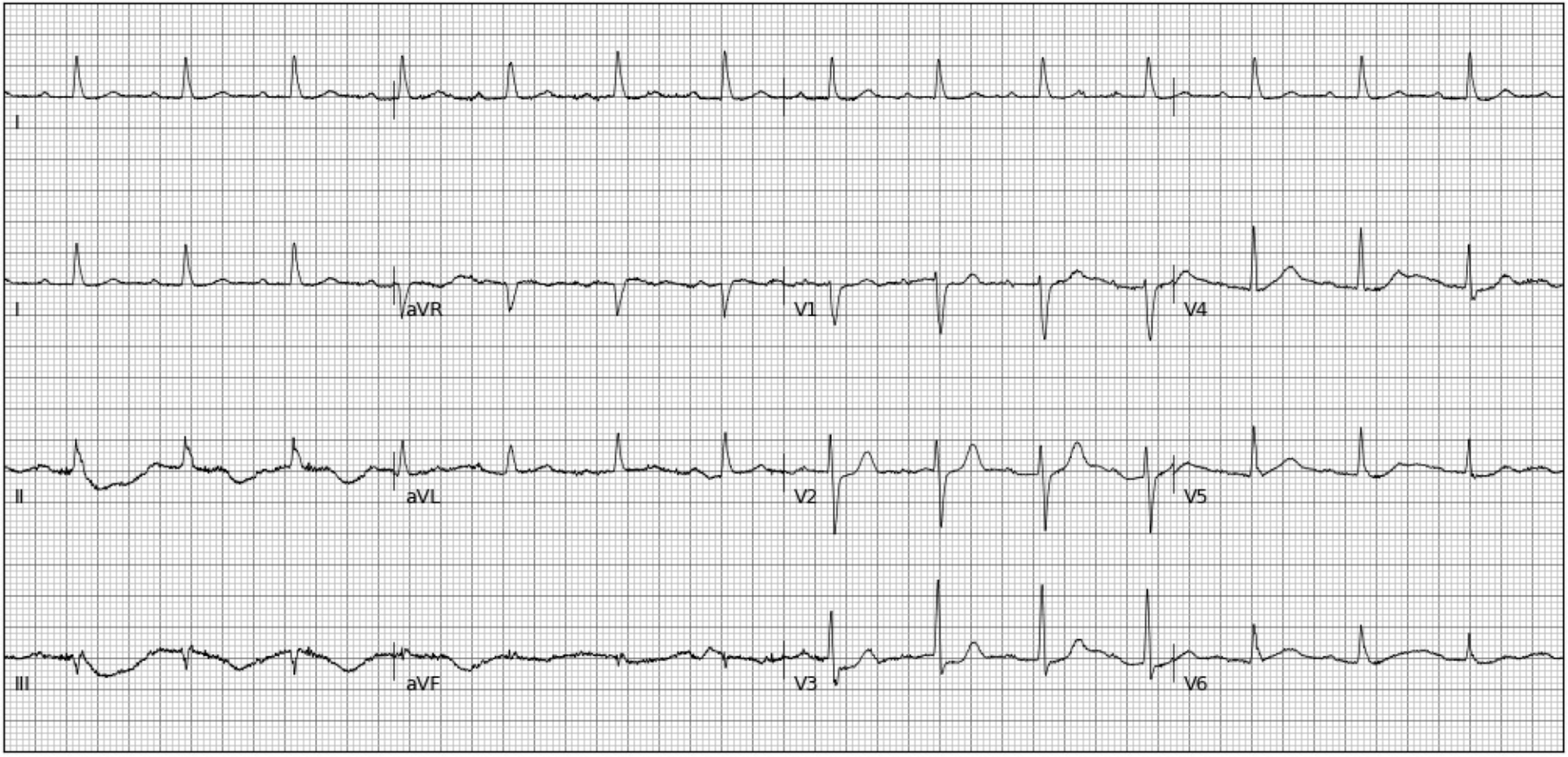

I
I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6

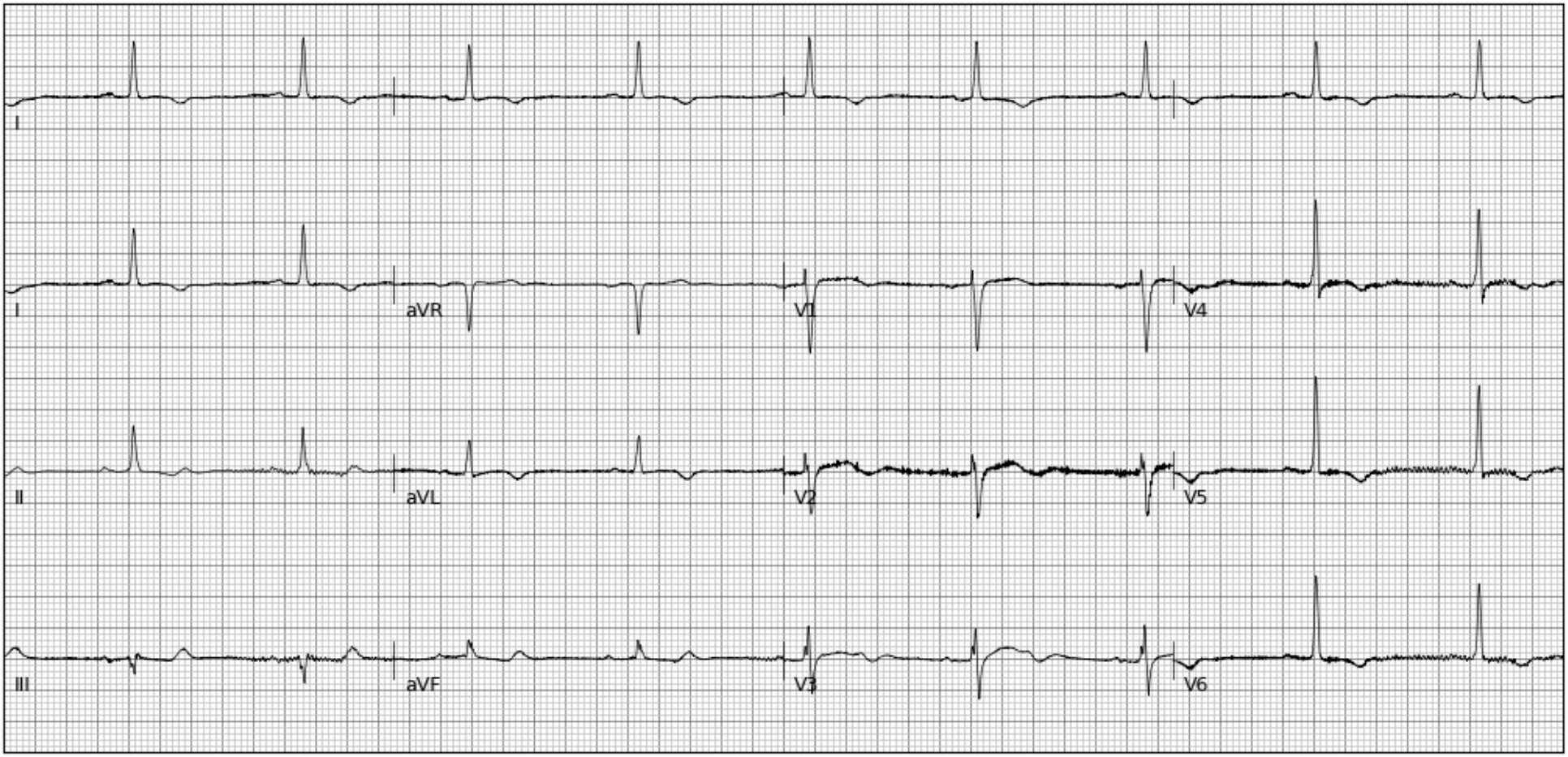

I
I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6

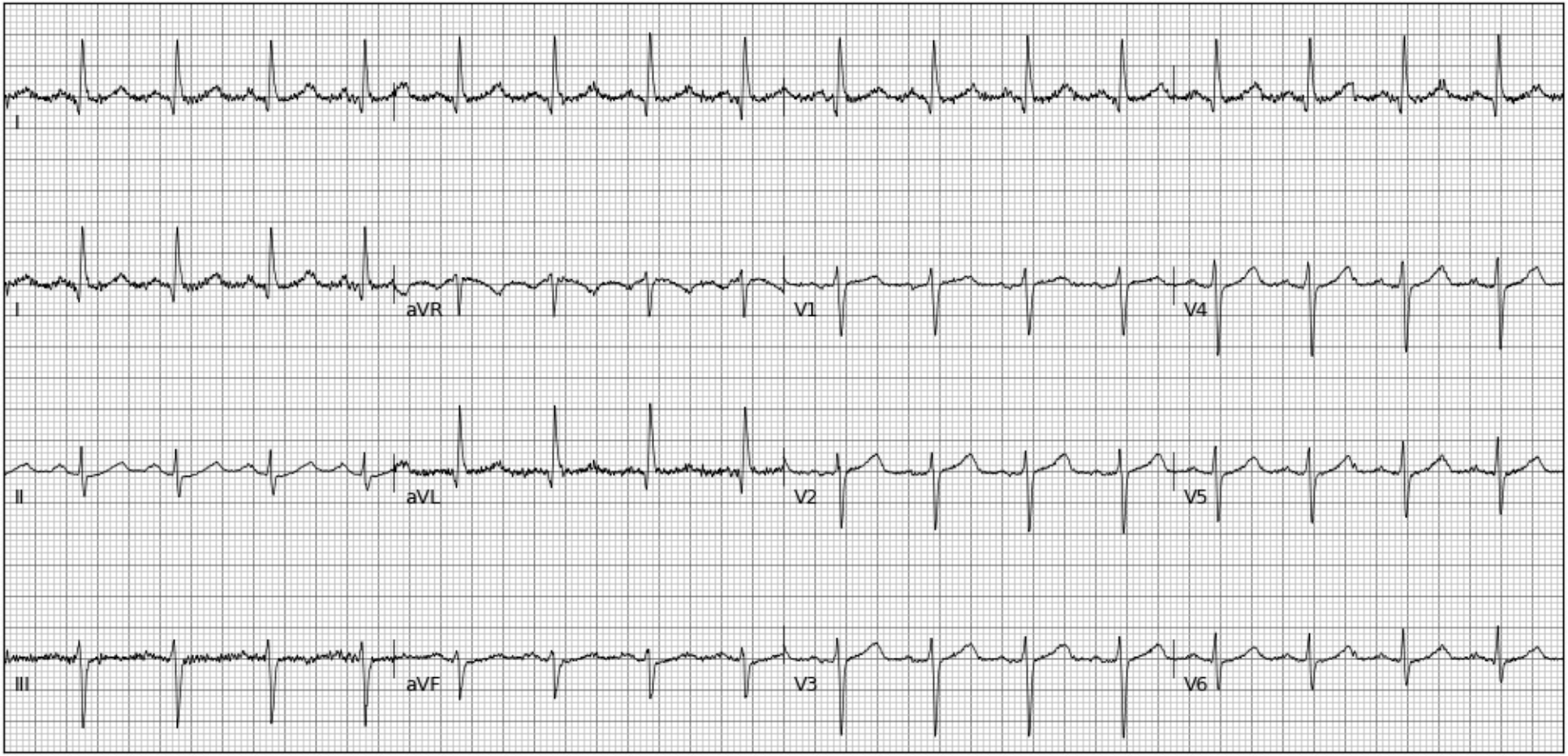

I
I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6

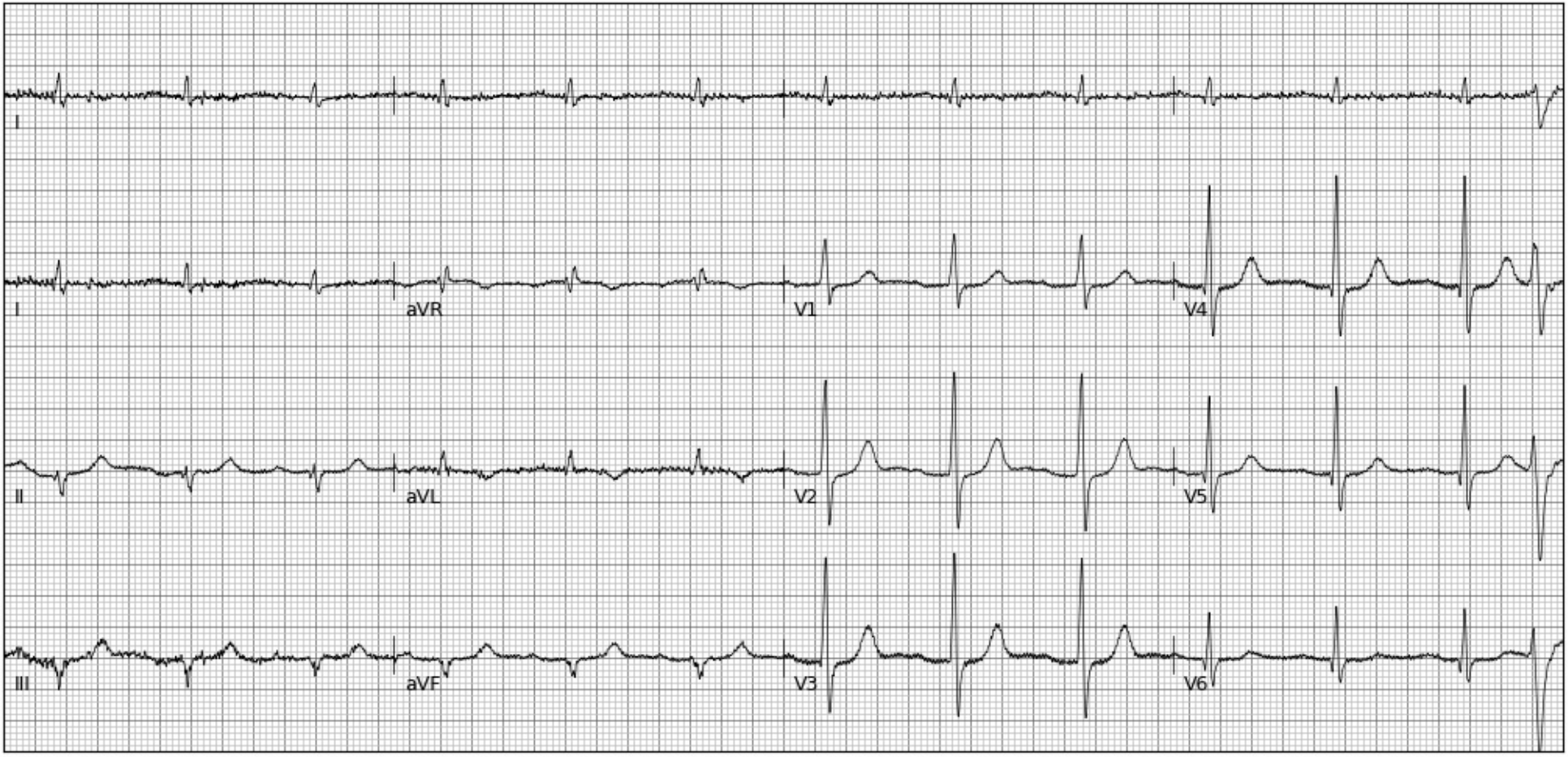

I
I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6

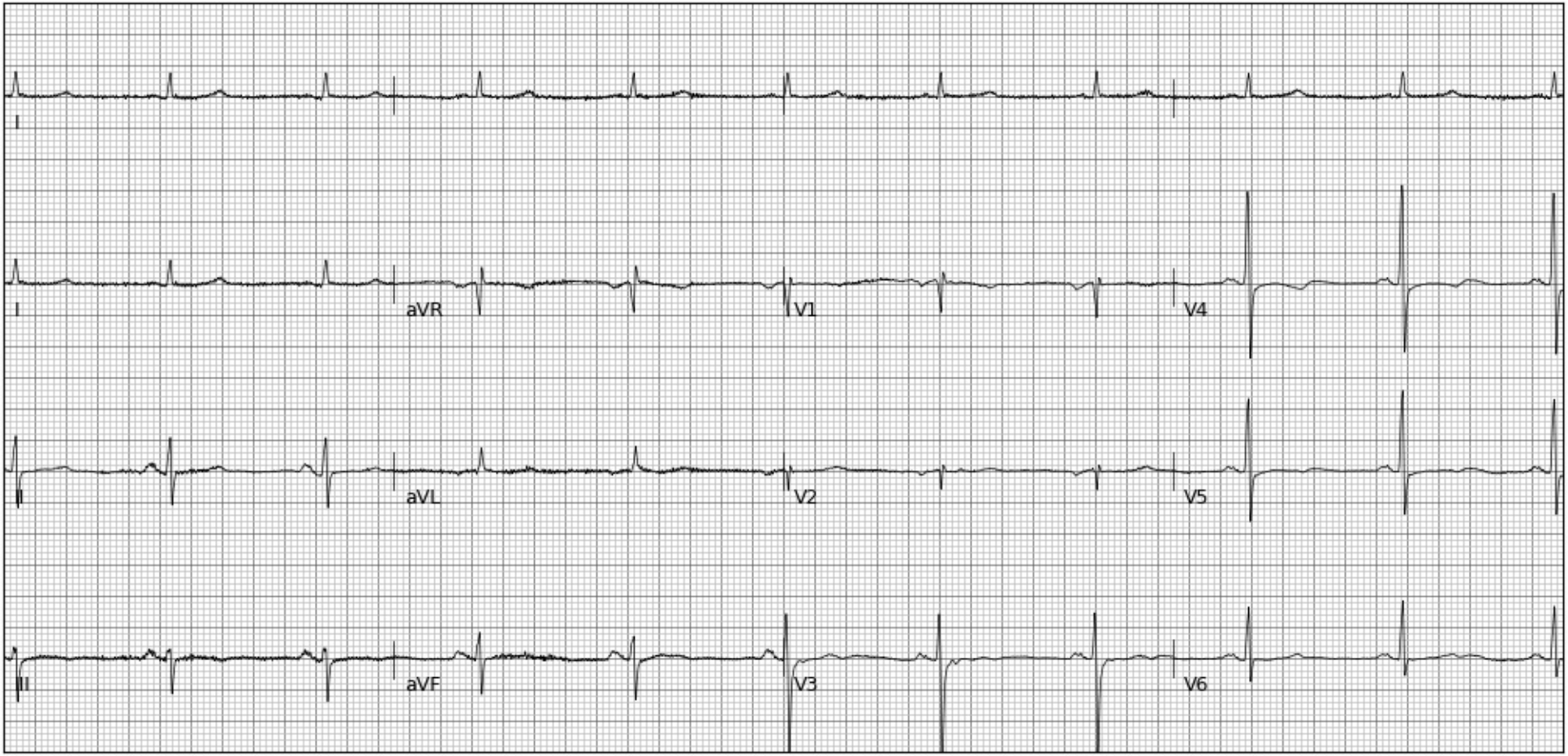

I
I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6

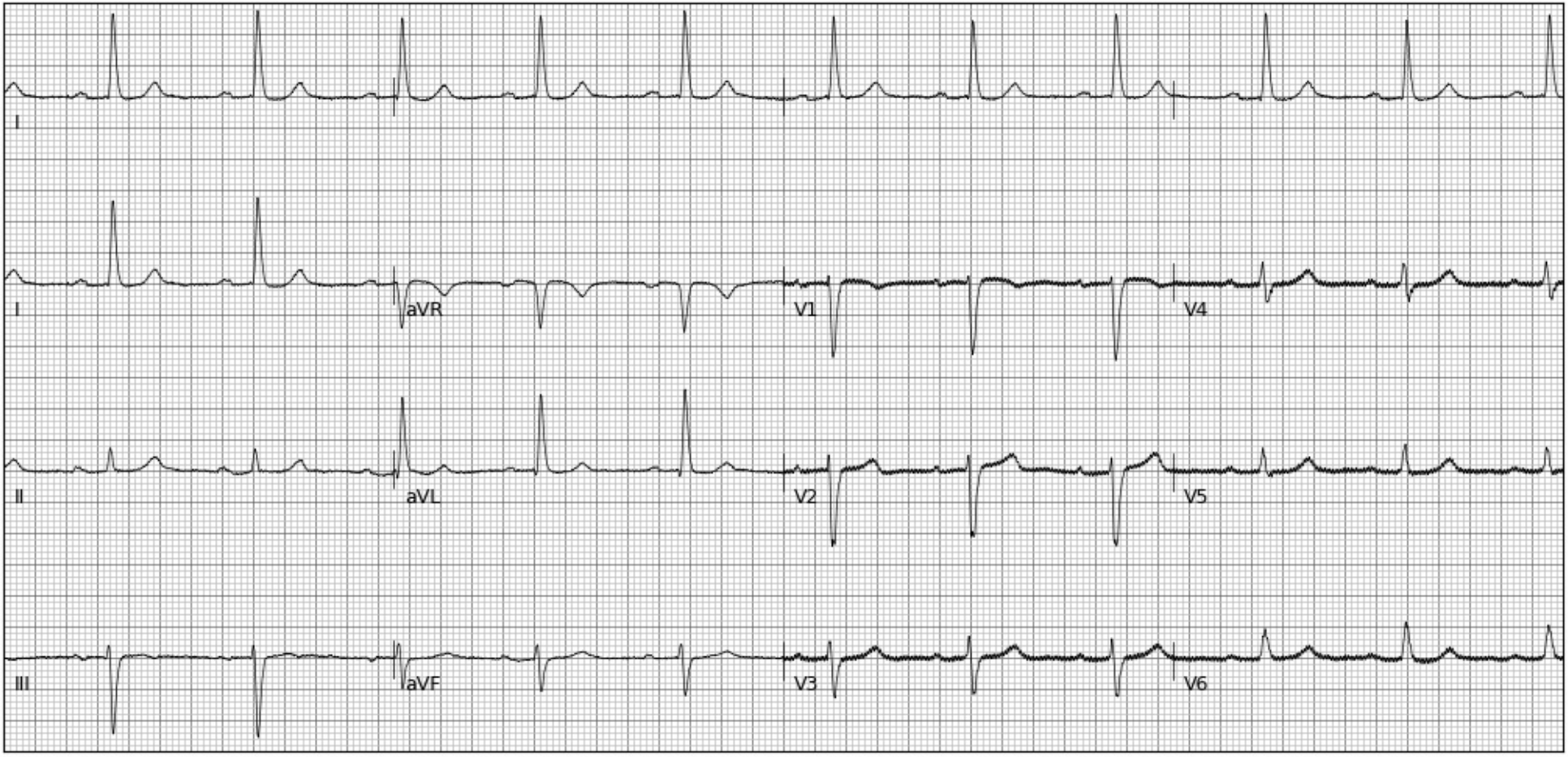

I
I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6

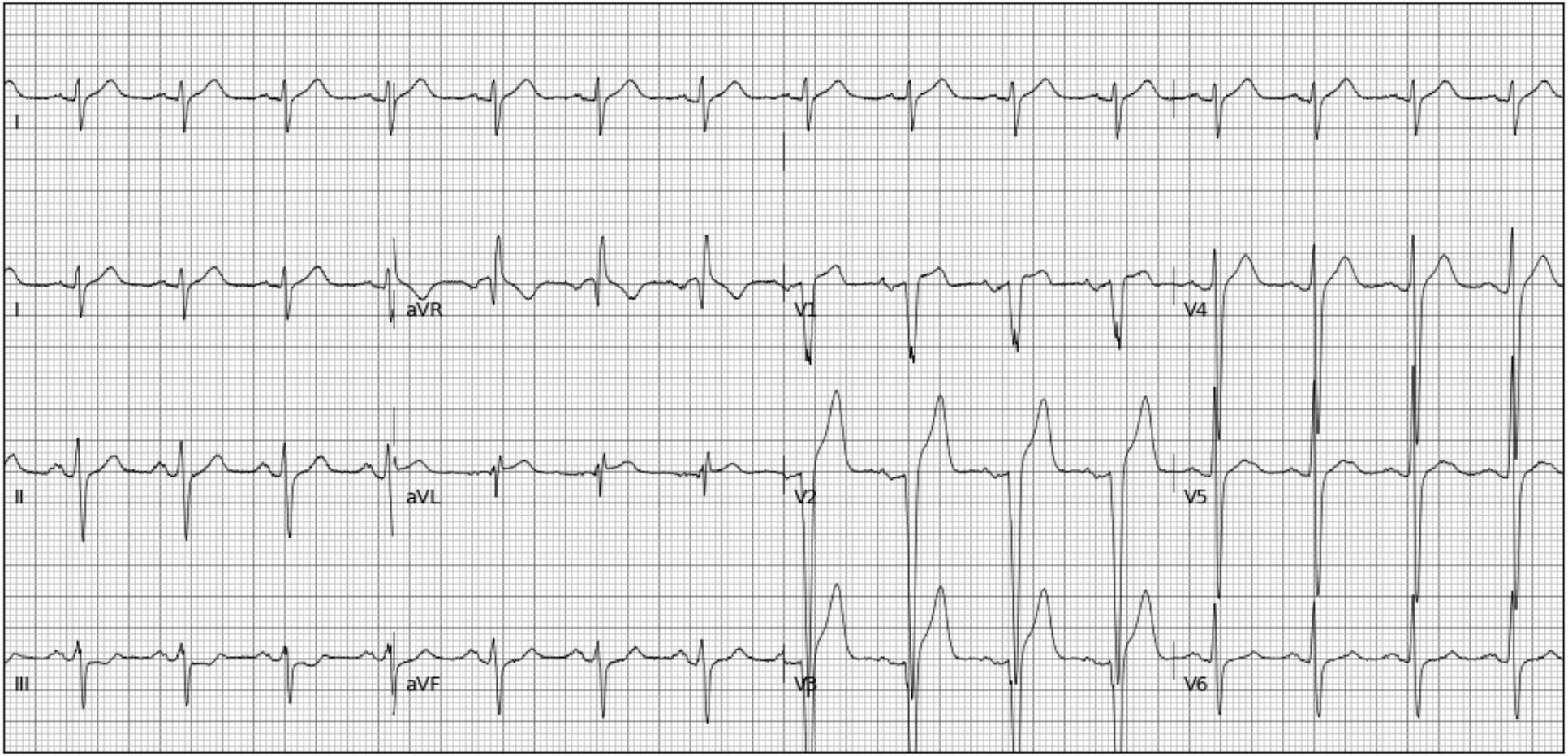

I
I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6

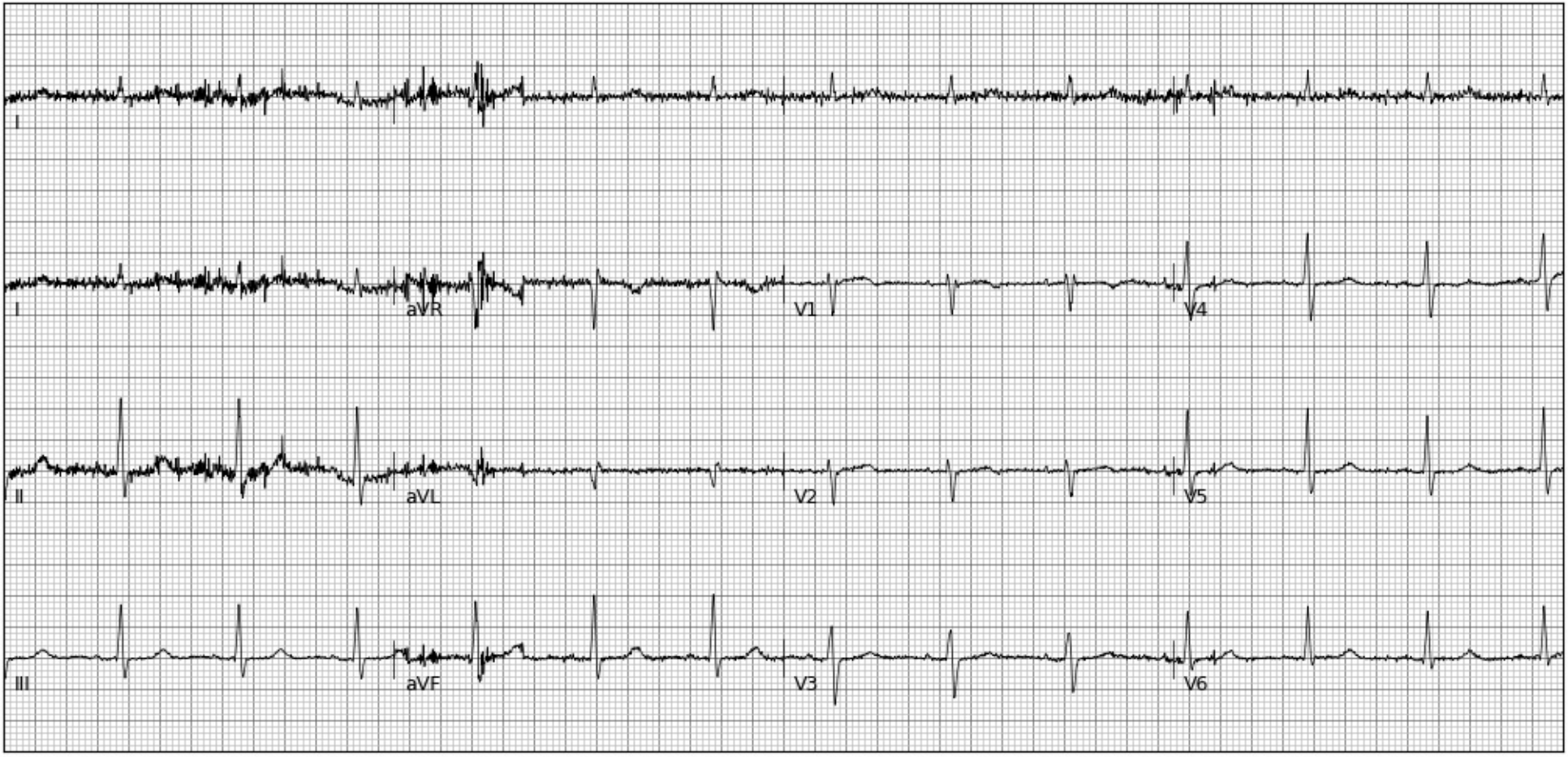

I
I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6


I
I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6


I
I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6


I
I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6


I
I
aVR
V1
V4
II
aVL
V2
V5
III
aVF
V3
V6


I
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aVR
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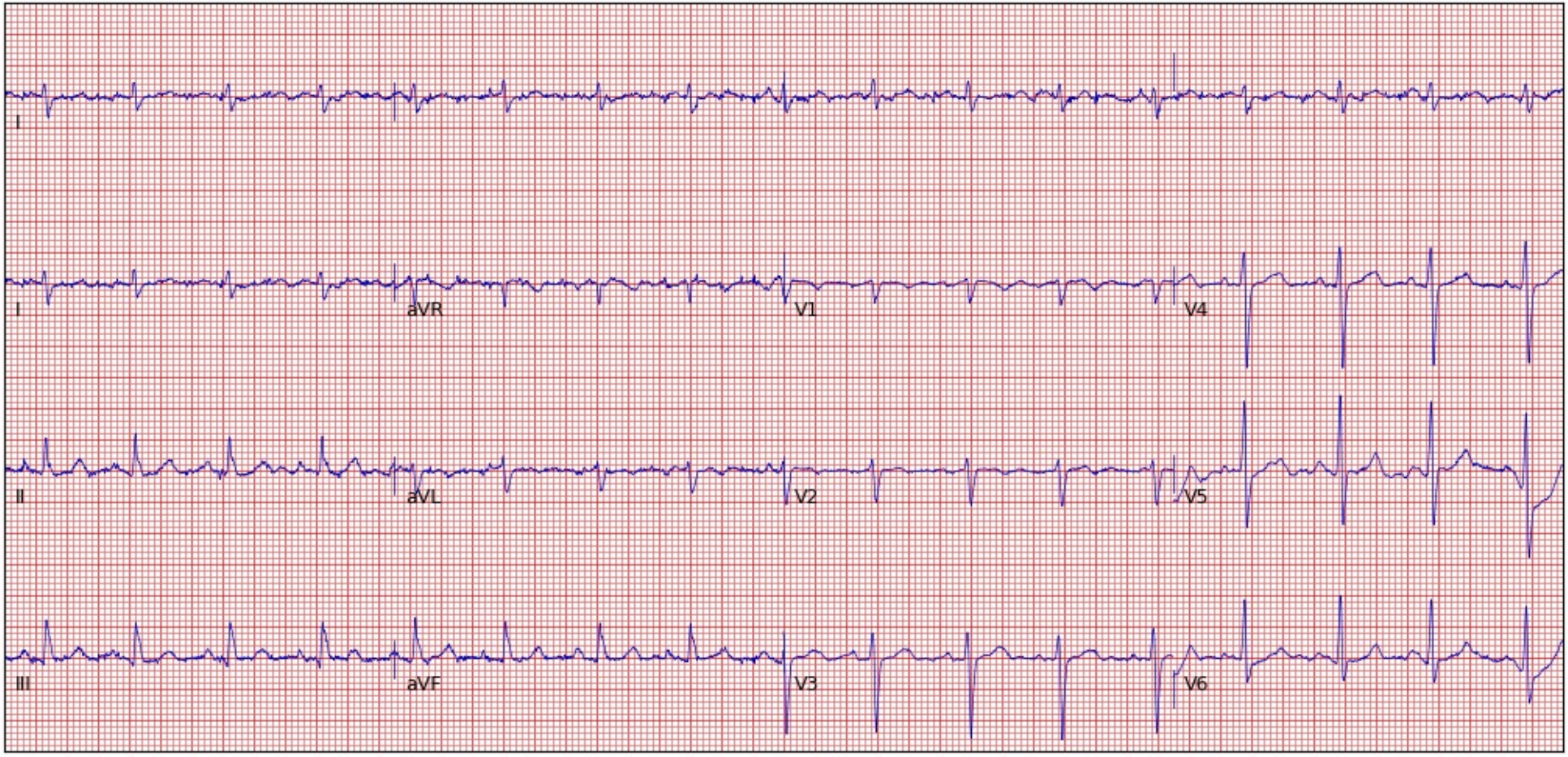
Section 3. Random examples of 25 electrocardiogram images plotted in novel format (Blue-on-Red Rhythm-on-top) not encountered during model development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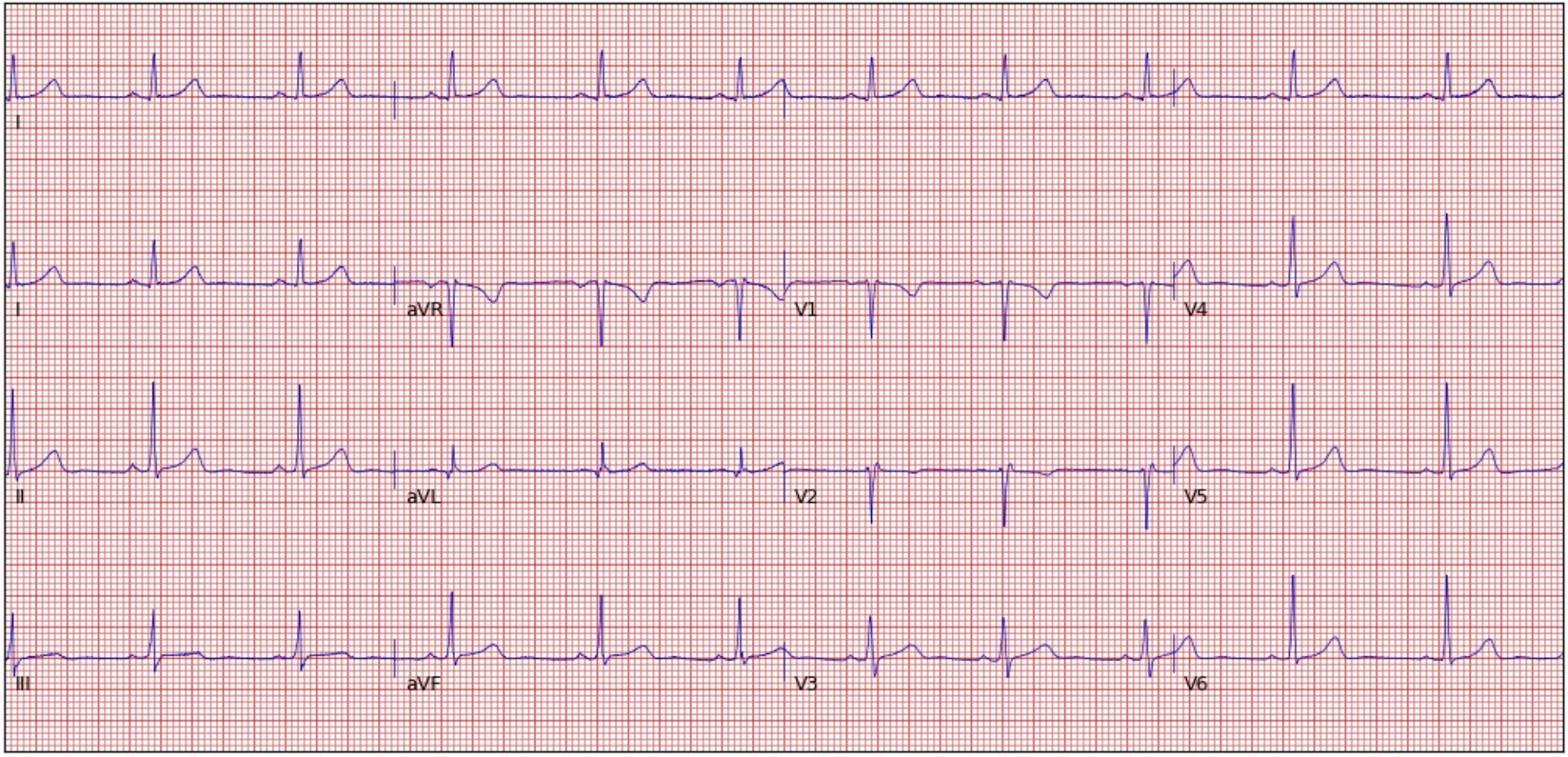
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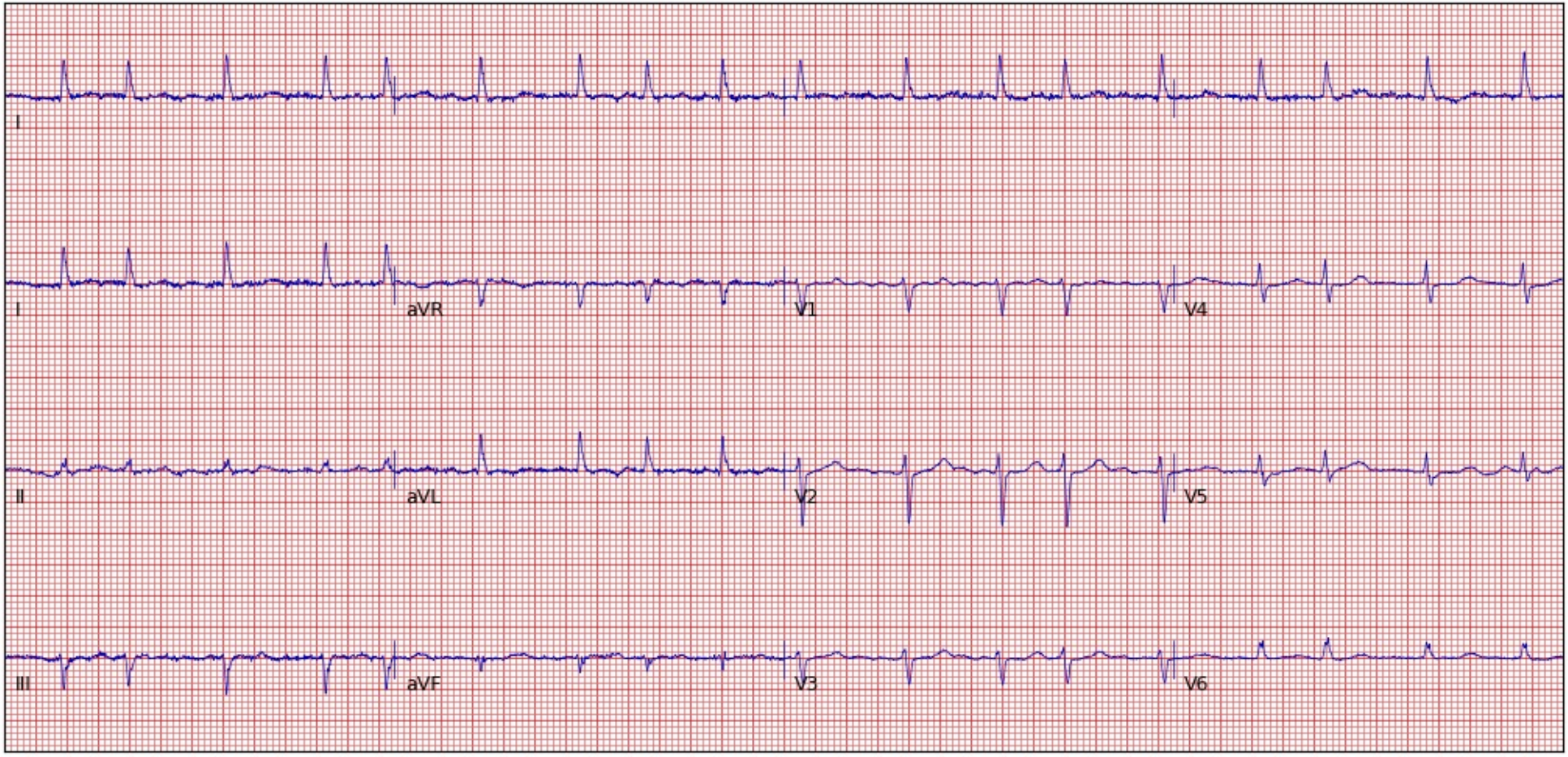
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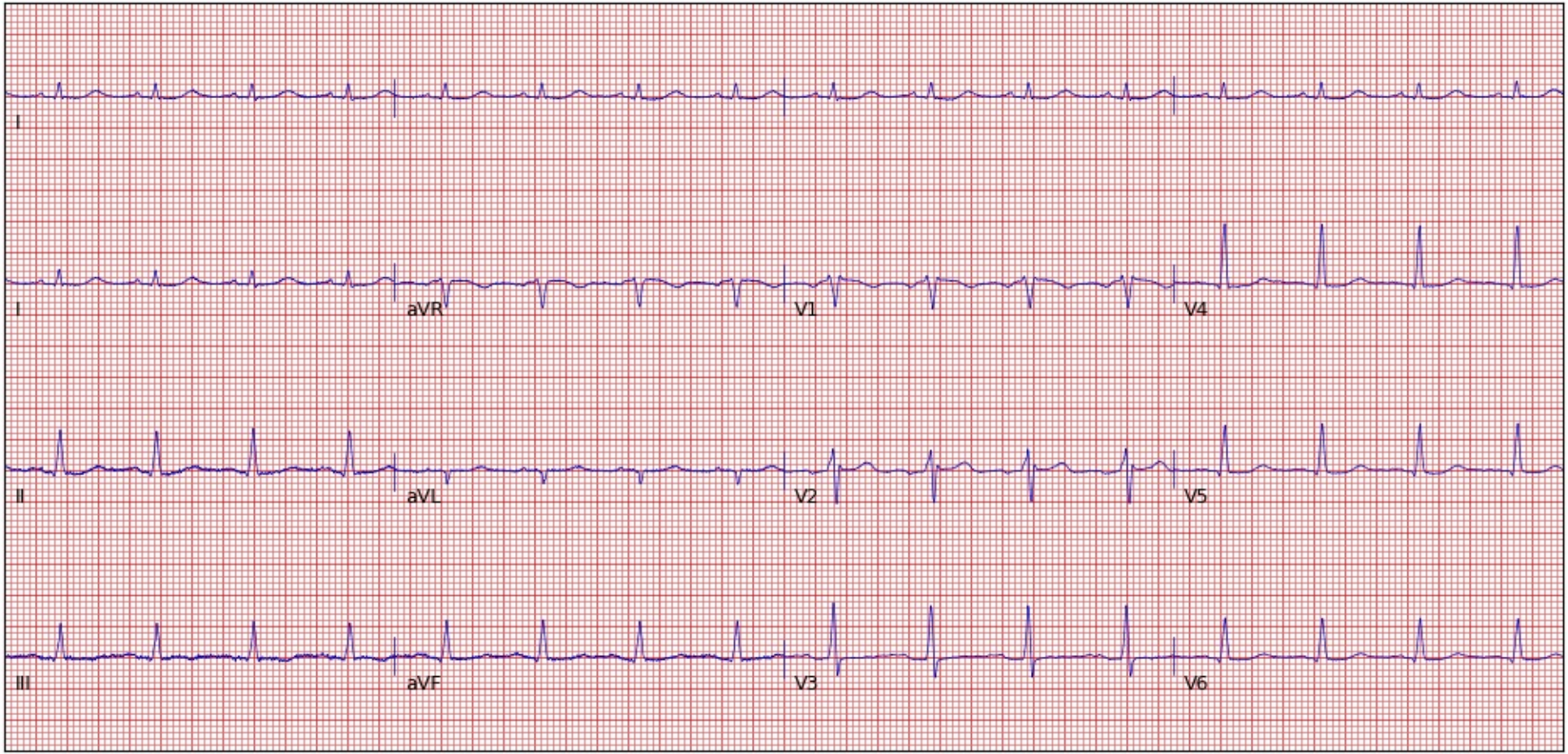
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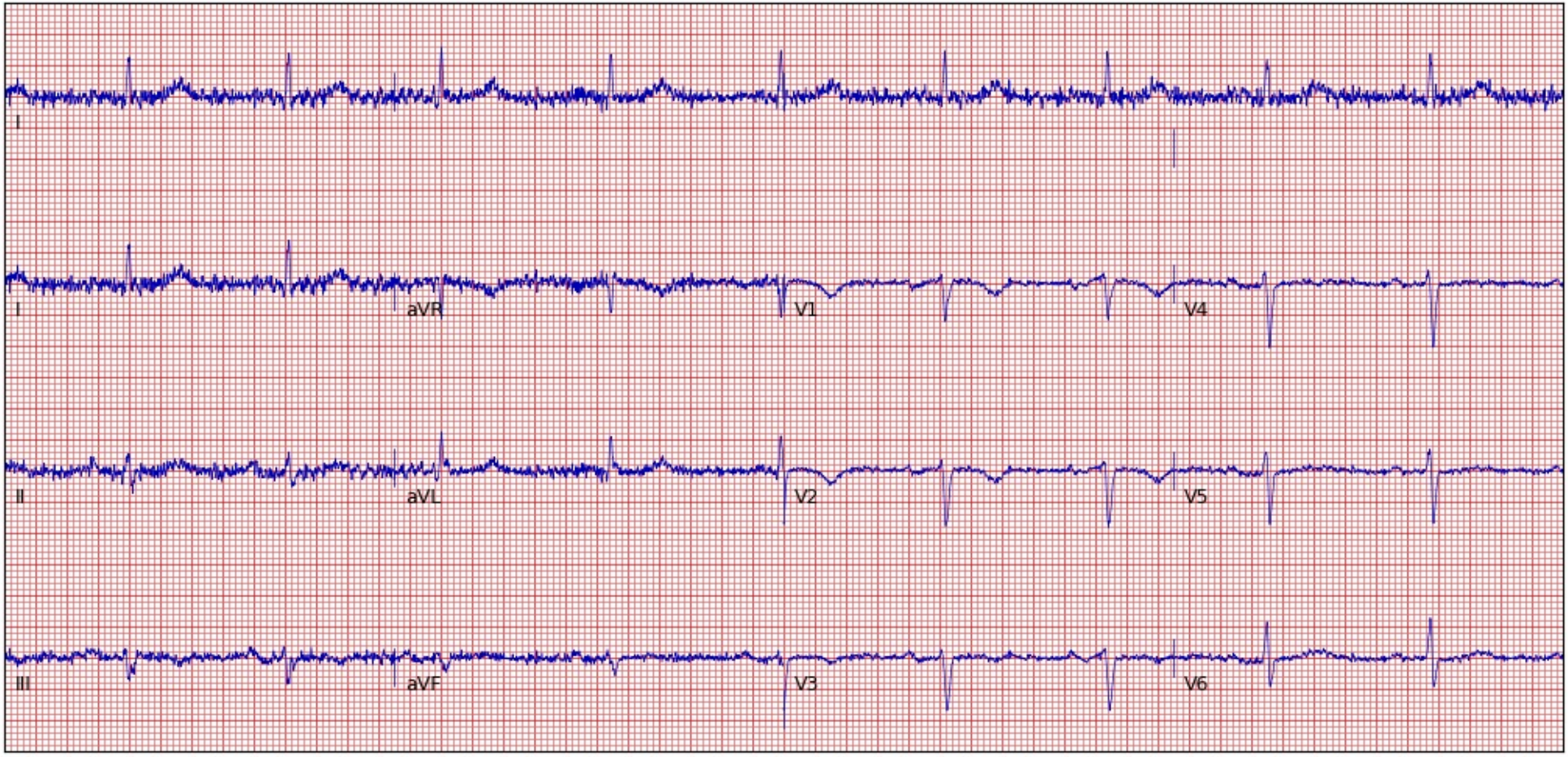
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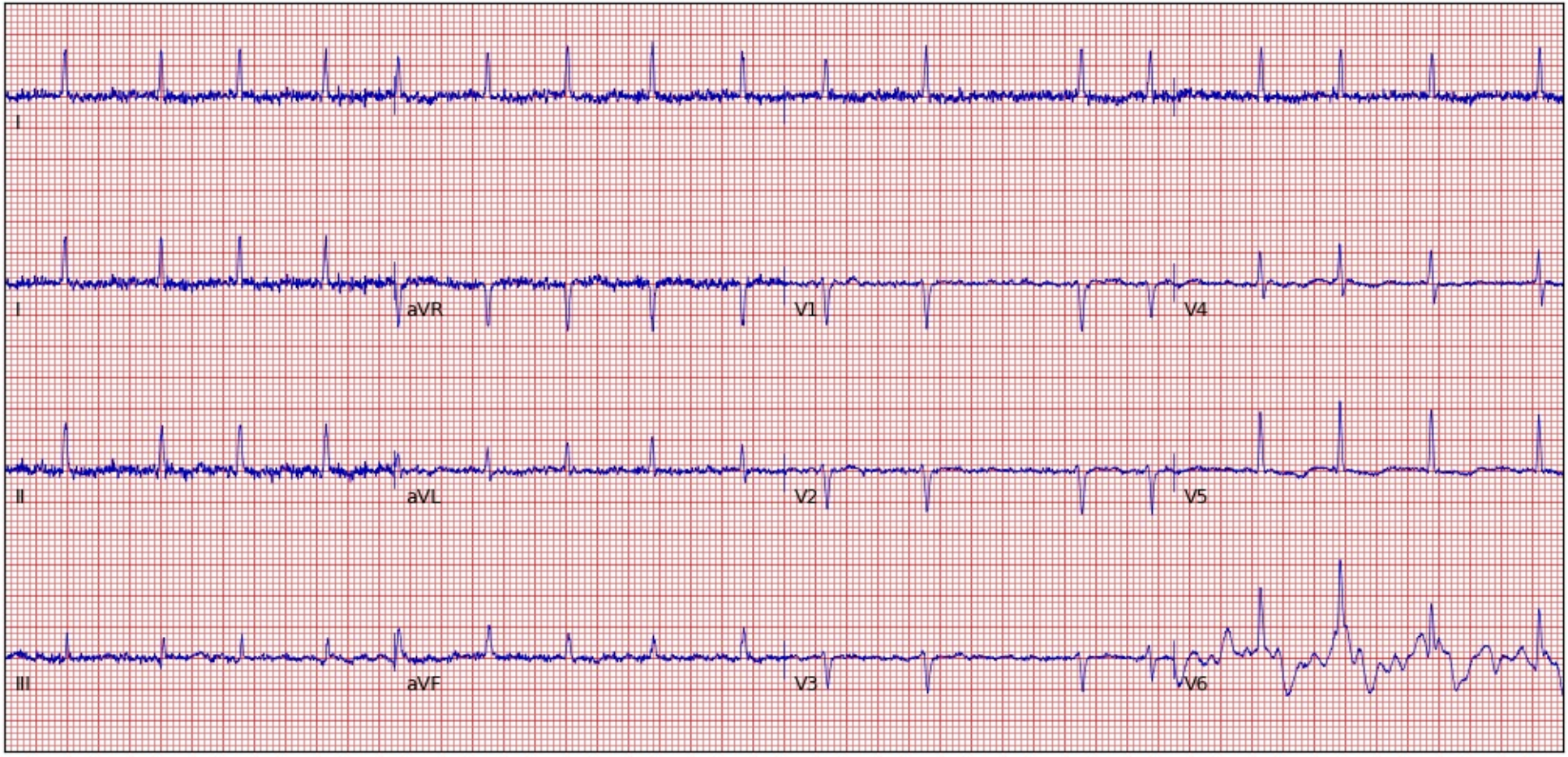
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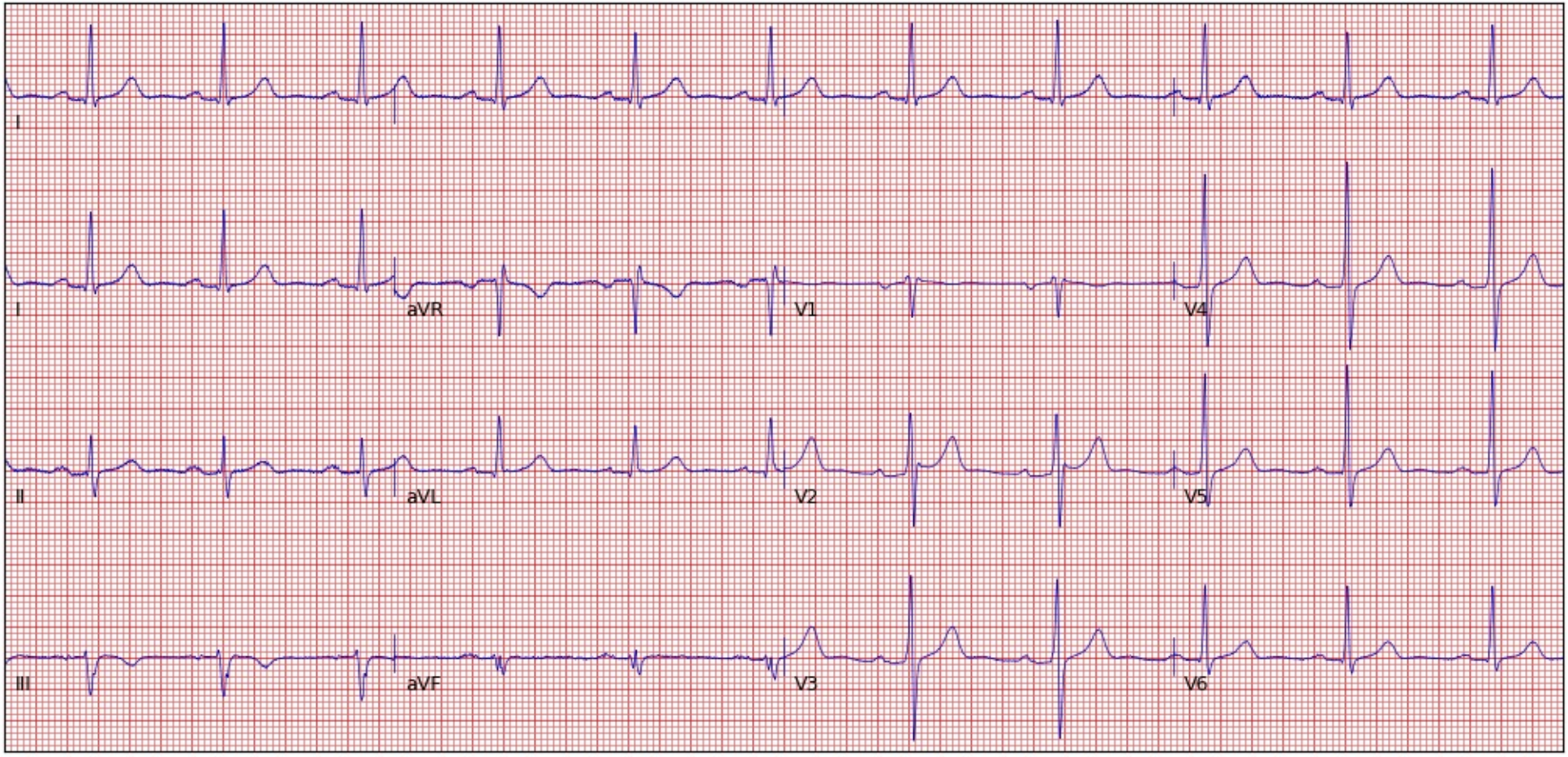
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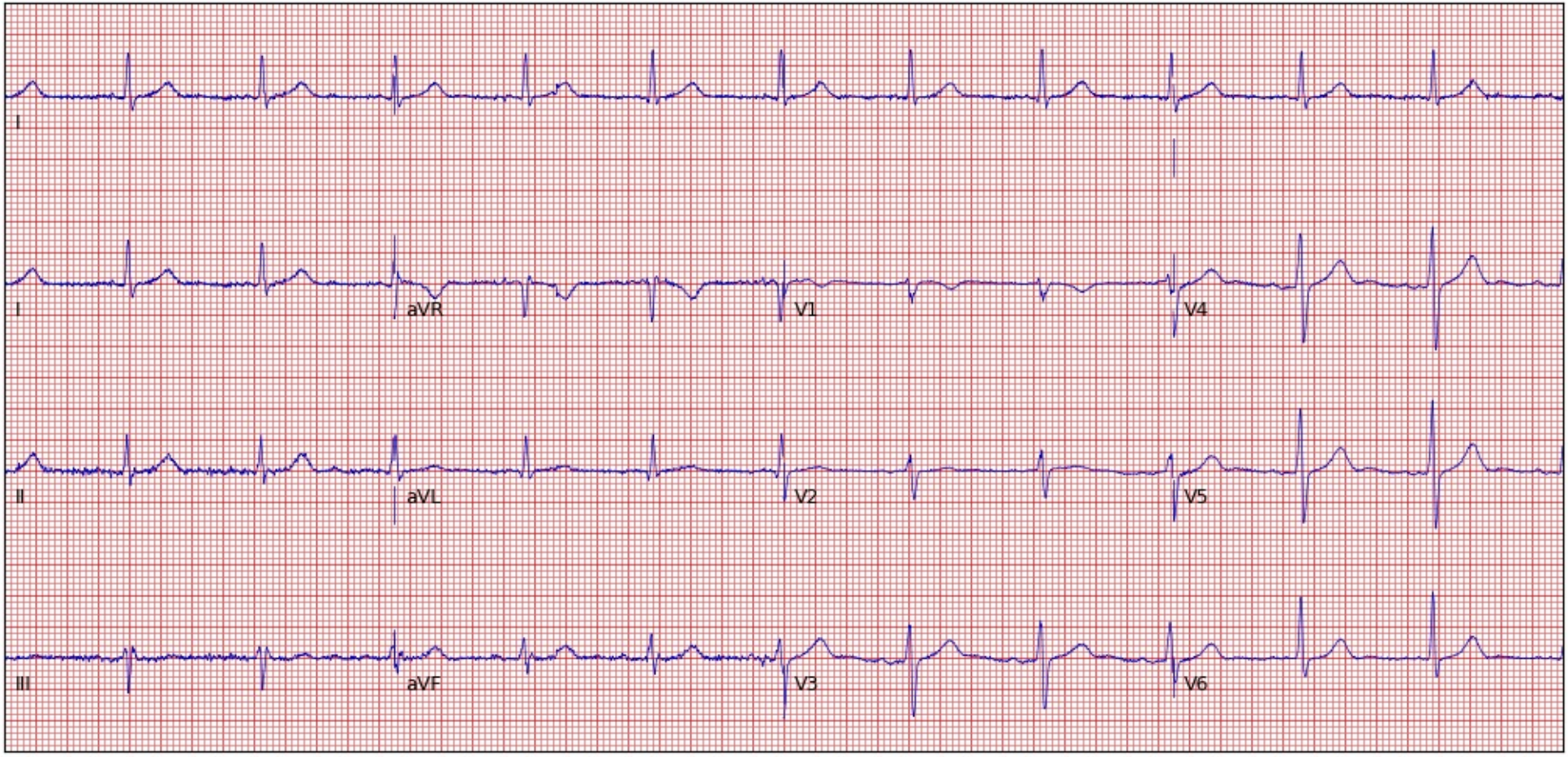
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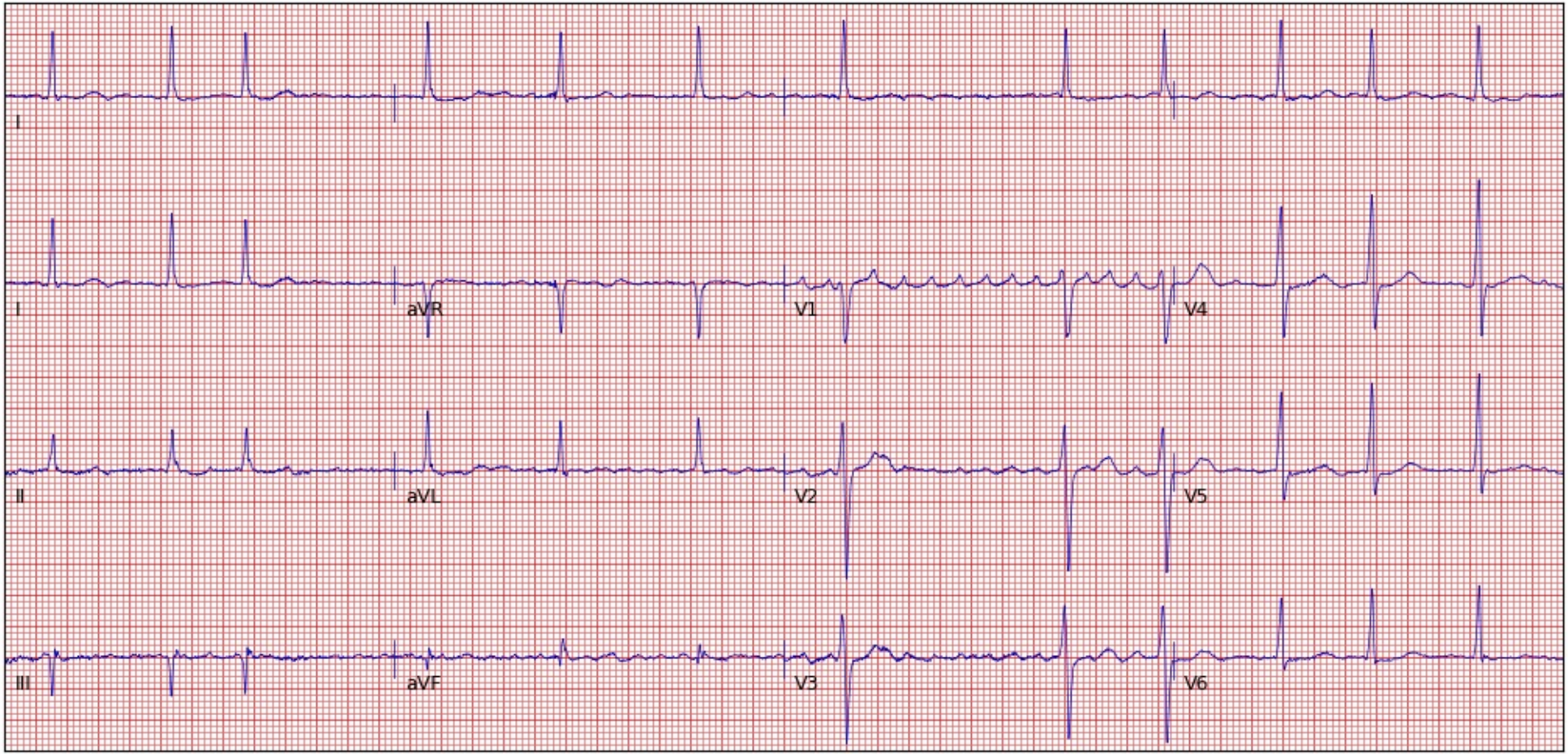
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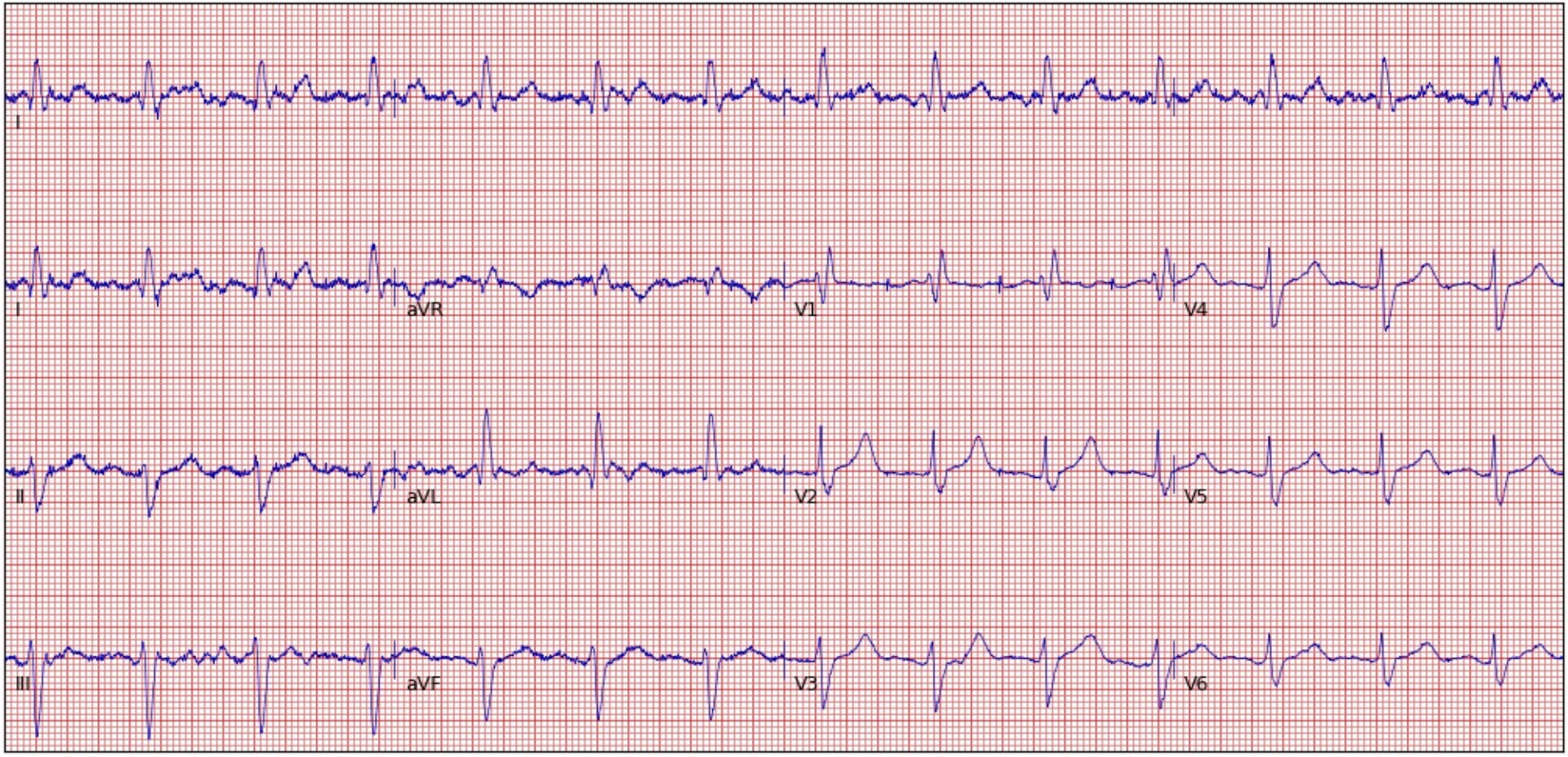
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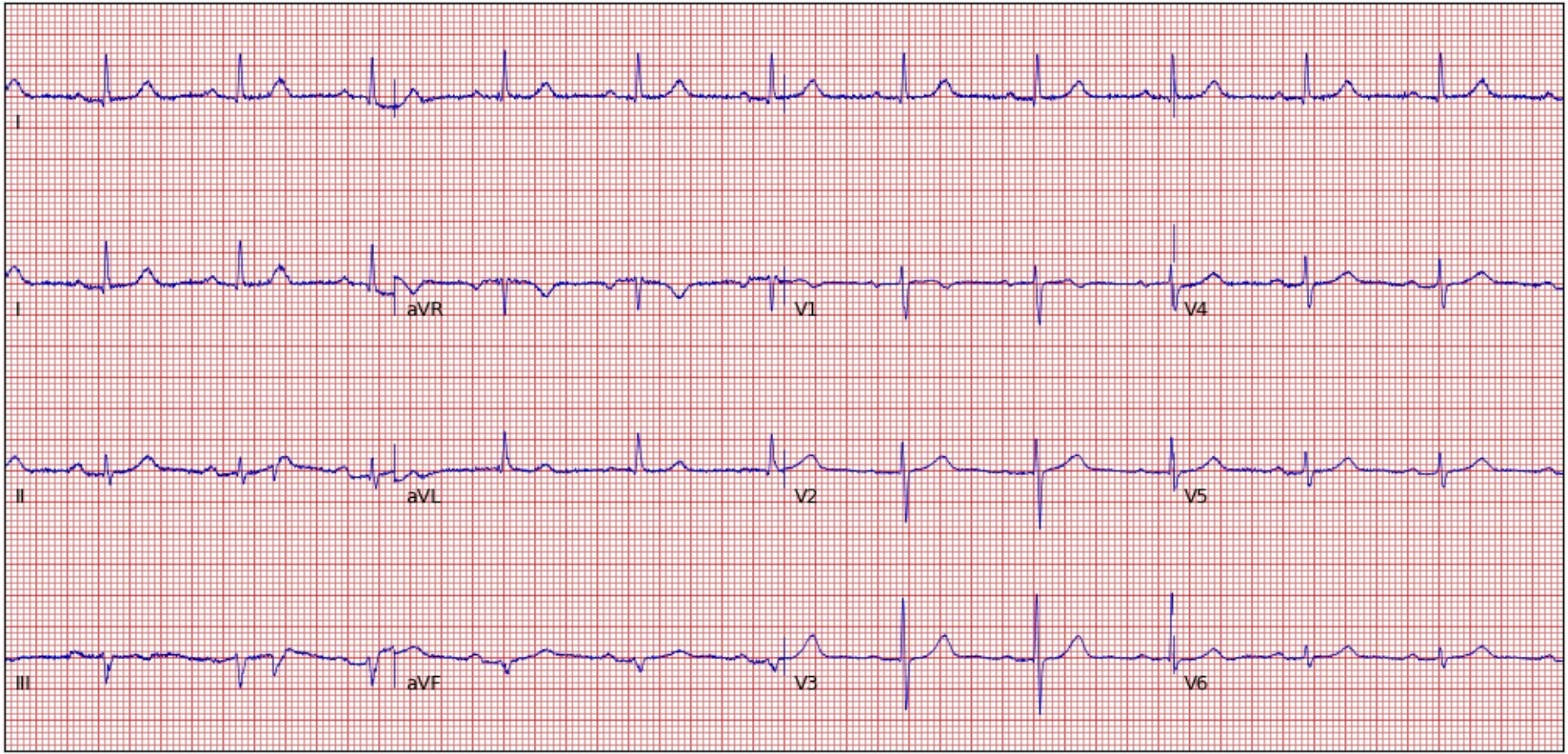
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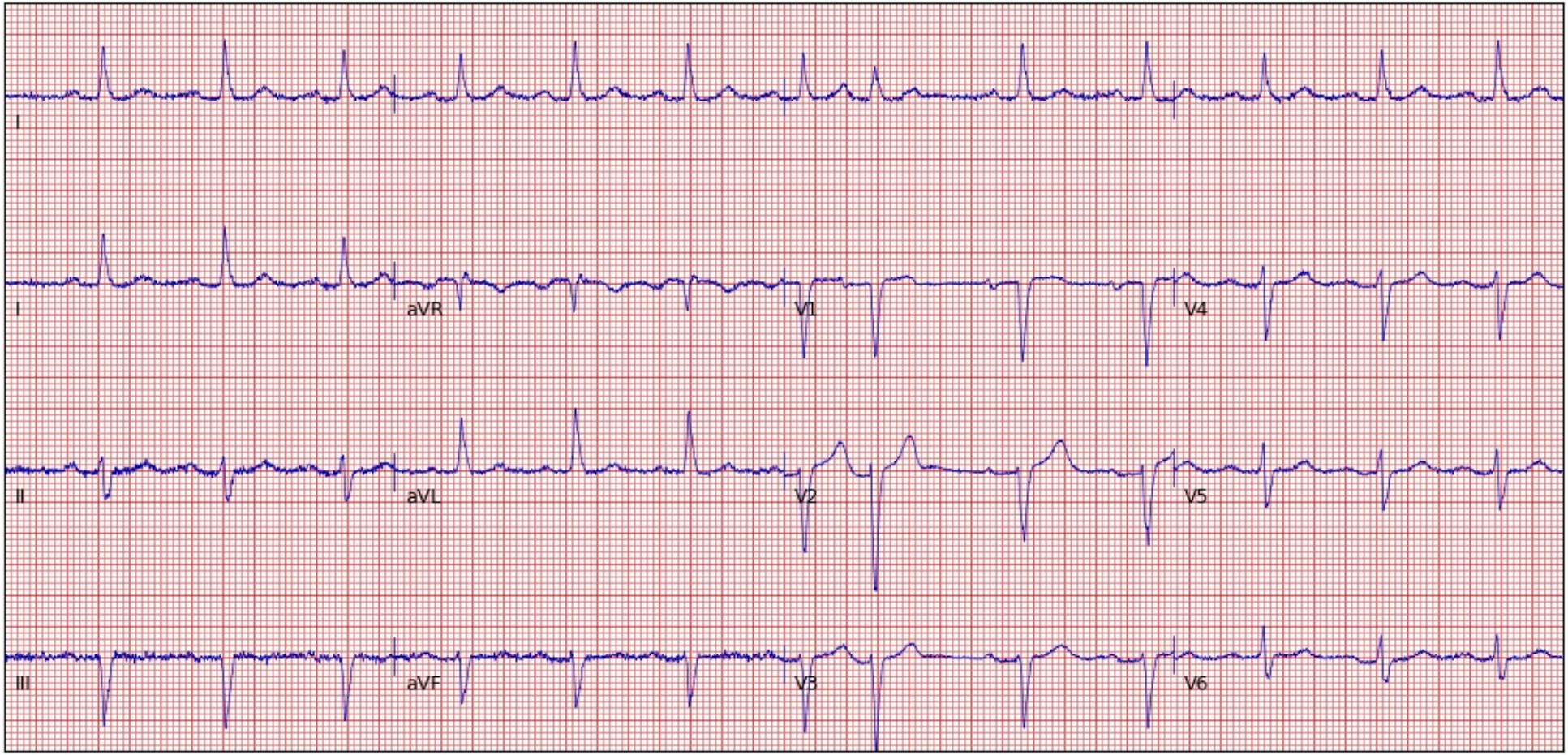
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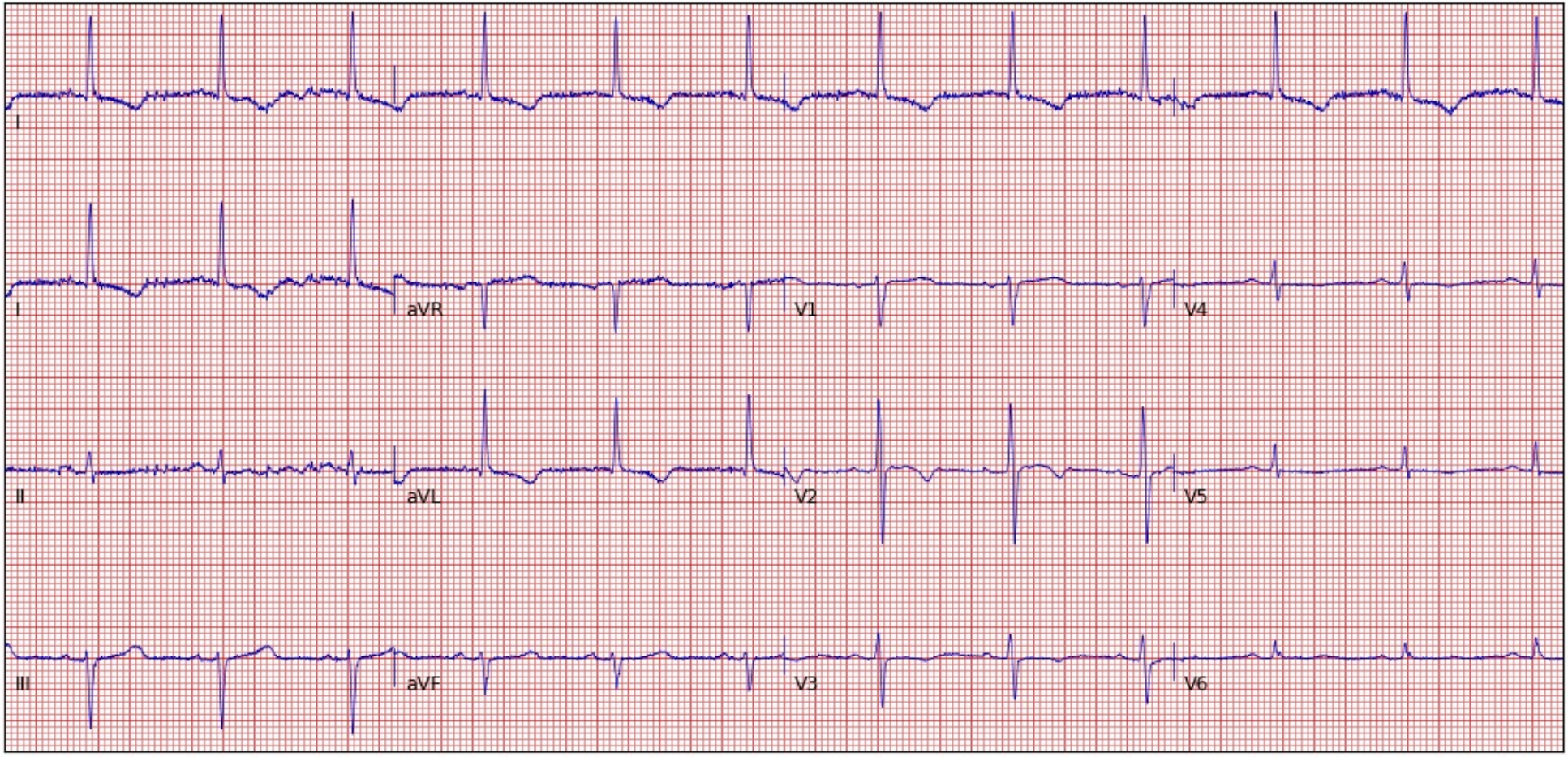
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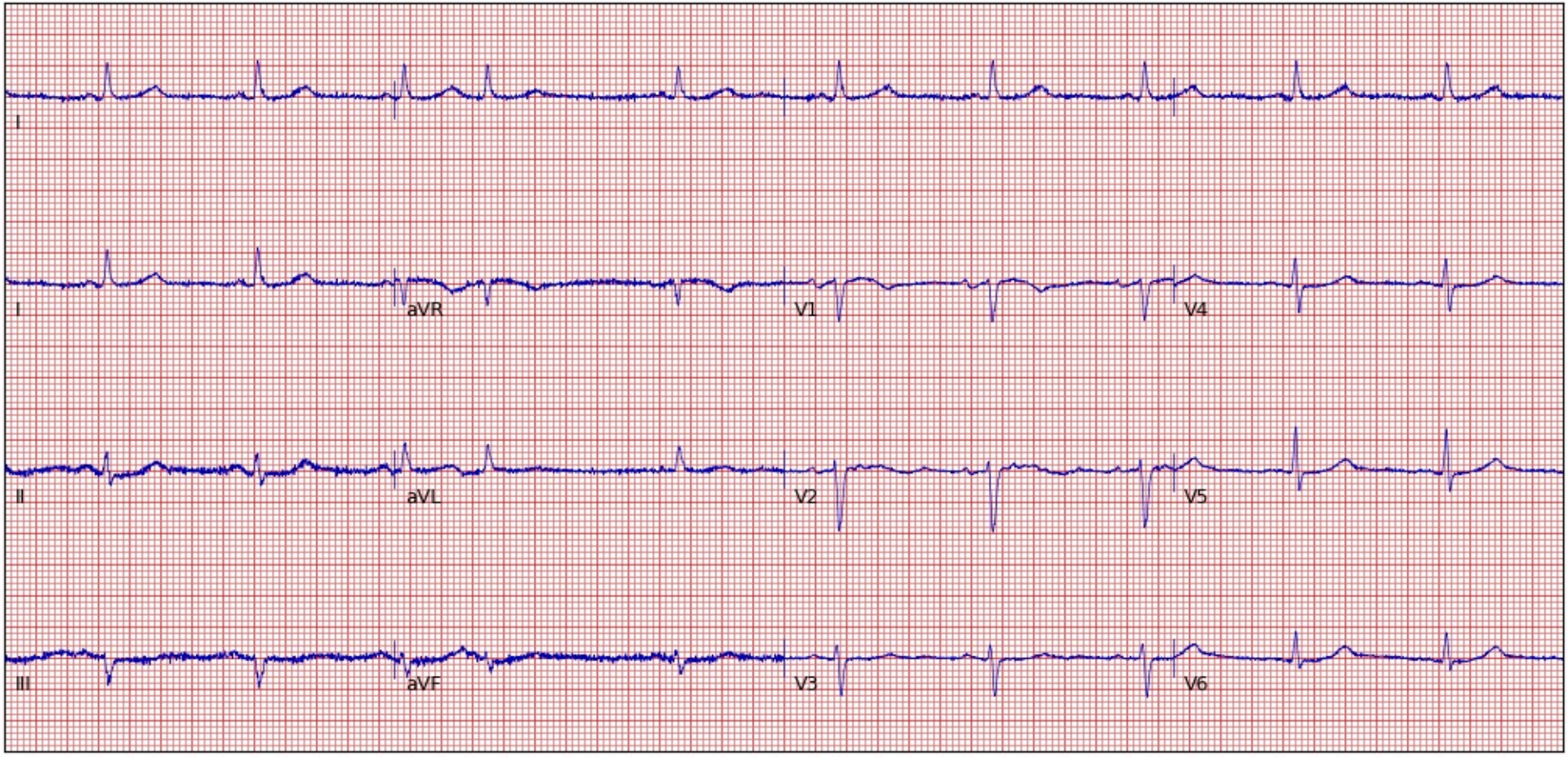
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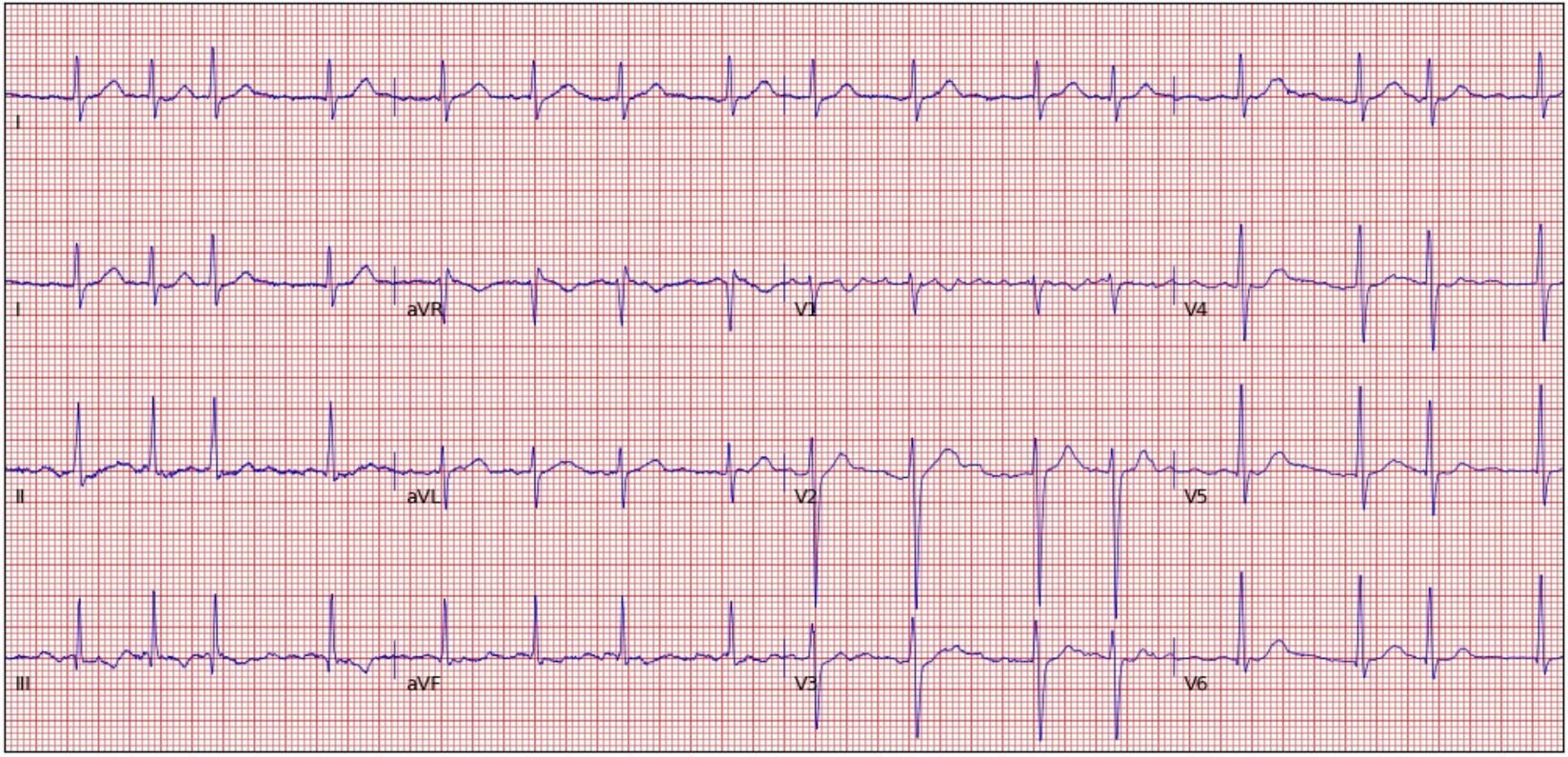
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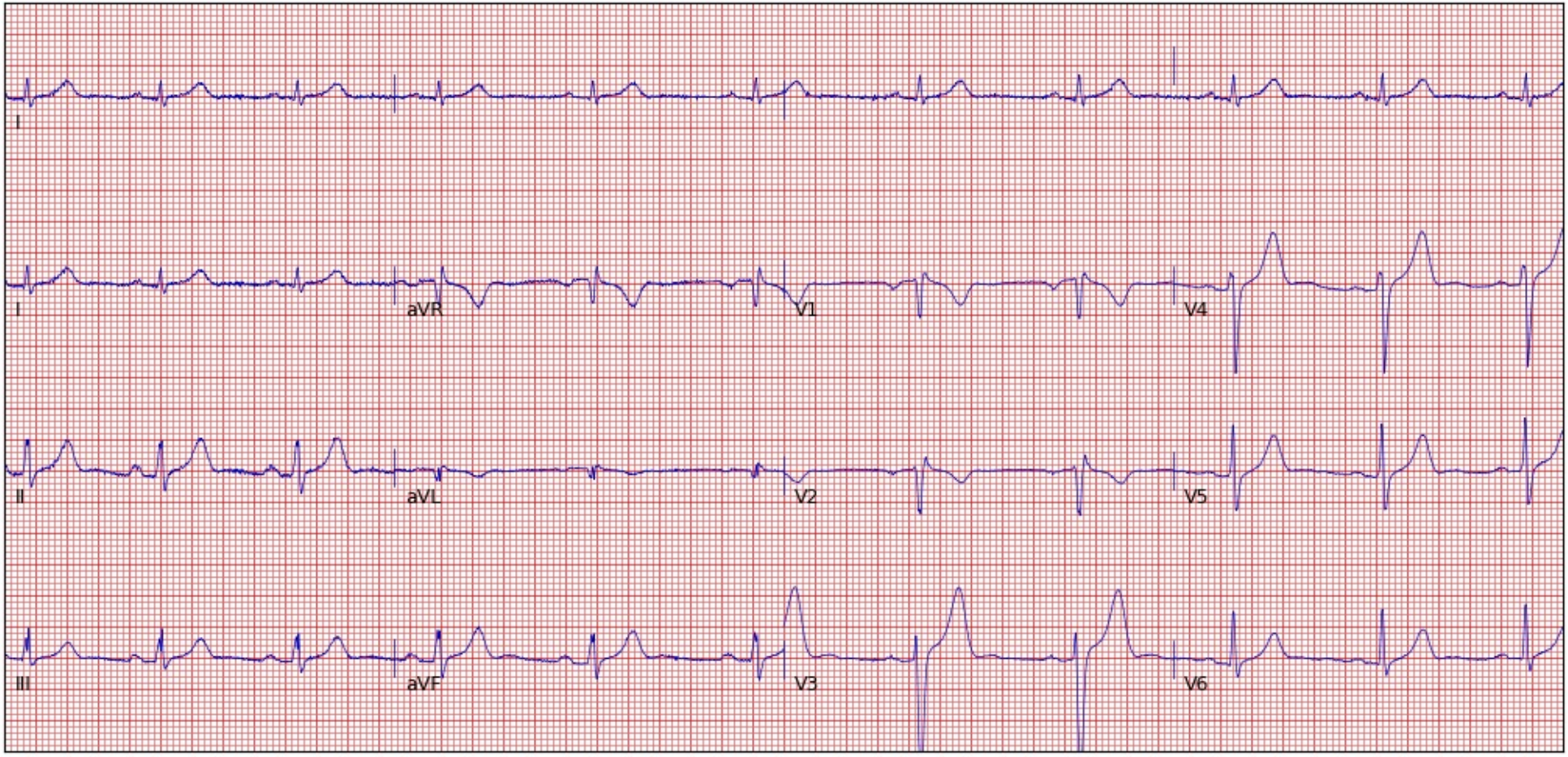
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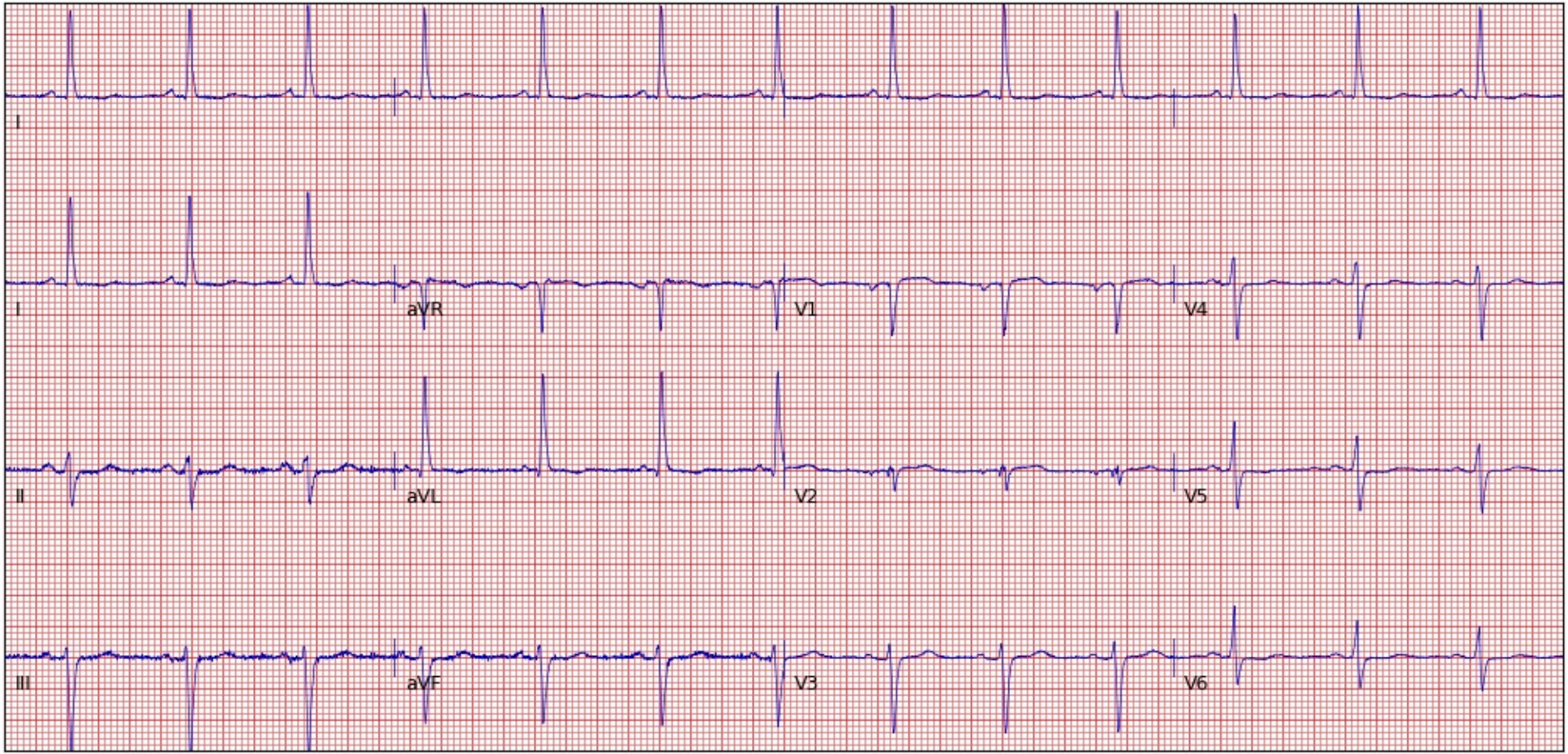
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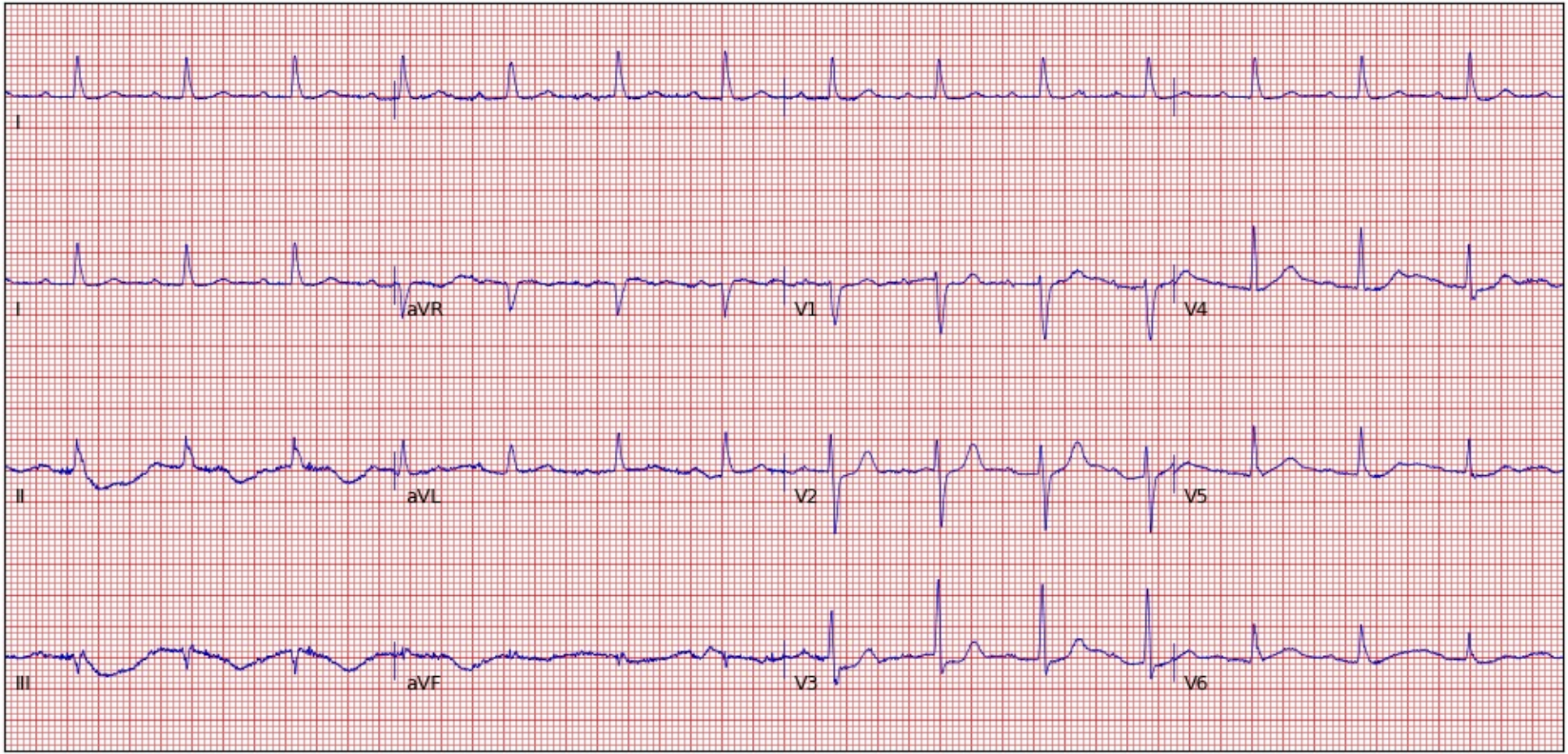
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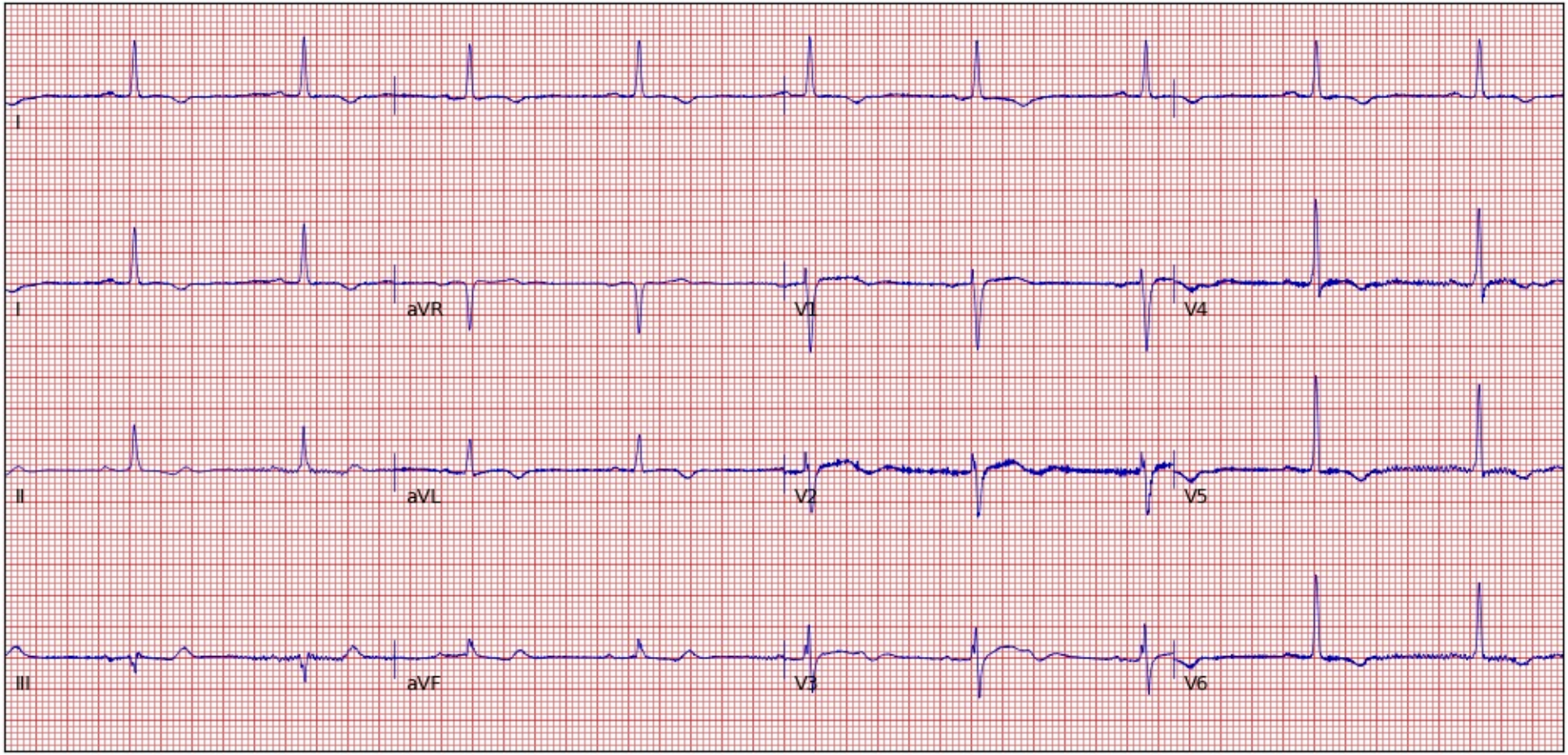
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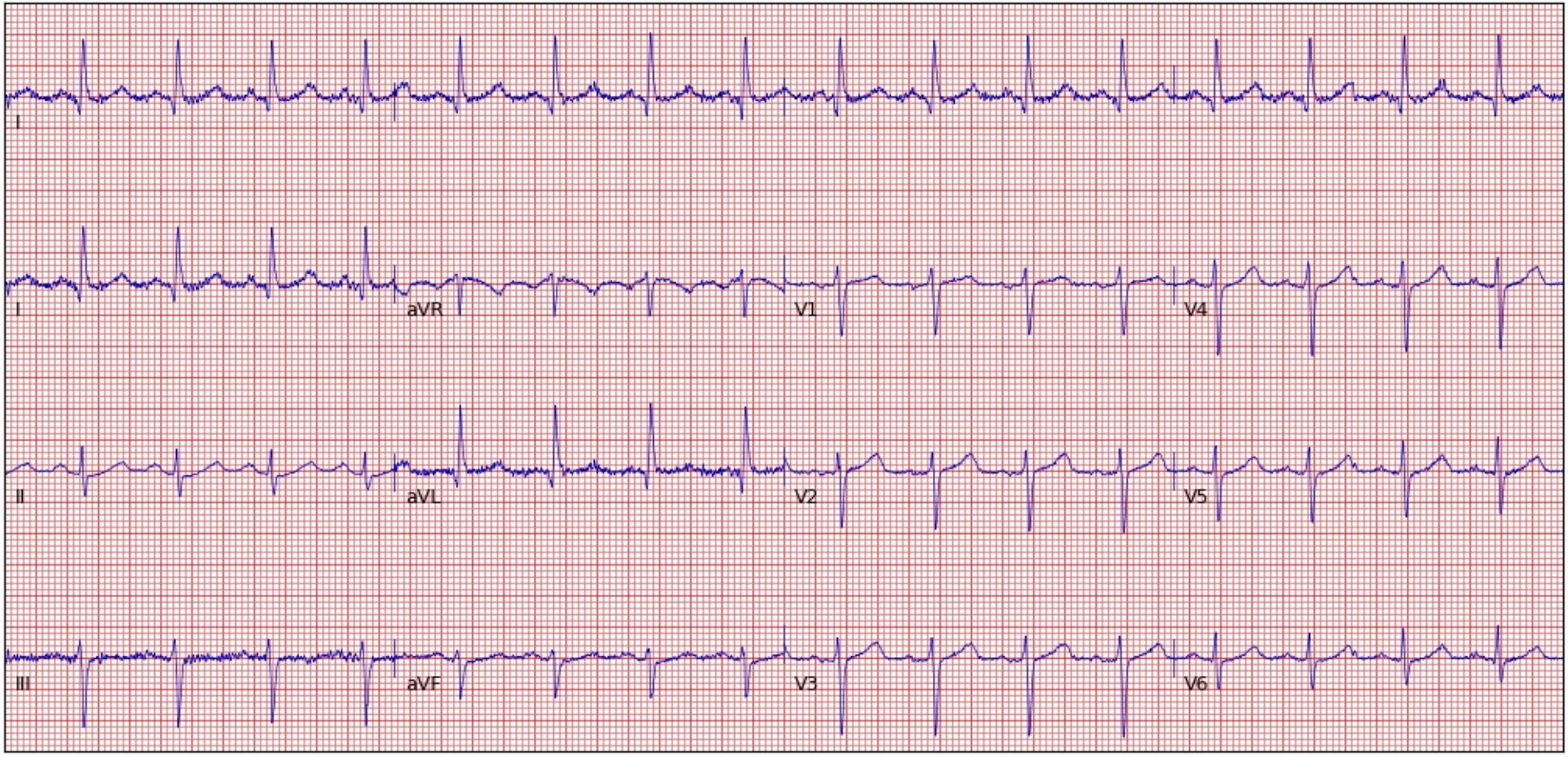
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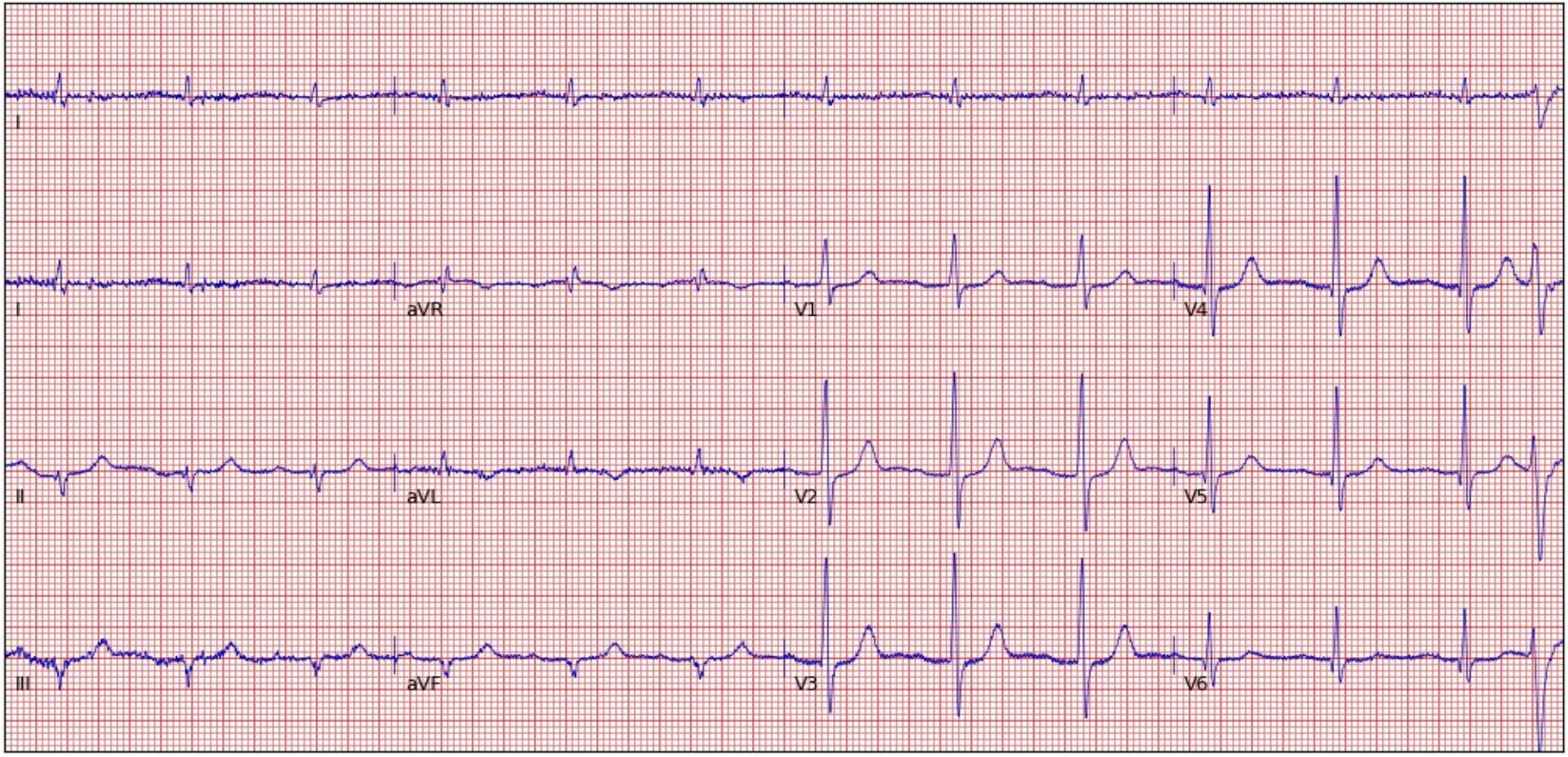
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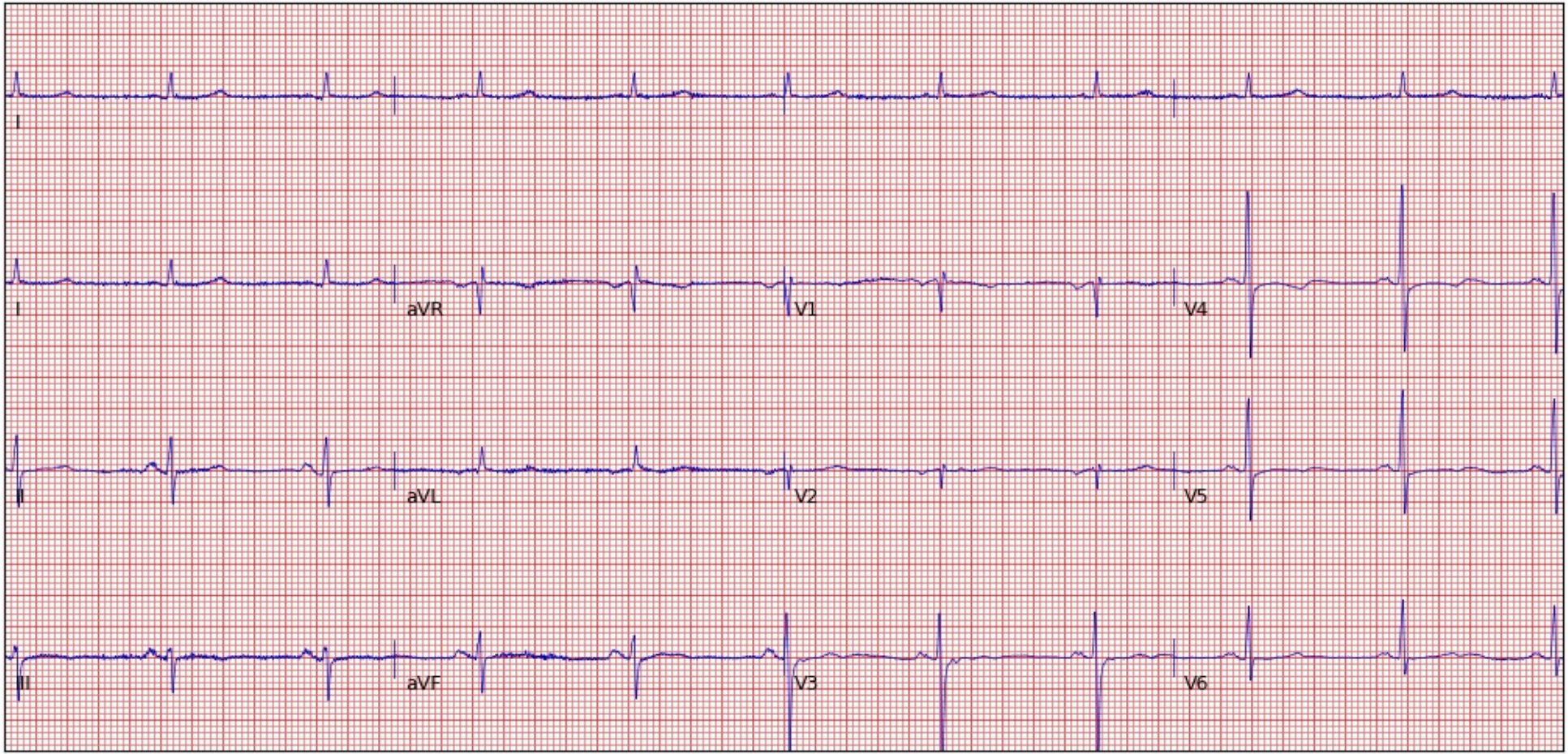
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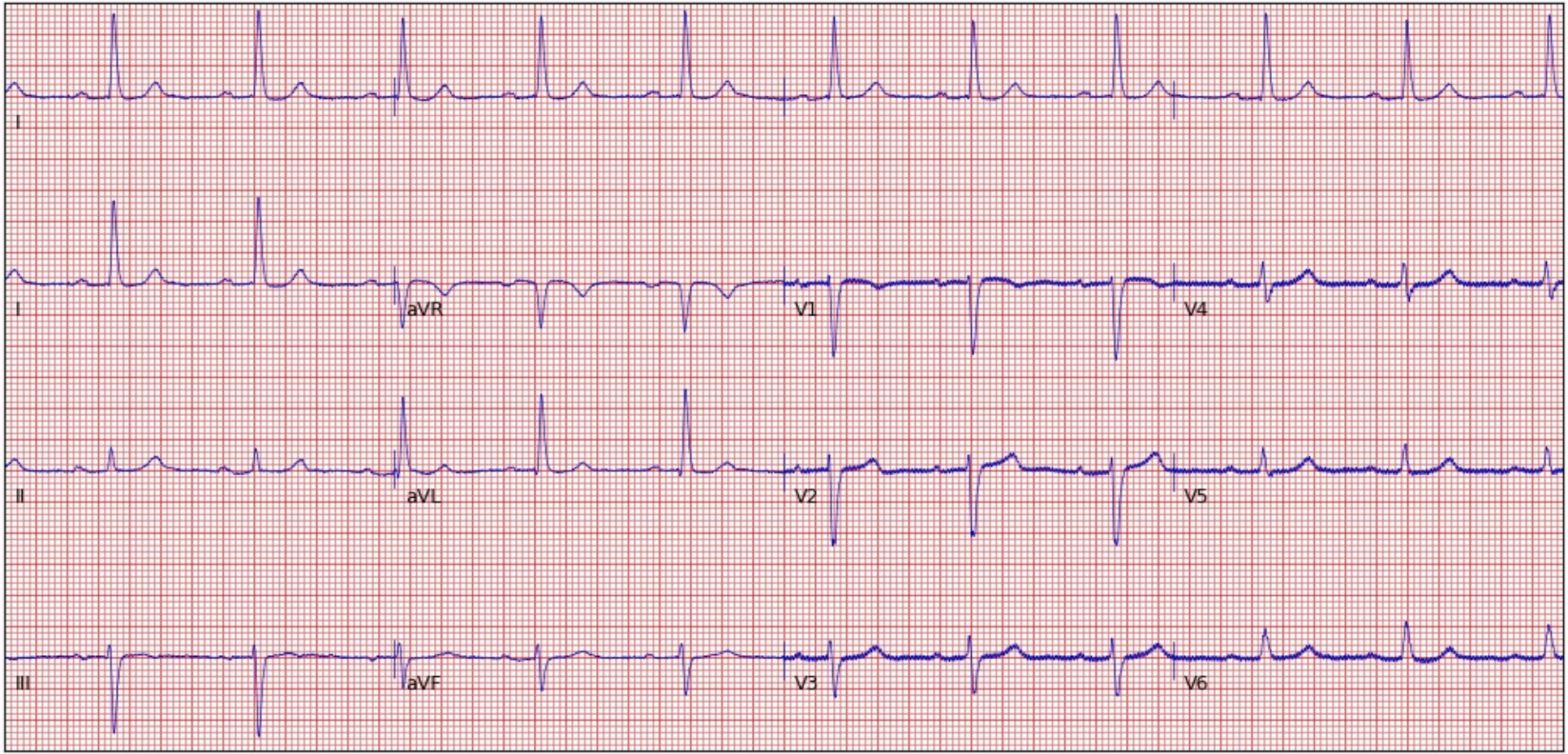
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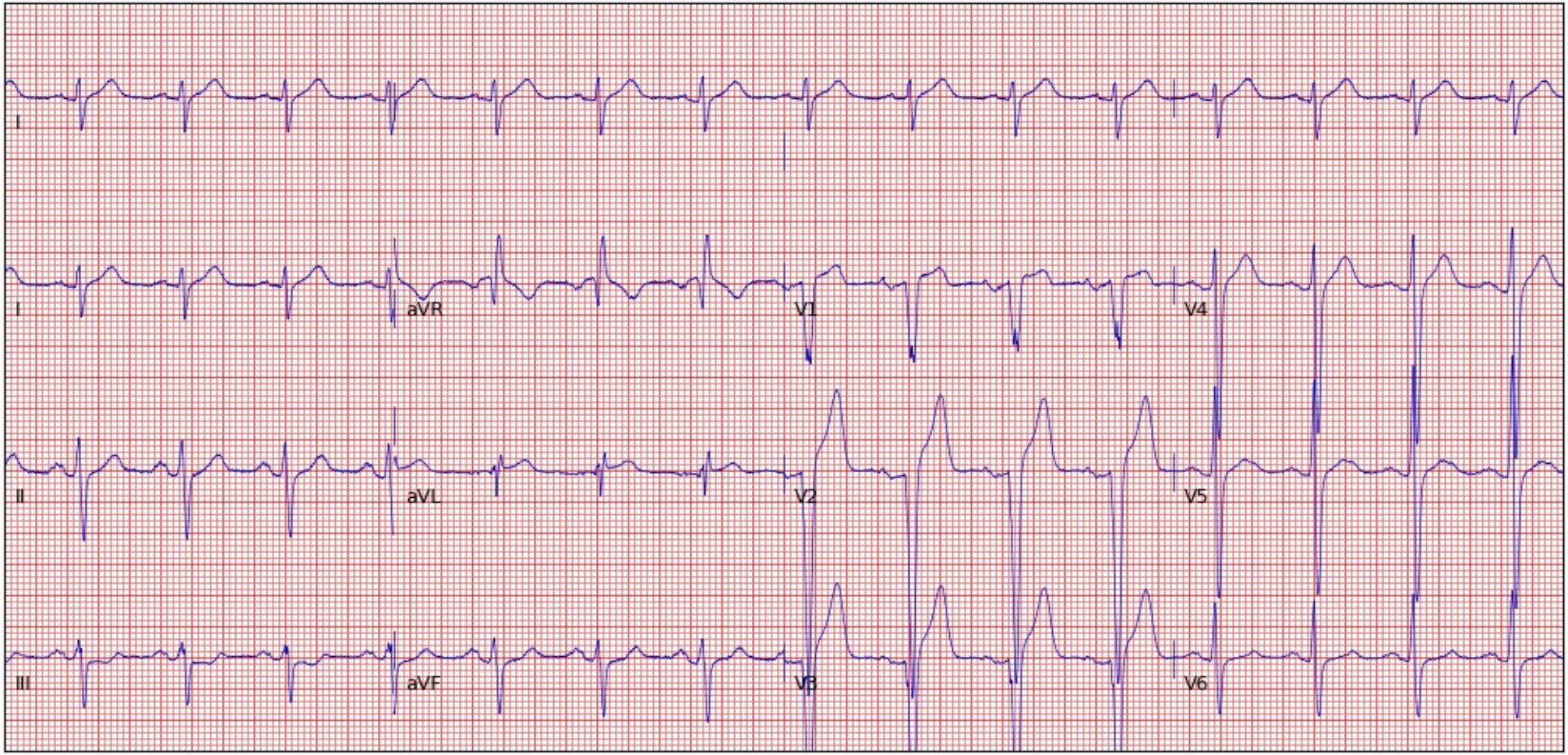
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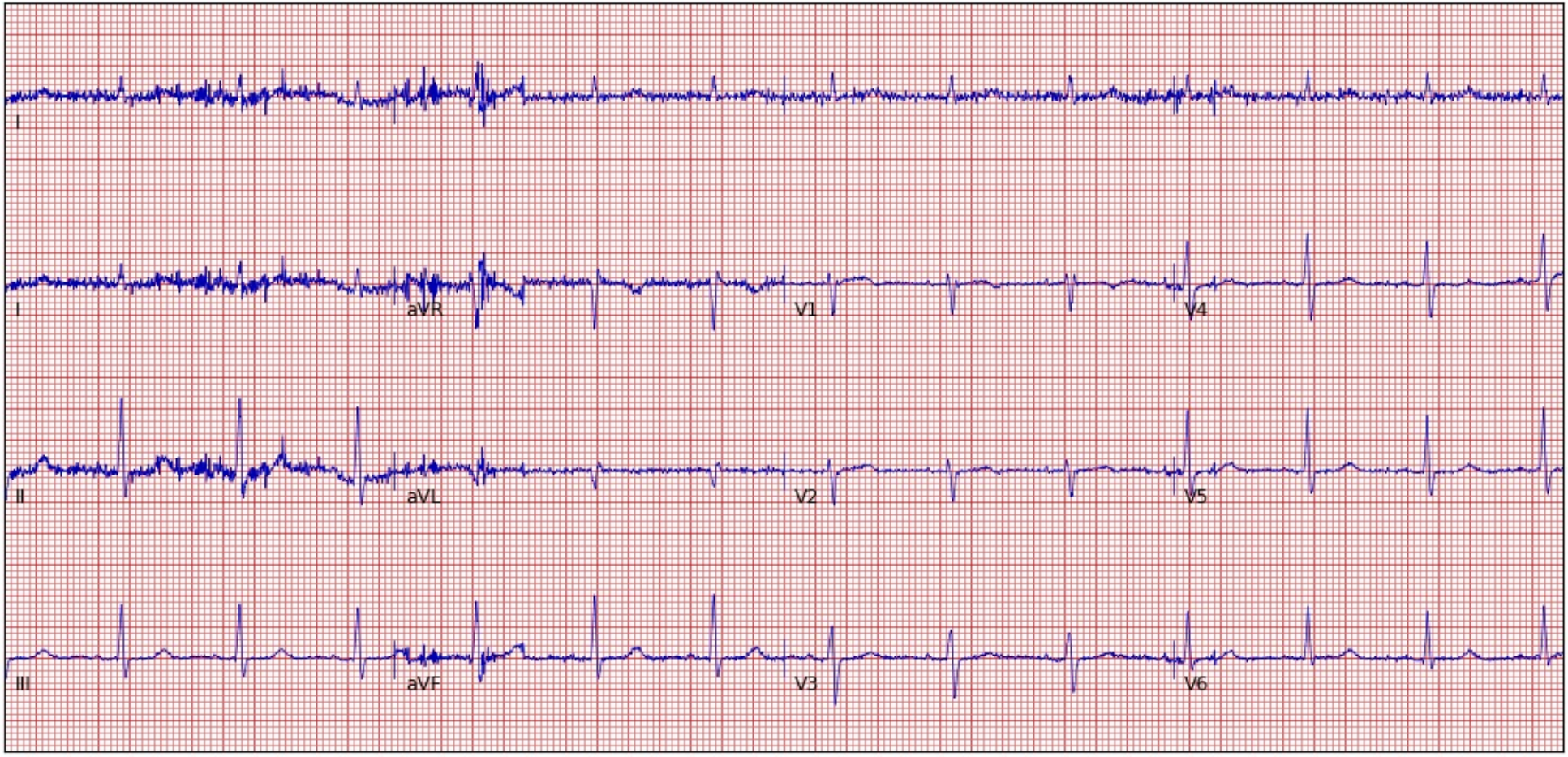
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