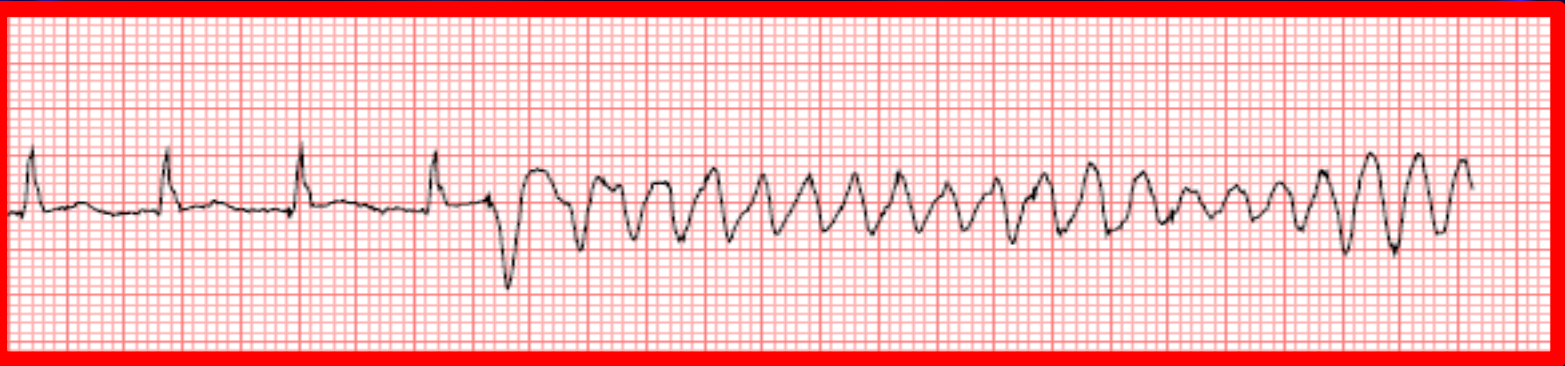


# 8<sup>th</sup> Annual UMEM Residency ECG Competition



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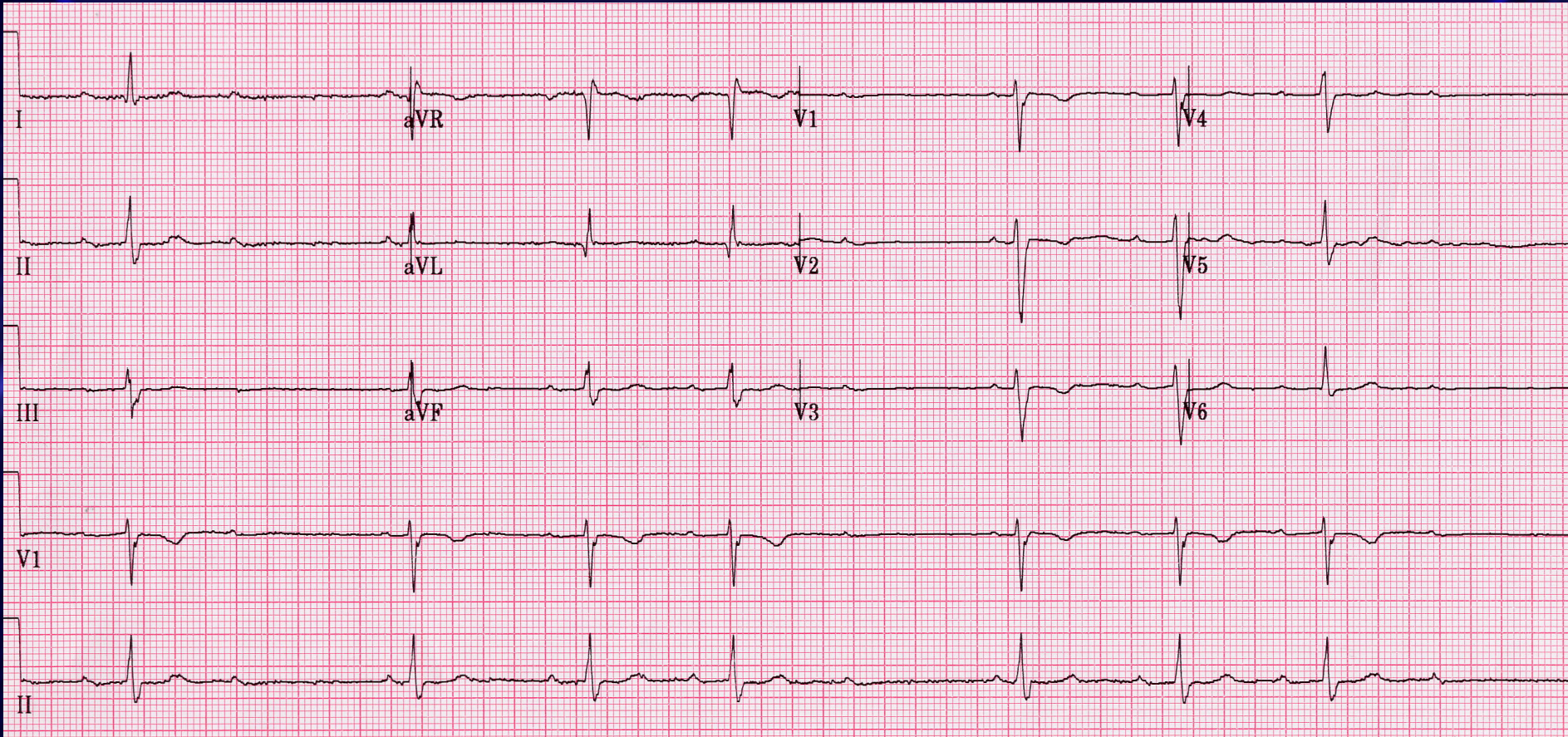
[amalmattu@comcast.net](mailto:amalmattu@comcast.net)



**#1: A 26 yo W presents to the ED with a non-concerning hx/o CP and has this ECG.**

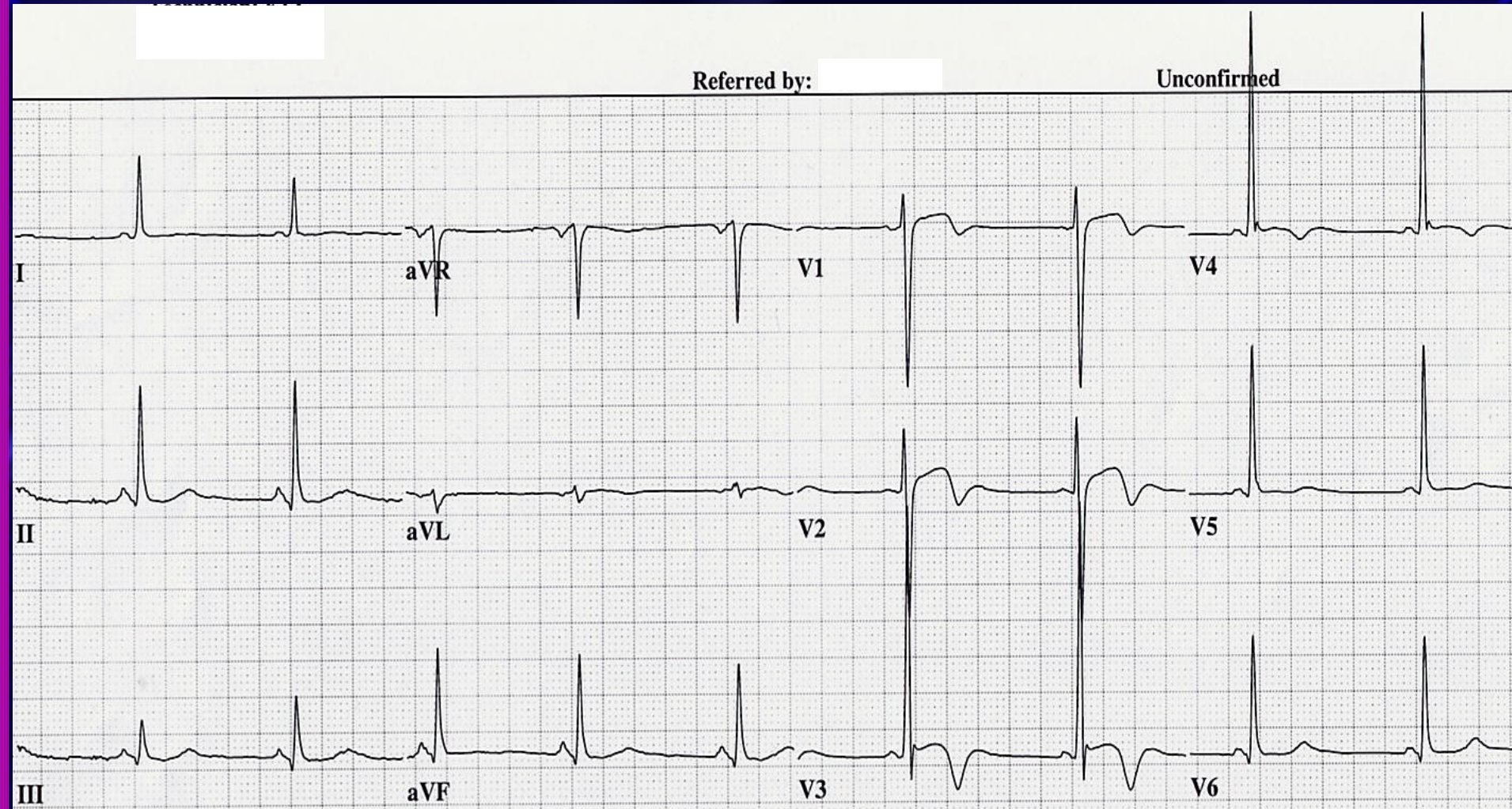
**1a. What is the full ECG interpretation? (3 pts)**

**1b. List at least 3 other causes of T-wave inversions in leads V1-V3. (3 pts)**





**#2: A 31 yo AAM presents with atypical CP and has this ECG. What is the cath likely to show? (2 pts)**



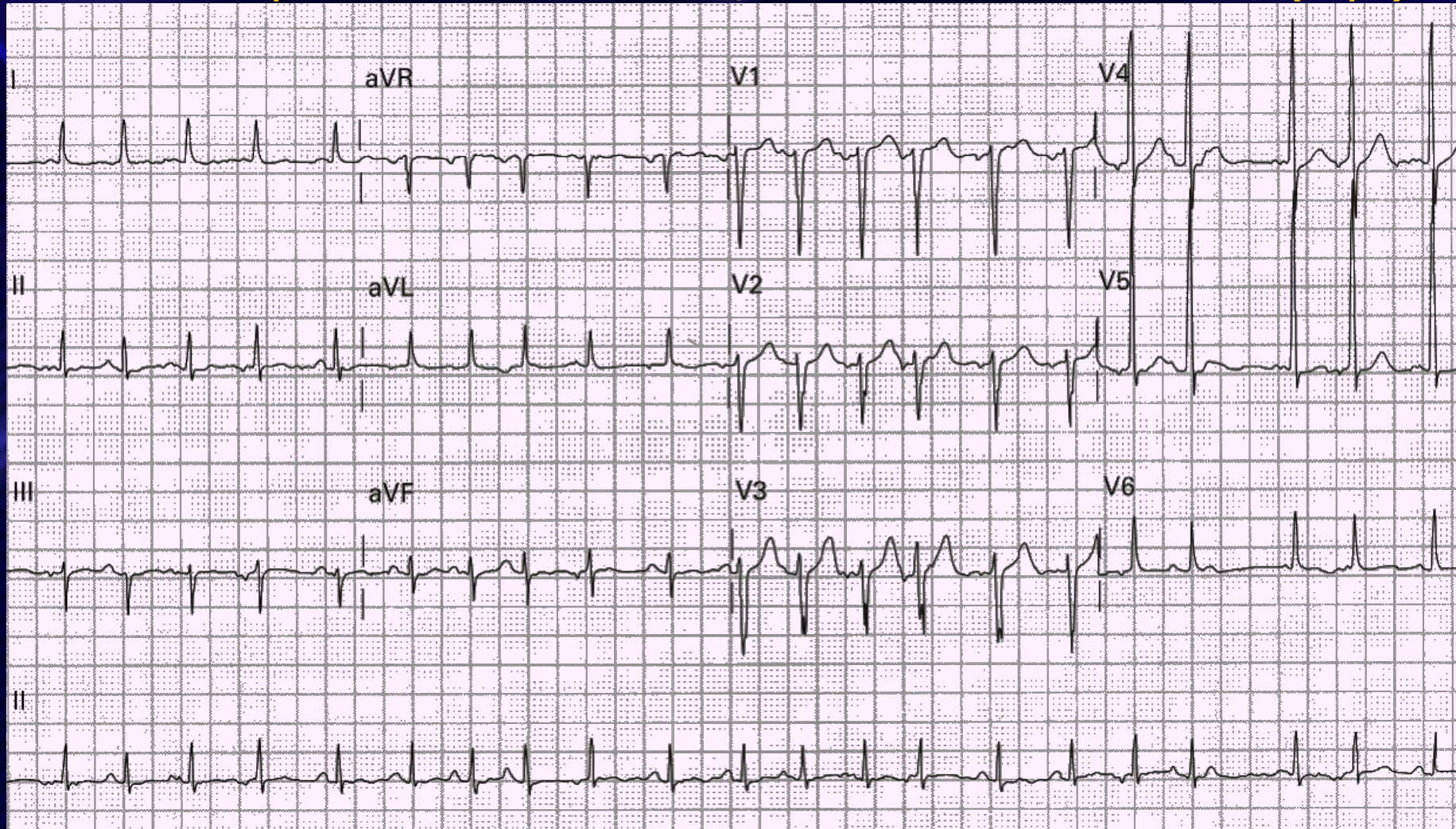


### #3: A 54 yo M presents with SOB and palpitations.

3a. What is the ECG diagnosis? (1 point)

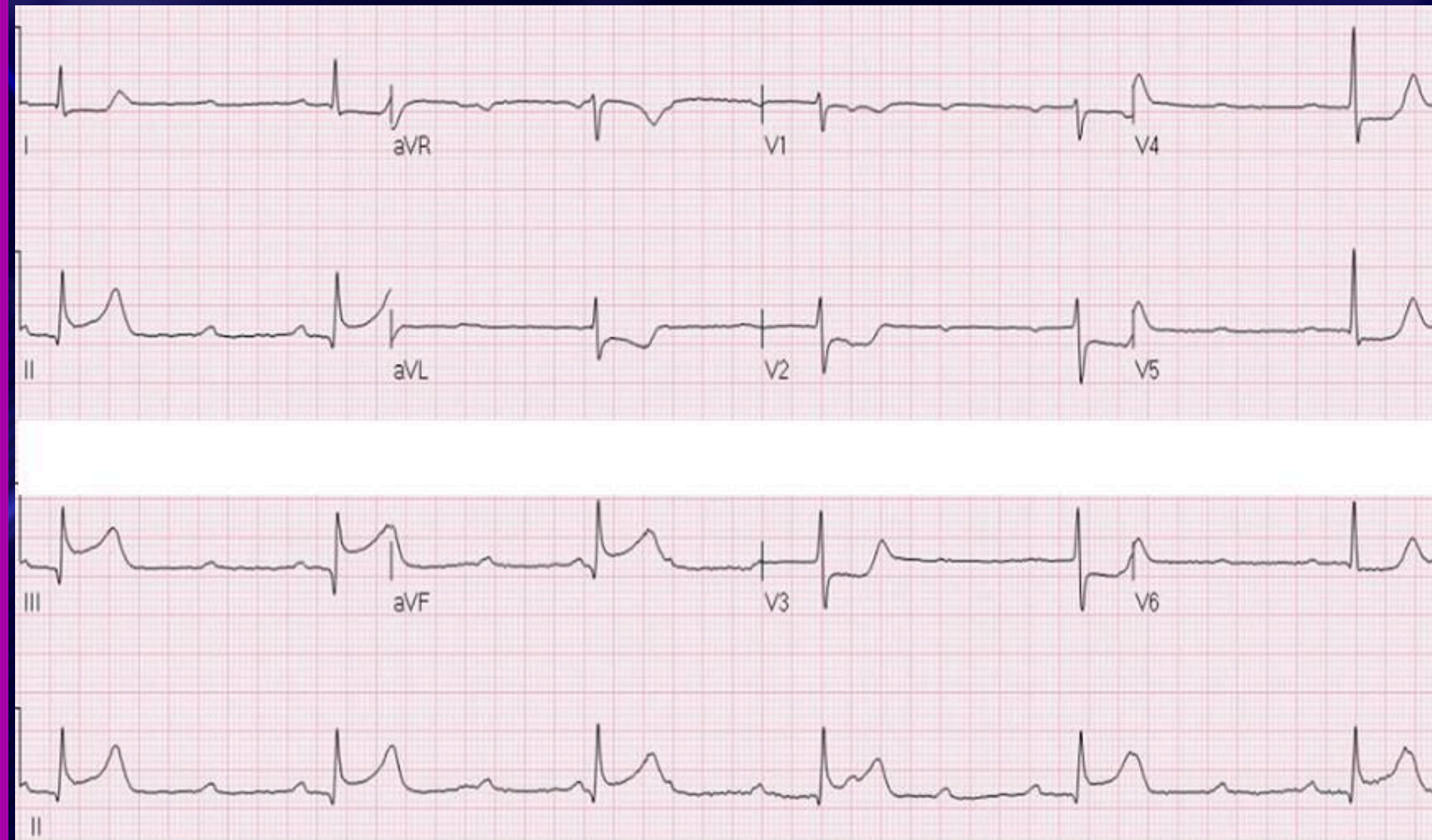
3b. What are 2 other causes of an irregularly irregular narrow complex tachycardia? (2 points)

3c. If the patient's SBP was 75, what would be the tx? (1 pt)





**#4: A 65 yo W presents with syncope and chest pain. What is the FULL ECG dx? (4 pts)**



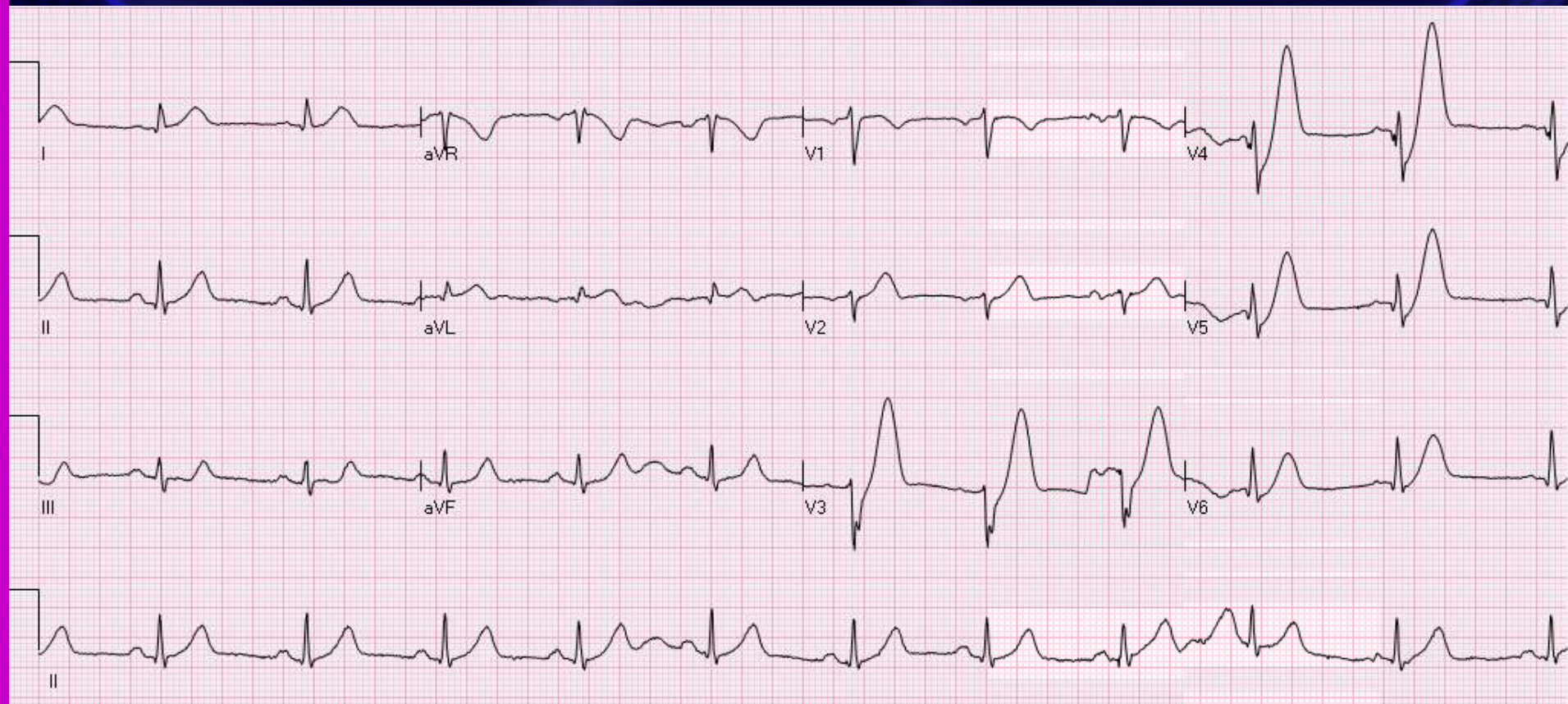


## #5: A 50 yo M presents with CP and this ECG.

5a. What is the name of this T-wave finding? (1 pt)

5b. What will the cath show? (1 pt)

5c. How does the underlying lesion differ from that found in Wellens syndrome? (1 pt)



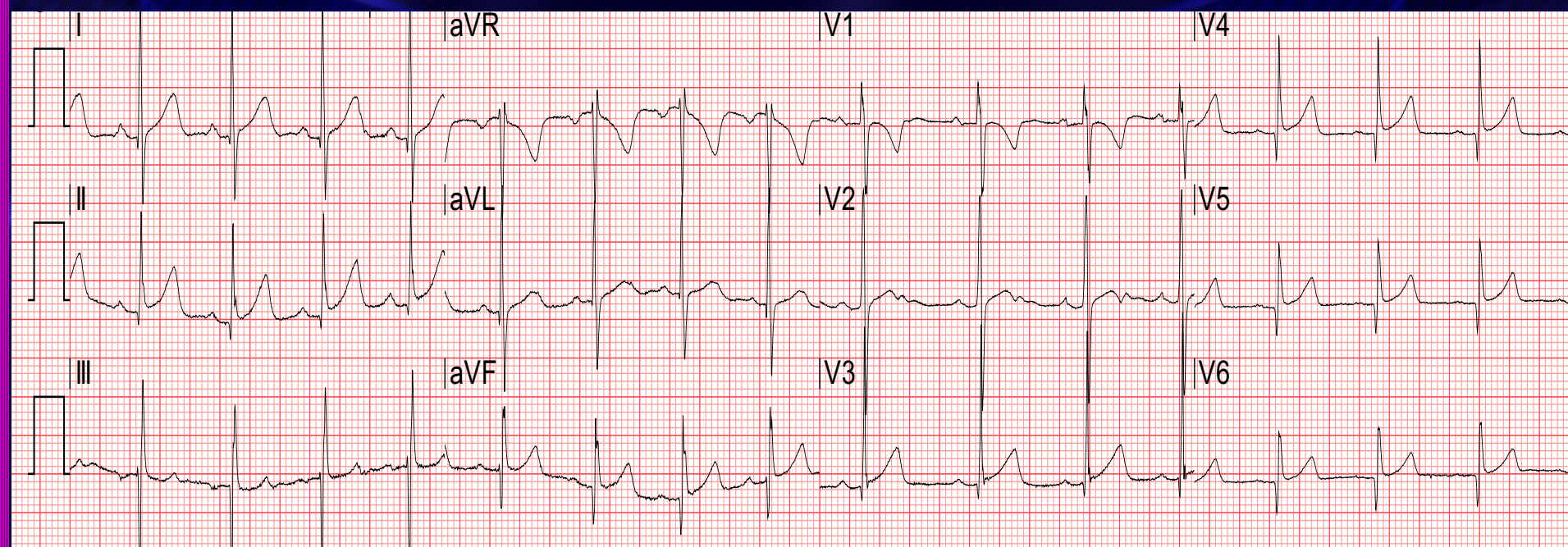


**#6: A 13 yo M presents to your urgent care center after a syncopal episode upon learning that he failed an important exam in school.**

6a. What is the presumed diagnosis? (1 pt)

6b. What is the diagnostic test of choice? (1 pt)

6c. If you are unable to obtain the diagnostic test, what should you do? (1 pt)

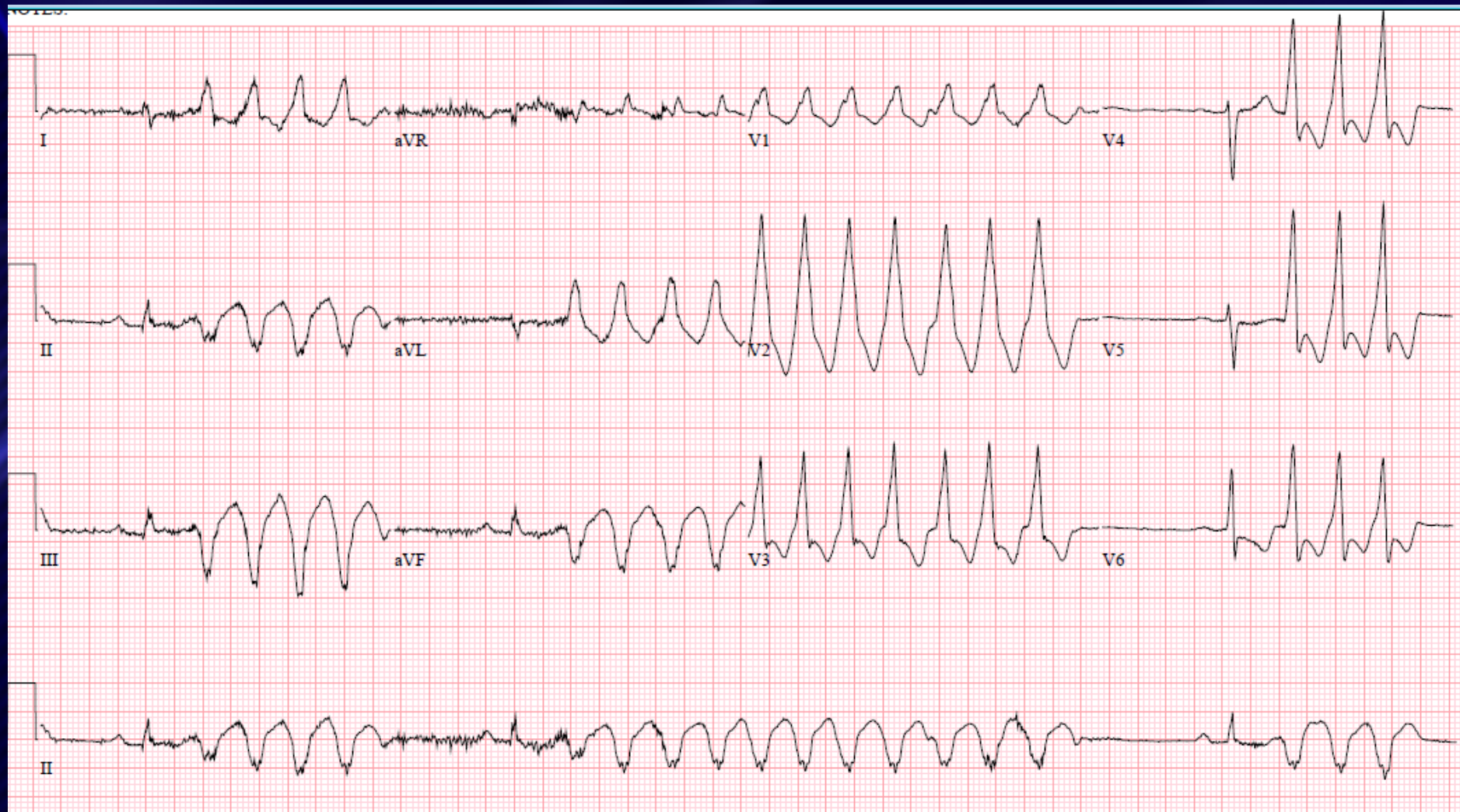




**#7: A 62 yo W with a prior hx/o CAD presents with lightheadedness & palpitations. BP is 130/75.**

**7a. What is the ECG interpretation? (2 pt)**

**7b. Electrolytes are all normal. What is the optimal ED drug therapy? (2 pts)**





**#8: What is the difference between monomorphic VTach, generic polymorphic VTach, and torsades de pointes in terms of:**

8a. the most likely underlying cause (3 pts)

8b. the best plan for treatment after you cardiovert the patient back to sinus rhythm (3 pts)

	MVT	PVT	TdP
Most likely underlying cause			
Best plan for Tx			

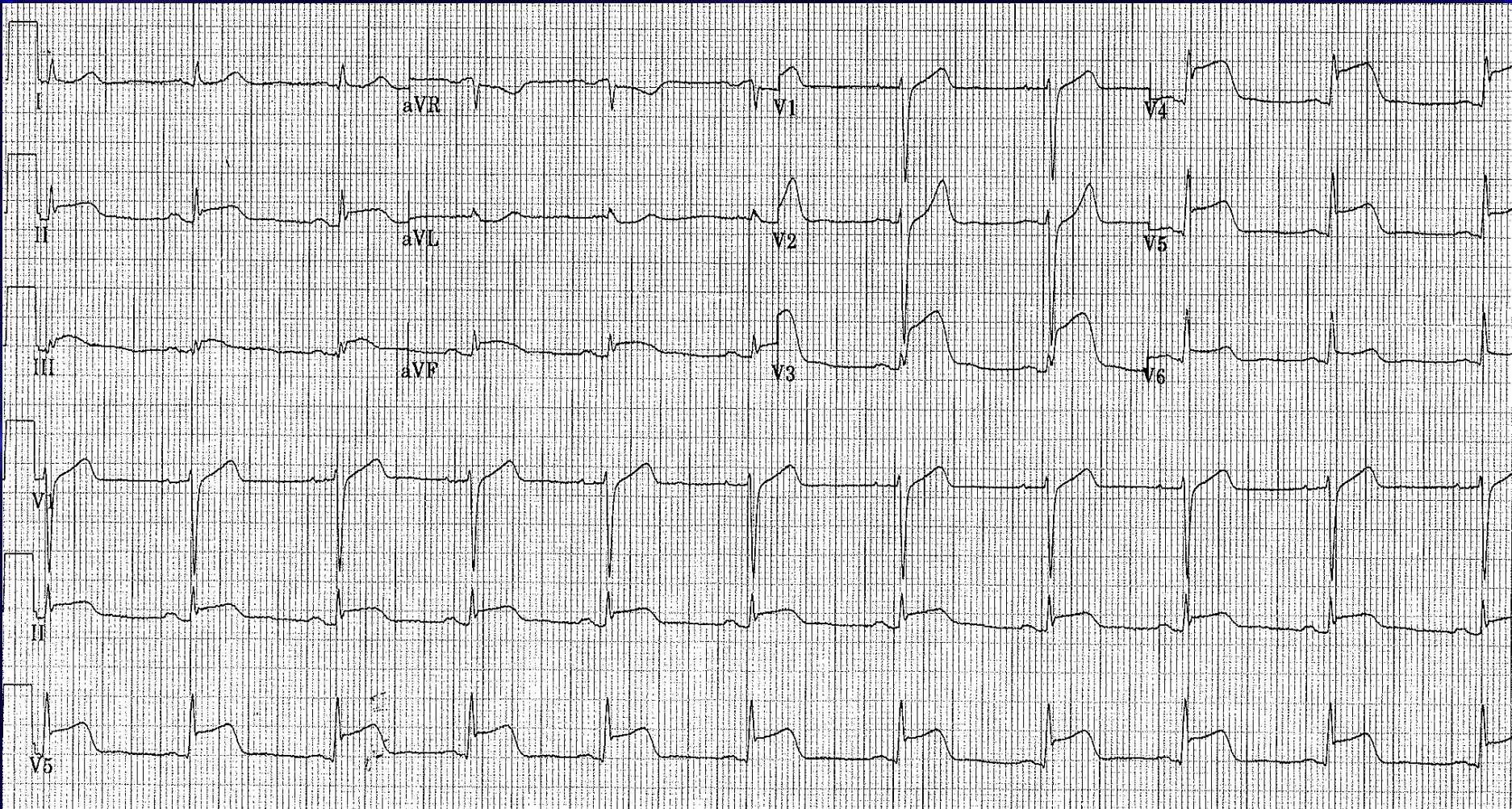


## #9: A 36 yo M presents with CP and this ECG.

9a. Name 4 causes of diffuse STE. (2 pts)

9b. What is the diagnosis here? (1 pt)

9c. List 2 reasons for your diagnosis (versus the other causes you listed in 9a.) (2 pts)



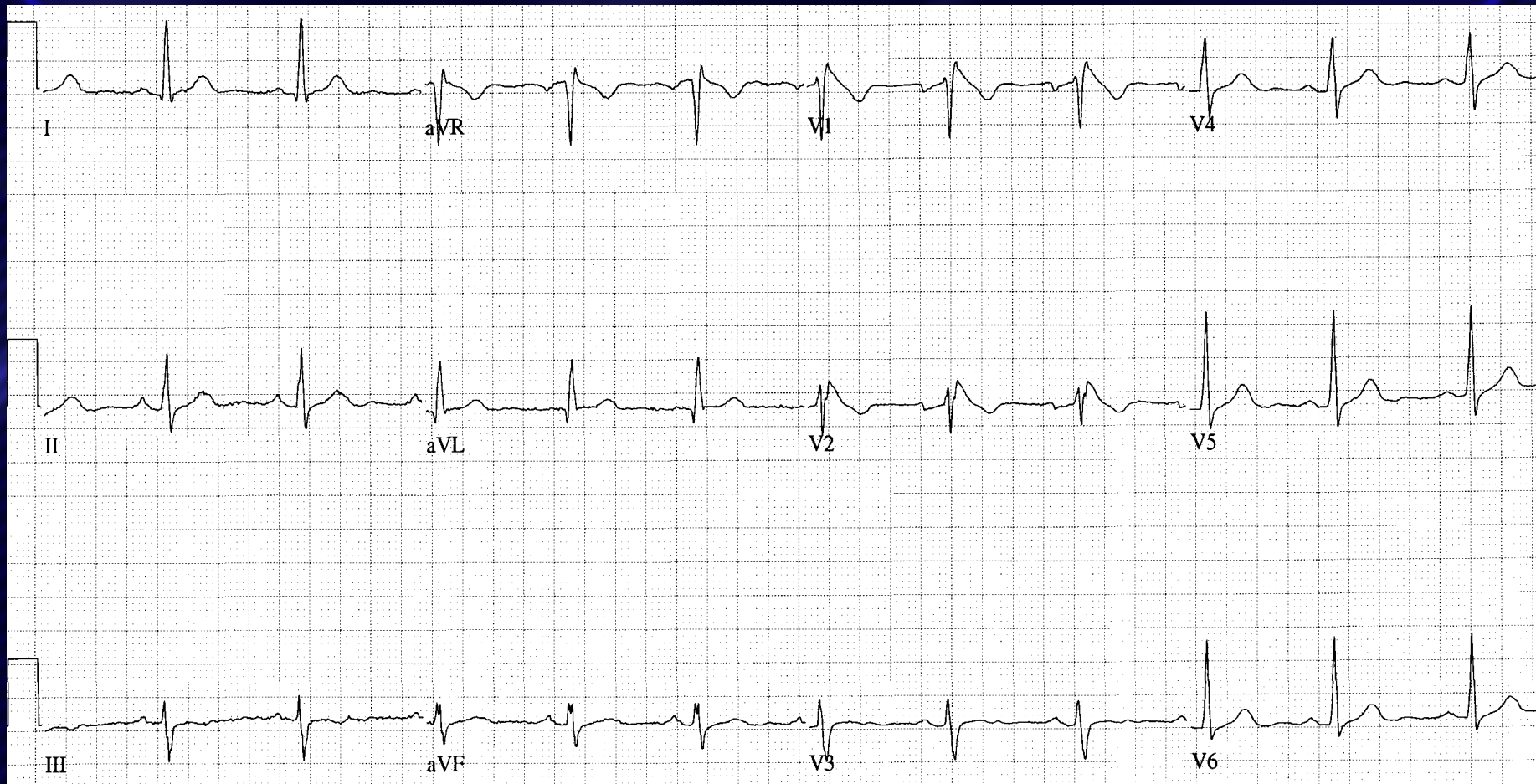


**#10: A 30 yo M presents after a syncopal episode.  
This is his ECG.**

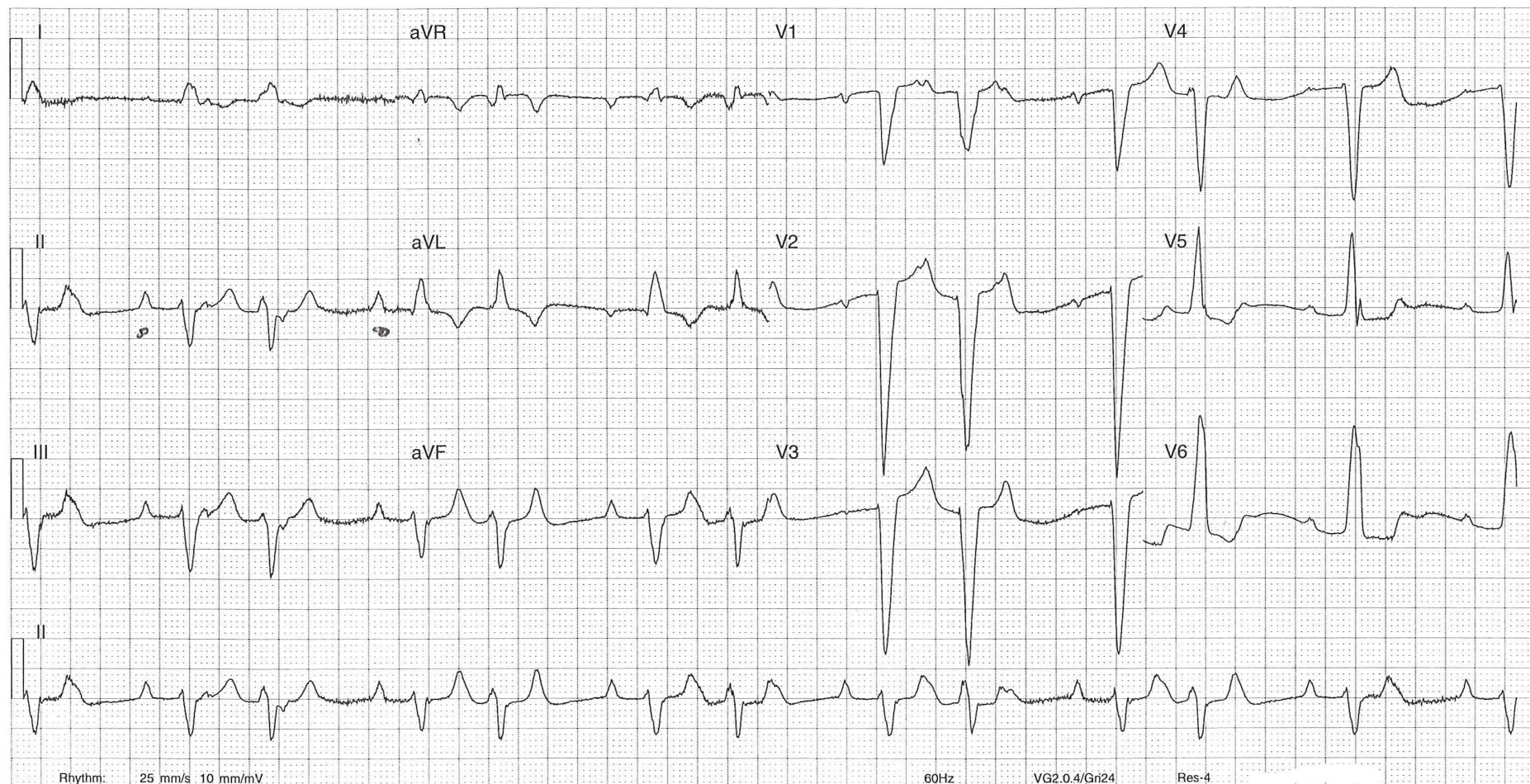
10a. What is the diagnosis? (1 pt)

10b. Name 2 other conditions that are known to mimic this pattern. (2 pts)

10c. What is the best management strategy? (1 pt)



11c. When the QRS complexes are so irregular, what “rookie trick” can you do to estimate the ventricular rate? (1 pt)





**#12: A 54 yo M presents with SSx that are highly concerning for a massive PE, but the computer is reading the ECG as a STEMI.**

12a. In which leads would you expect STE in the setting of a massive PE? (2 pts)

12b. Besides STEMI & PE, name another condition which can typically produce STE in those same leads. (1 pt)

12c. List up to 6 ECG findings in patients with large PEs. (2 pts)

12d. Which of the answers you listed in 12c. is the most common abnormality in cases of large PE? (1 pt)



## #13: BONUS (5 points)

Ignoring the non-specific T-wave flattening, what is the main abnormality in this ECG, and list 8 causes.

