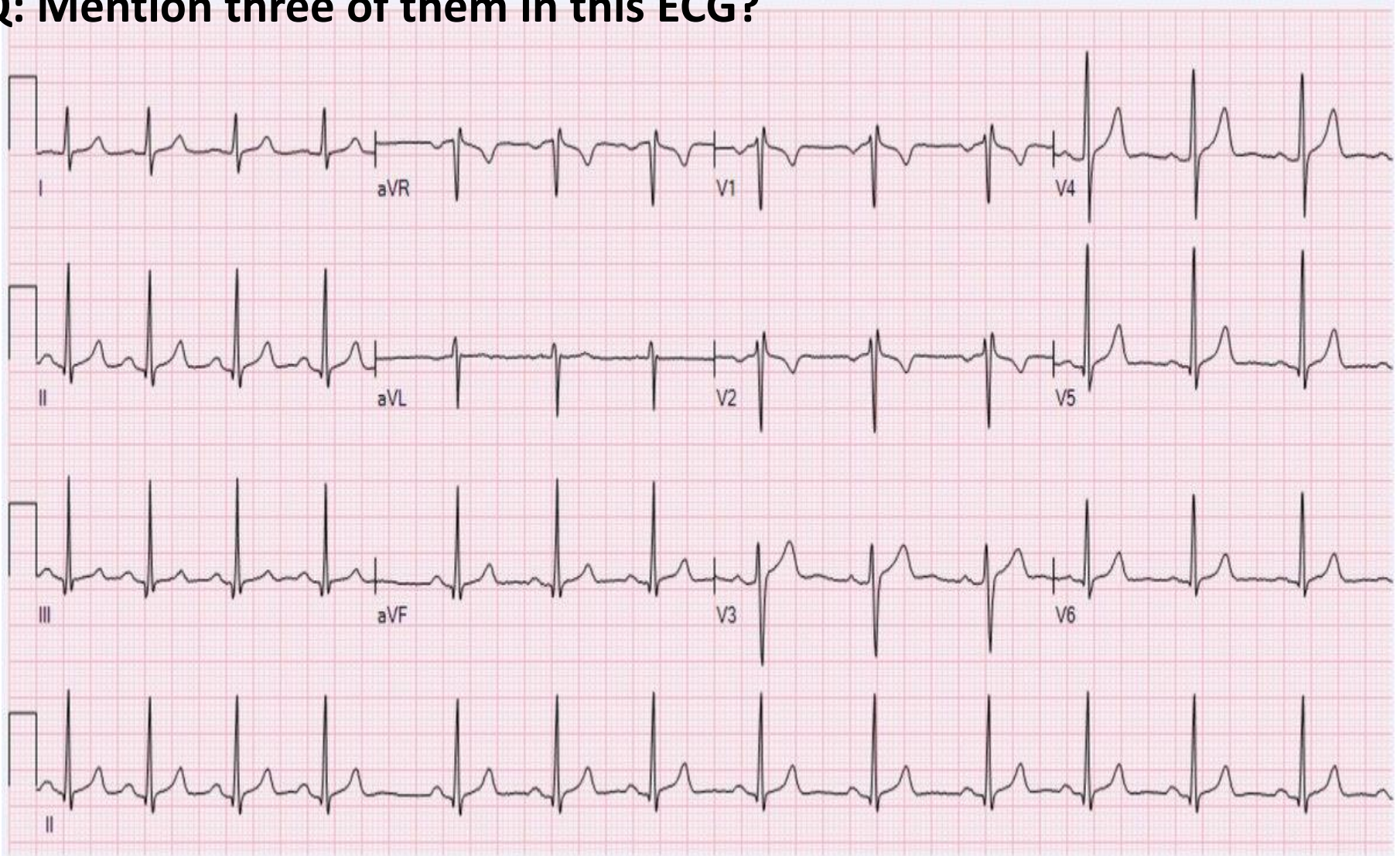


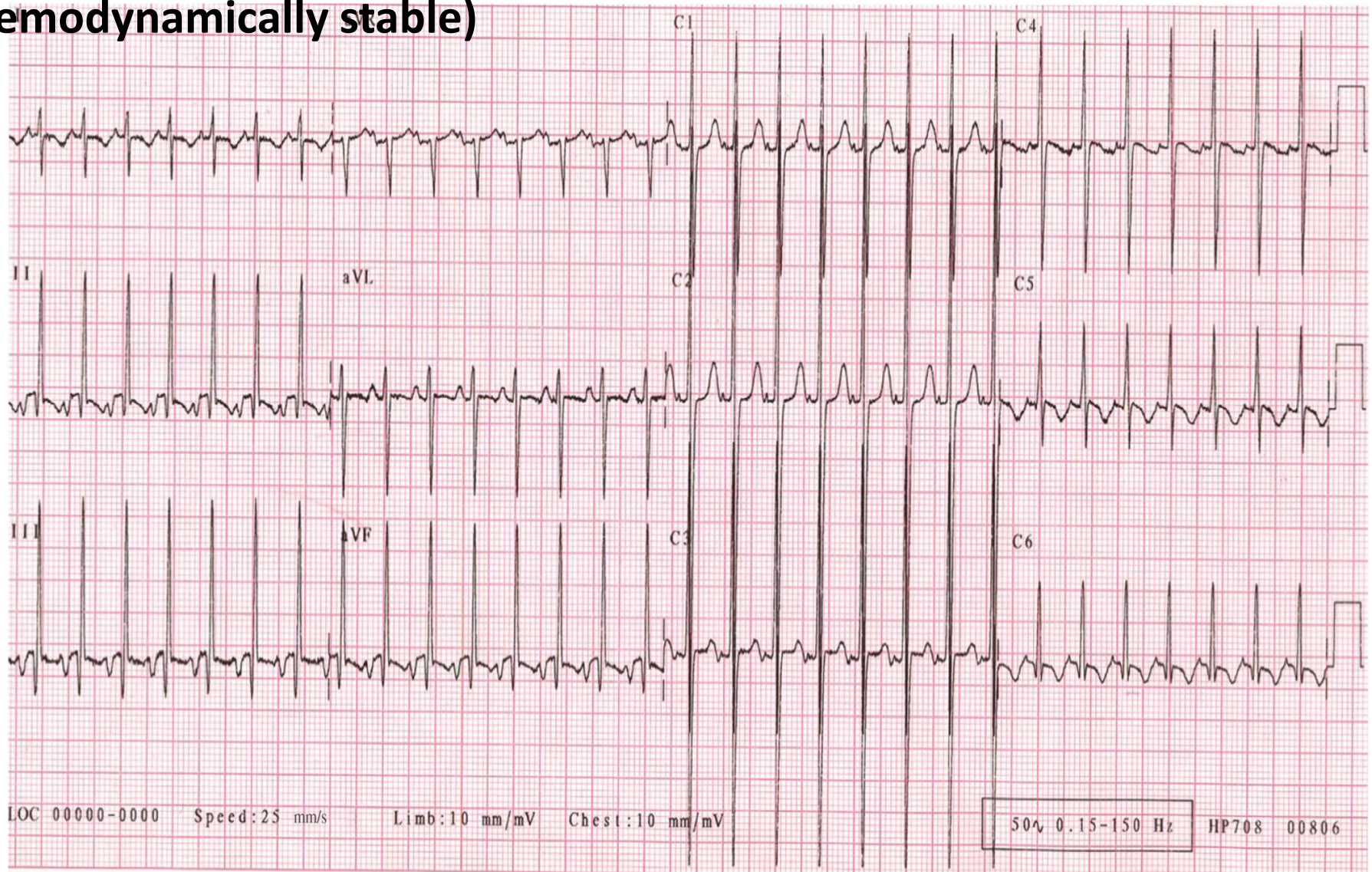
This ECG of a healthy 7-year-old boy displays some of the typical features of the pediatric ECG.

Q: Mention three of them in this ECG?



A 5-year-old male was admitted to the ER due to palpitation that started 30 minutes earlier.

Q: What is the diagnosis and proper treatment for such a case? (if hemodynamically stable)



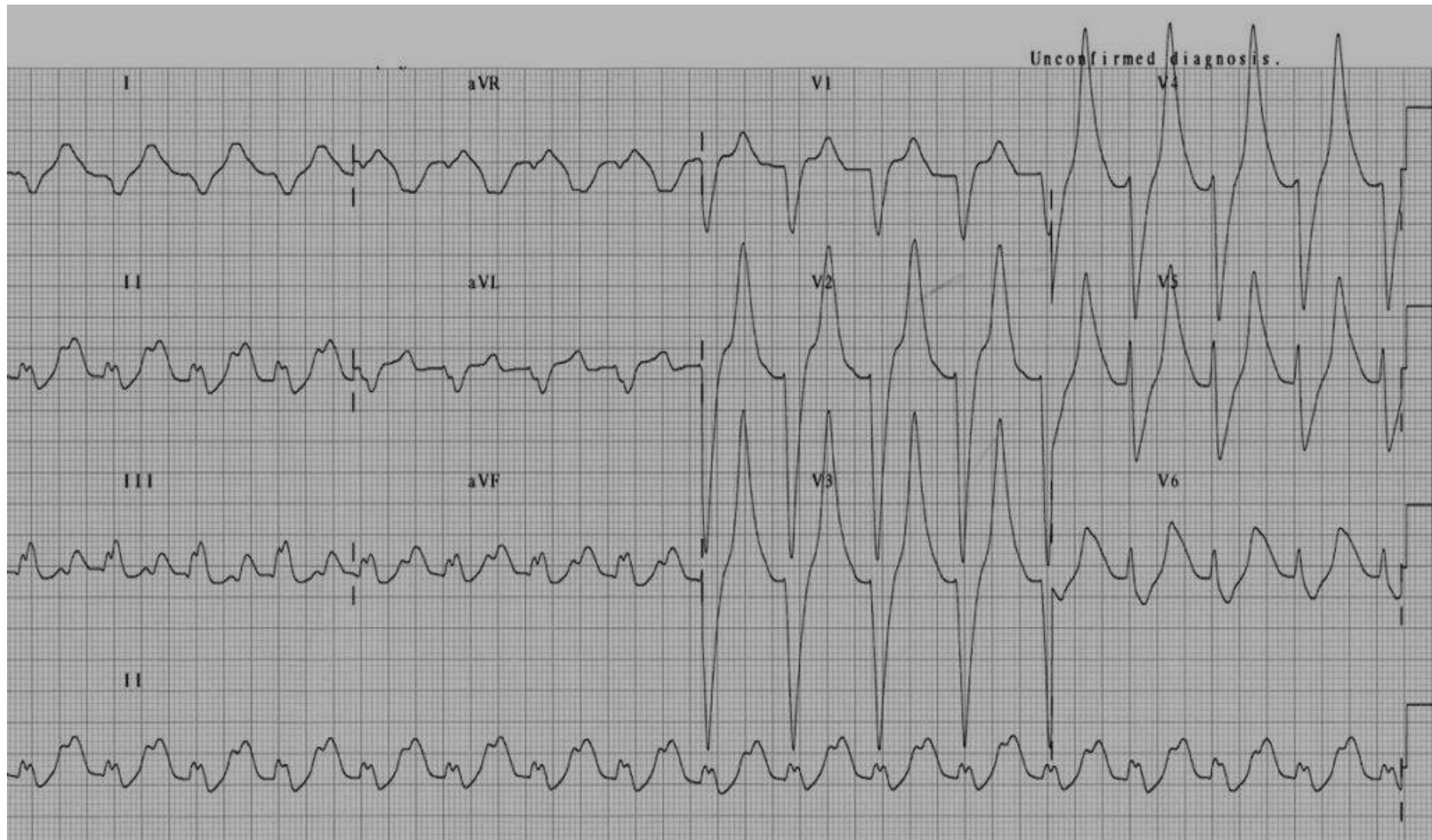
An 8-year-old male was admitted to the ER due to palpitation that started 90 minutes earlier.

Q: What is the diagnosis and proper treatment for such a case? (if hemodynamically unstable)



A 12-year-old male, previously healthy, was admitted due to oliguria and shortness of breath to the PICU.

Q: What is the diagnosis and proper treatment for such a case?

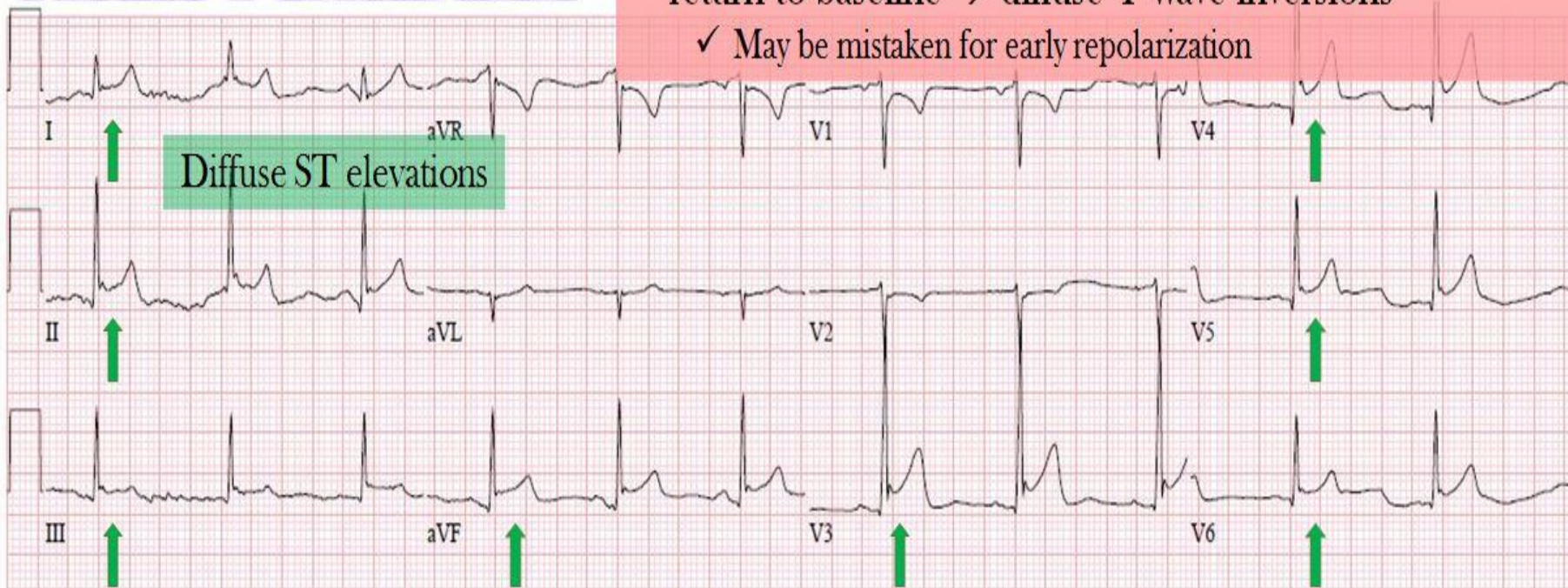


Acute Pericarditis

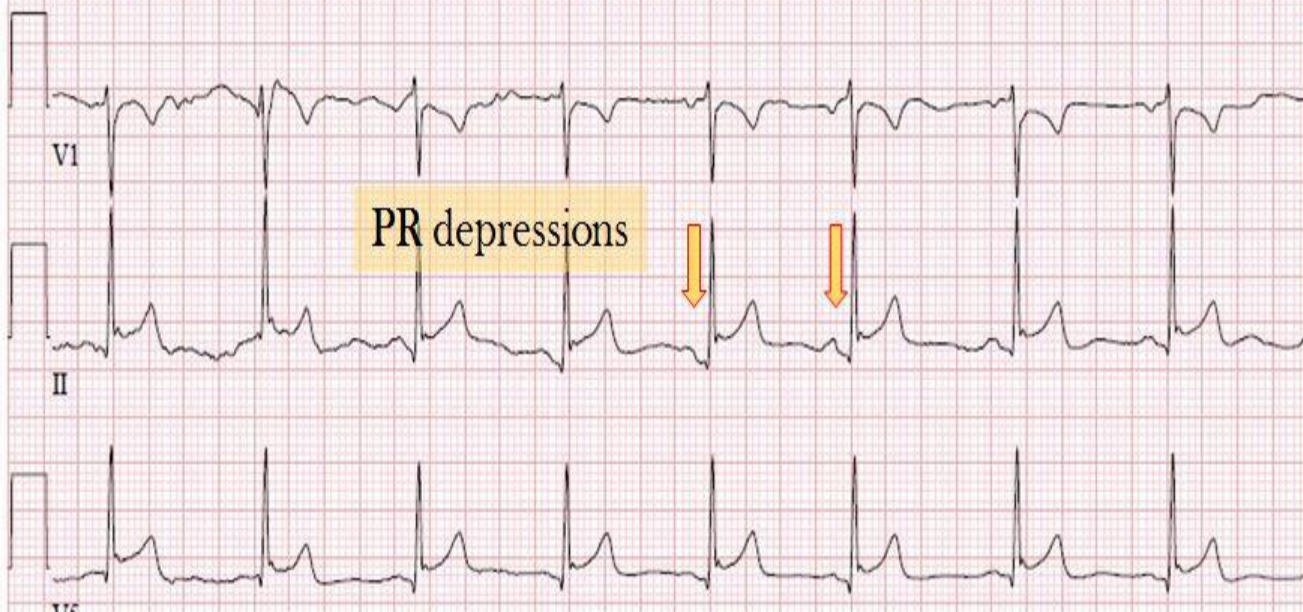
✓ EKG changes over weeks: ST elevation and PR depression → return to baseline → diffuse T wave inversions

✓ May be mistaken for early repolarization

Diffuse ST elevations



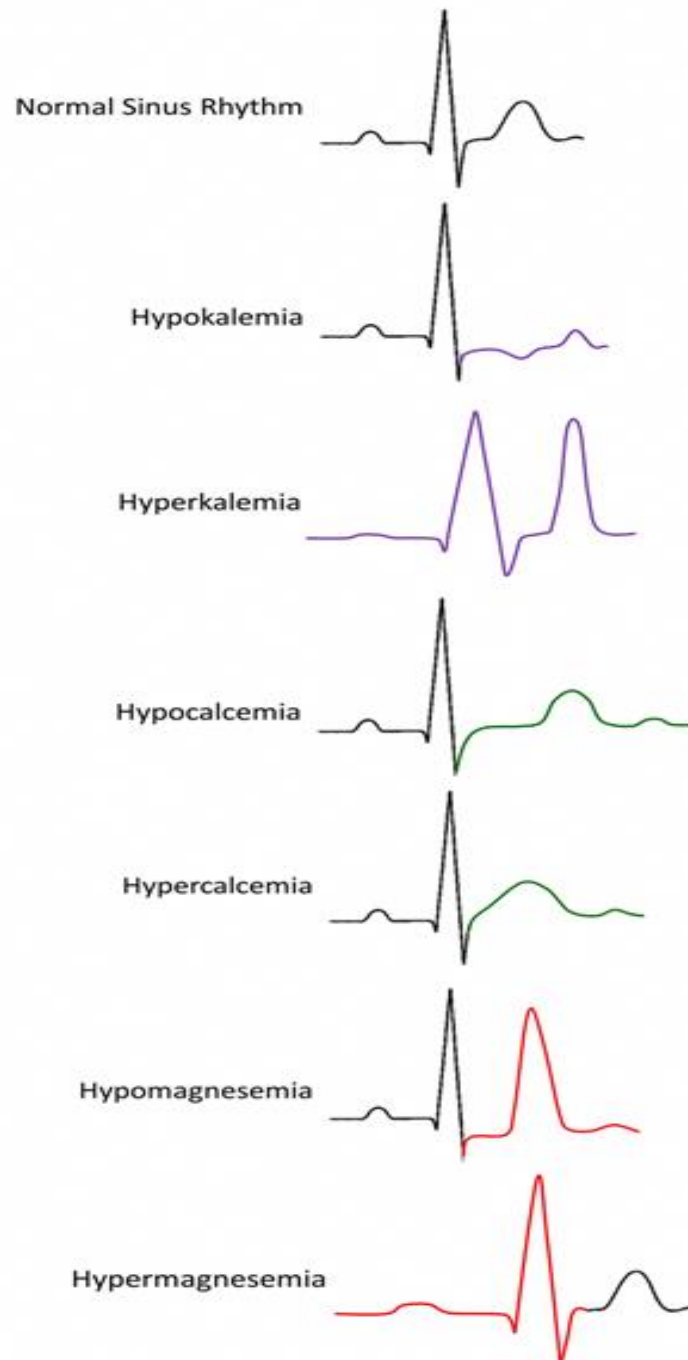
PR depressions



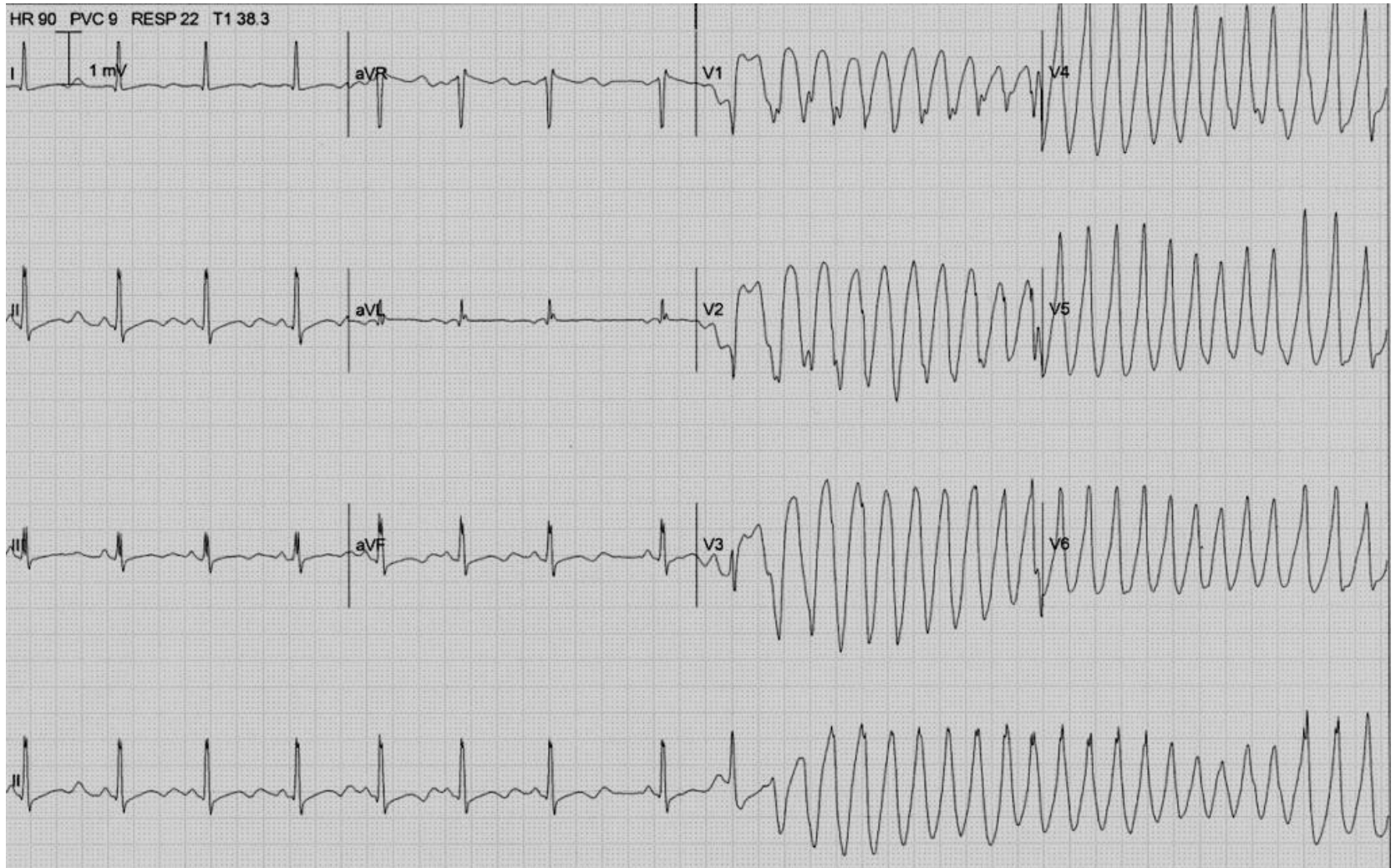
- ✓ Chest pain is classically pleuritic and improved by leaning forward
- ✓ Friction rub is subtle finding on L lower sternal border
- ✓ Elevation of troponin indicates myocarditis or myopericarditis

ECG Changes

- **(K) Hypokalemia:**
 - ST depression
 - Flat/inverted T wave
 - U wave
- **(K) Hyperkalemia:**
 - Flat P wave
 - Prolonged PR interval
 - QRS widening
 - Tall, peaked T wave
- **(Ca) Hypocalcemia**
 - Prolonged ST segment
 - Prolonged QT interval
- **(Ca) Hypercalcemia**
 - Shortened ST segment
 - Widened T wave
- **(Mg) Hypomagnesemia**
 - Tall T wave
 - ST depression
- **(Mg) Hypermagnesemia**
 - Prolonged PR interval
 - QRS widening



Diagnosis and acute management



Diagnosis and possible complications

