

# **ECG ANALYSIS OF ARRHYTHMIAS II.**

## **(PASSIVE HETEROTOPIES AND VENTRICULAR ARRHYTHMIAS)**

UNIVERSITY OF DEBRECEN  
FACULTY OF MEDICINE  
DIVISION OF CLINICAL PHYSIOLOGY



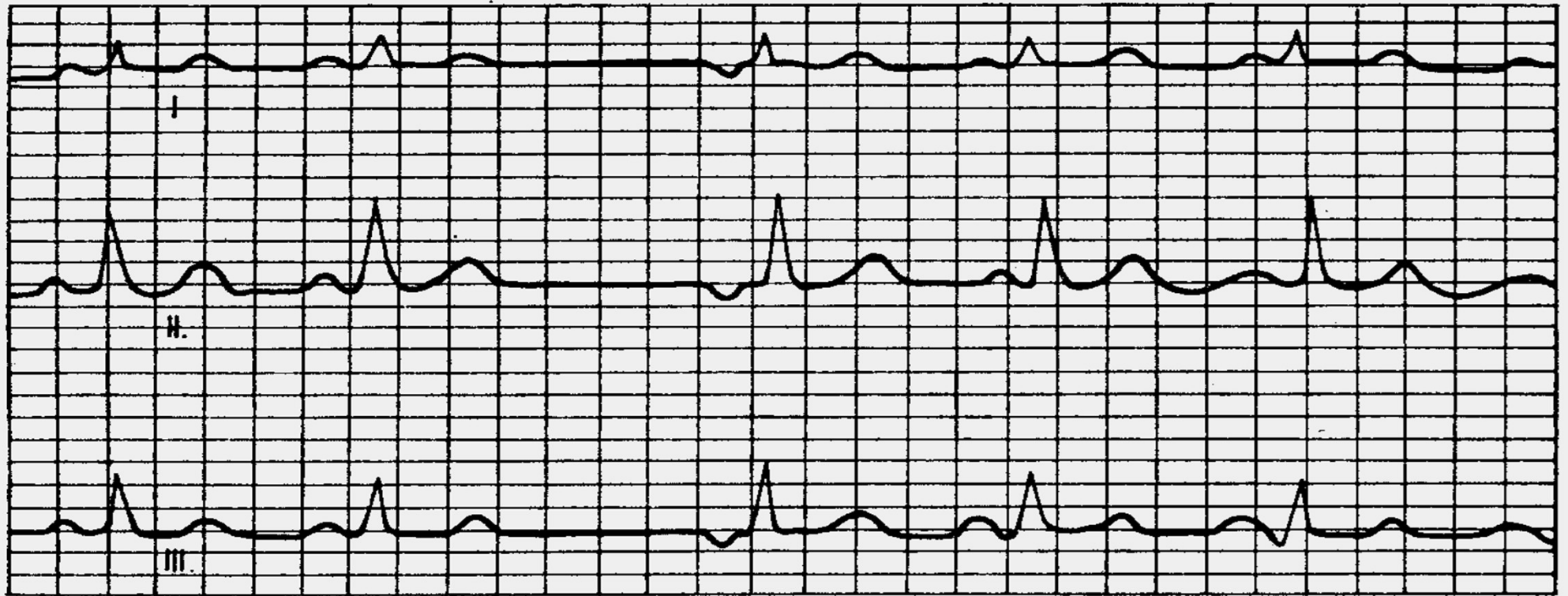
## **Passive heterotopies**

- 1. Junctional escape beat**
- 2. Junctional escape rhythm**
- 3. Idioventricular escape beat**
- 4. Idioventricular escape rhythm**
- 5. Parasystole**
- 6. Interference dissociation**

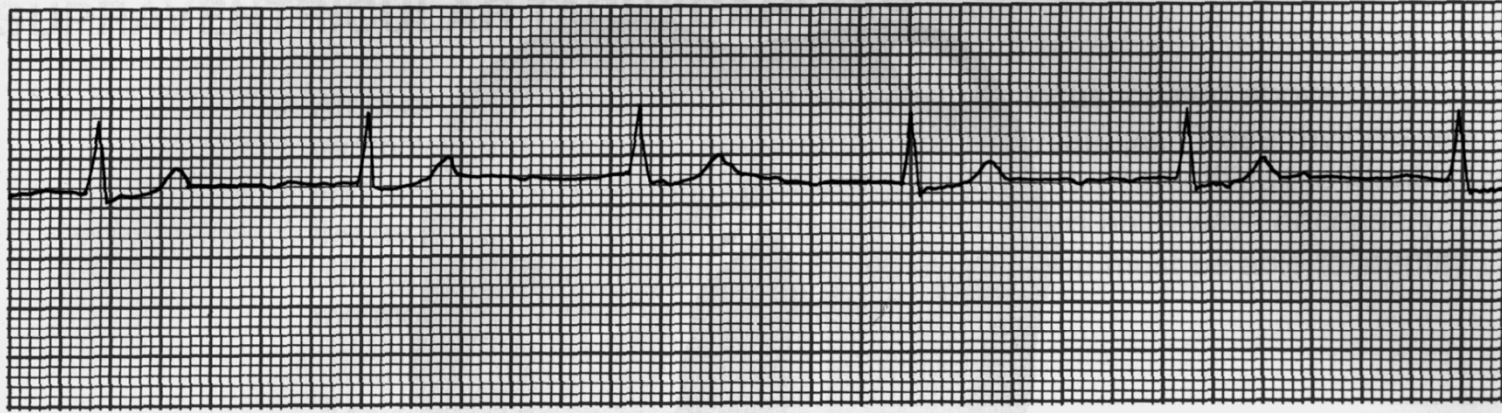
## **Active heterotopies with ventricular origin**

- 1. Ventricular premature contraction**
- 2. Idioventricular acceleration**
- 3. Ventricular tachycardia**
- 4. Ventricular flutter**
- 5. Ventricular fibrillation**

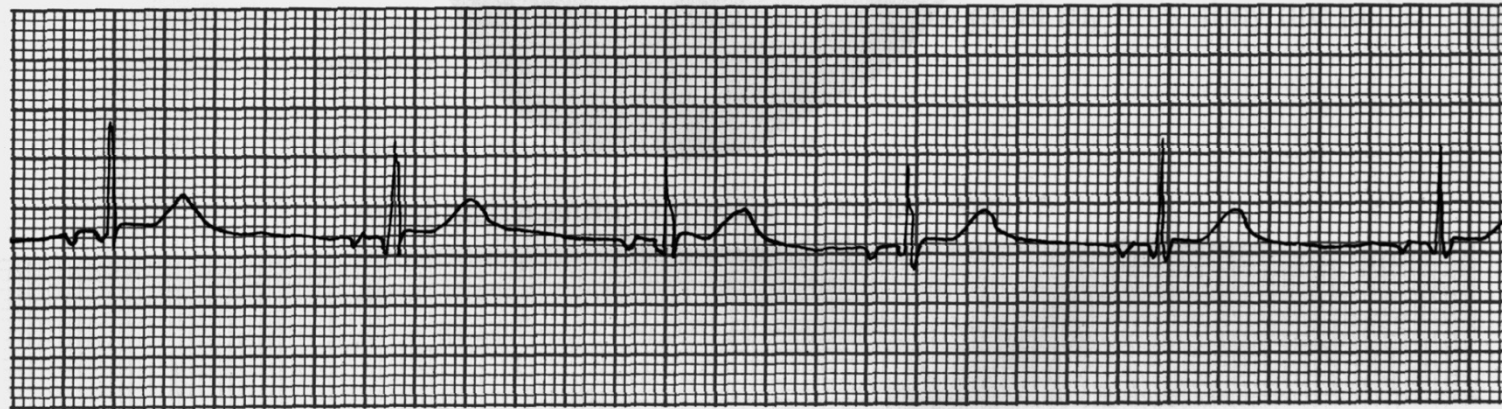
# Junctional escape beat



# Junctional escape rhythm

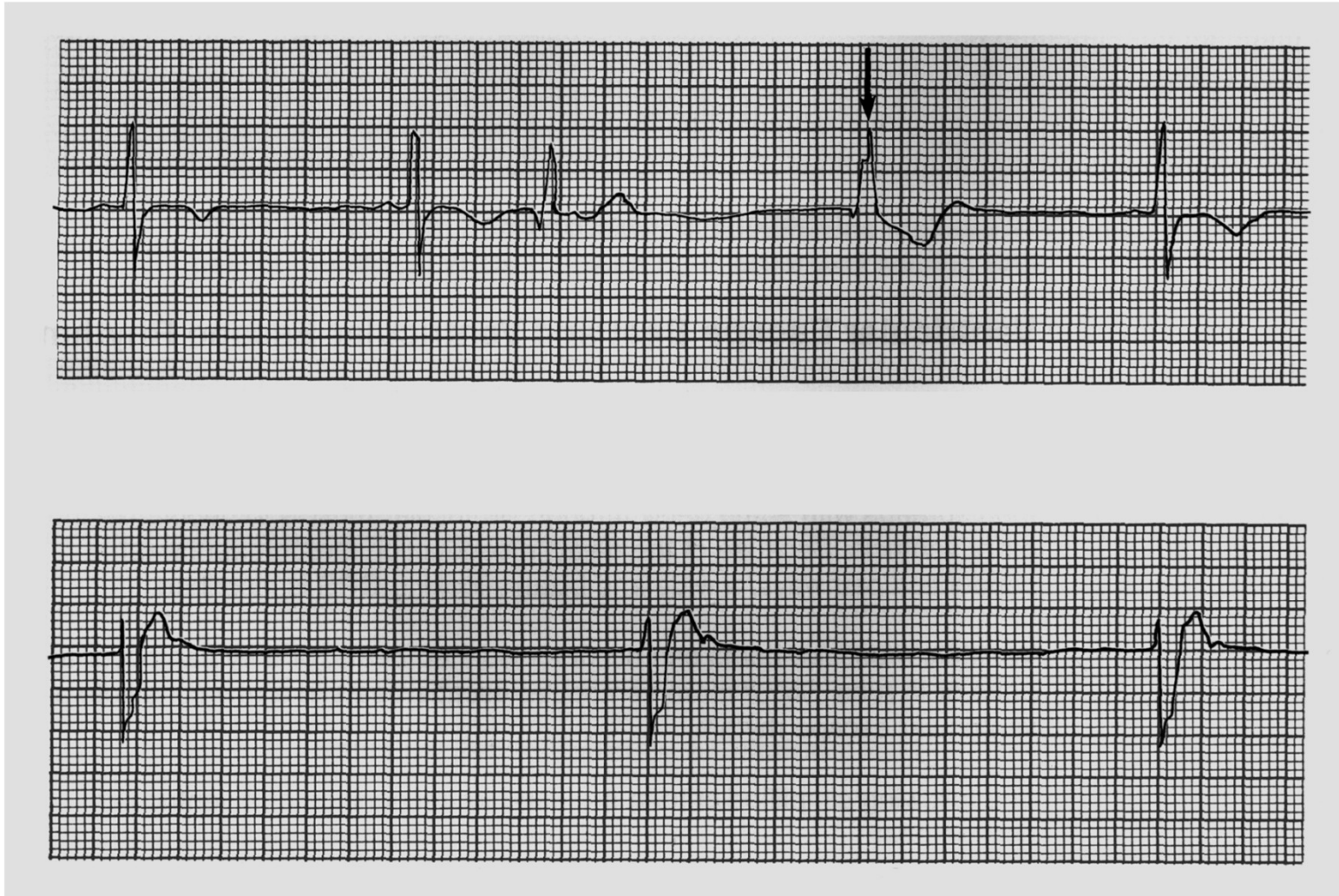


Junctional escape rhythm

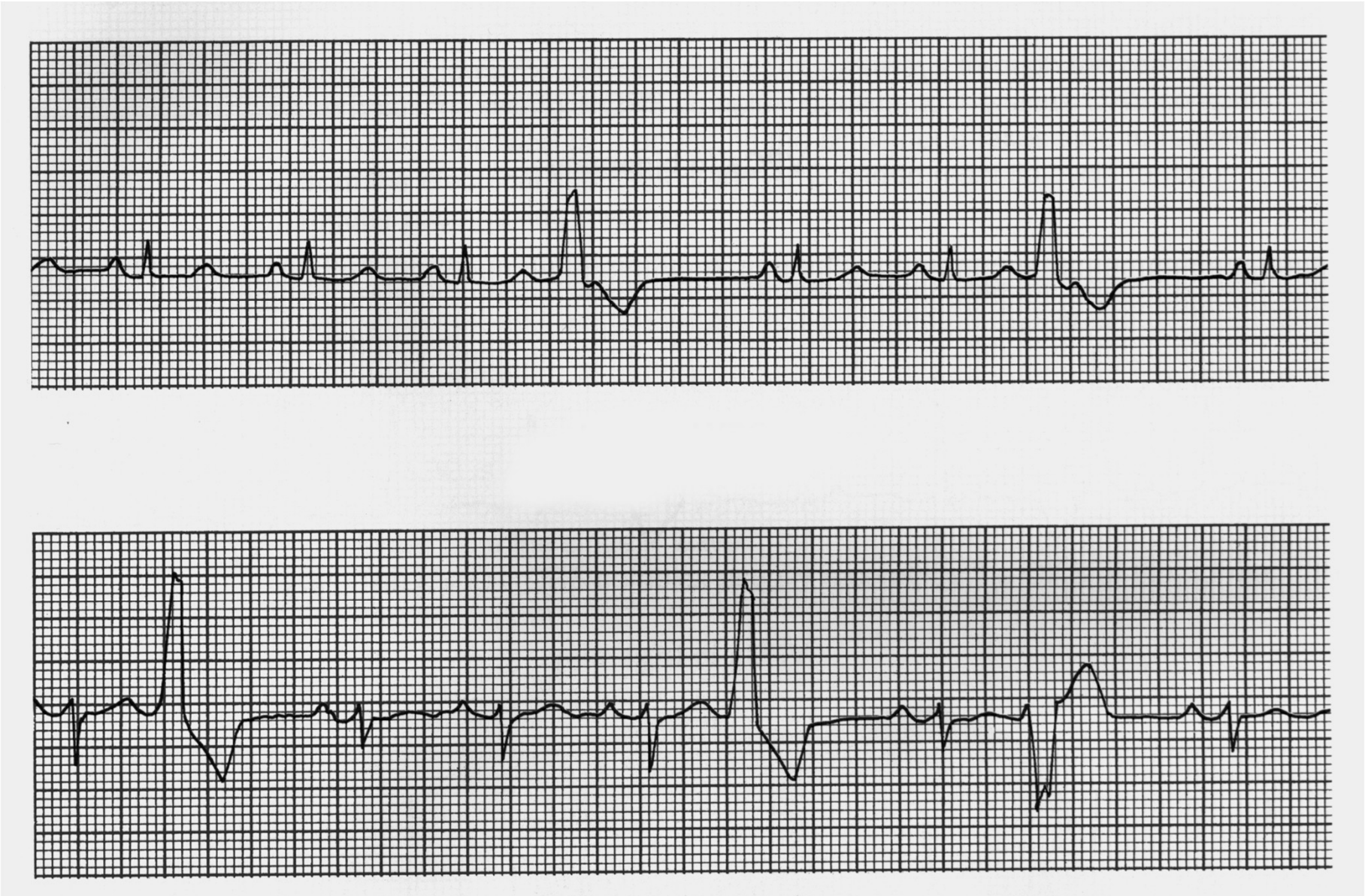


Junctional escape rhythm

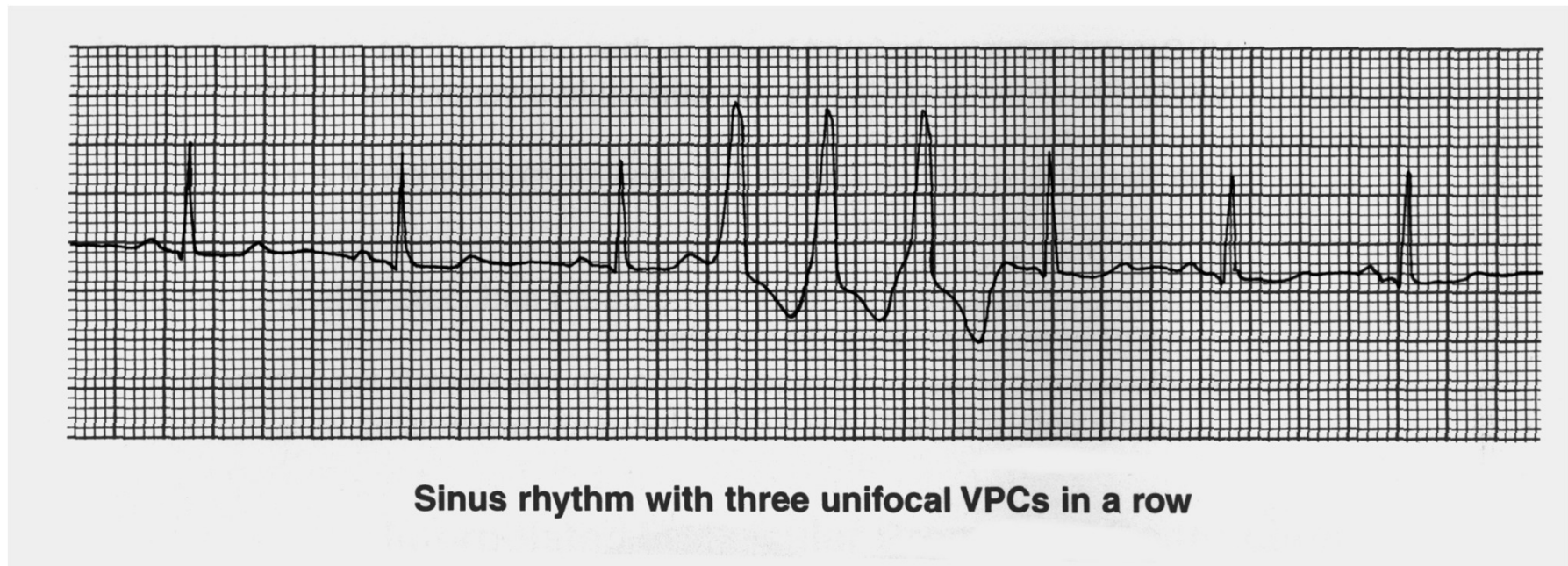
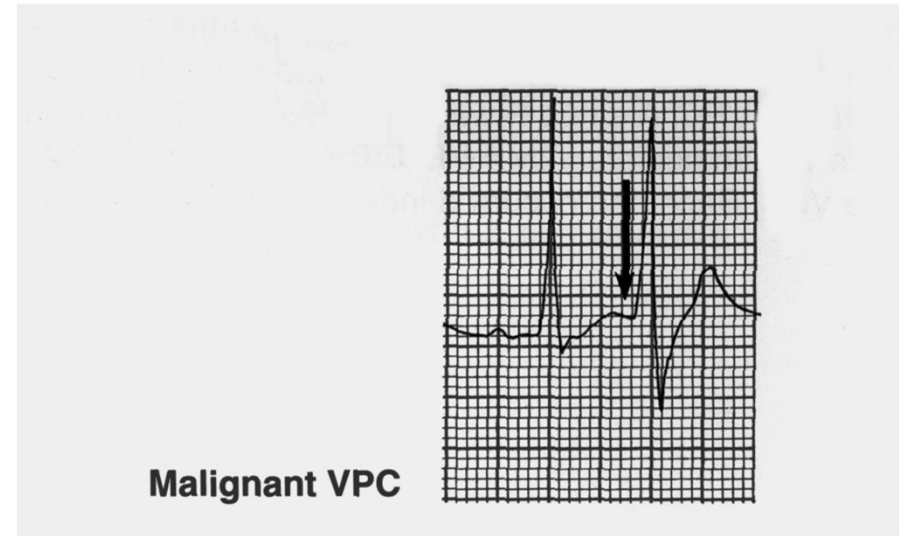
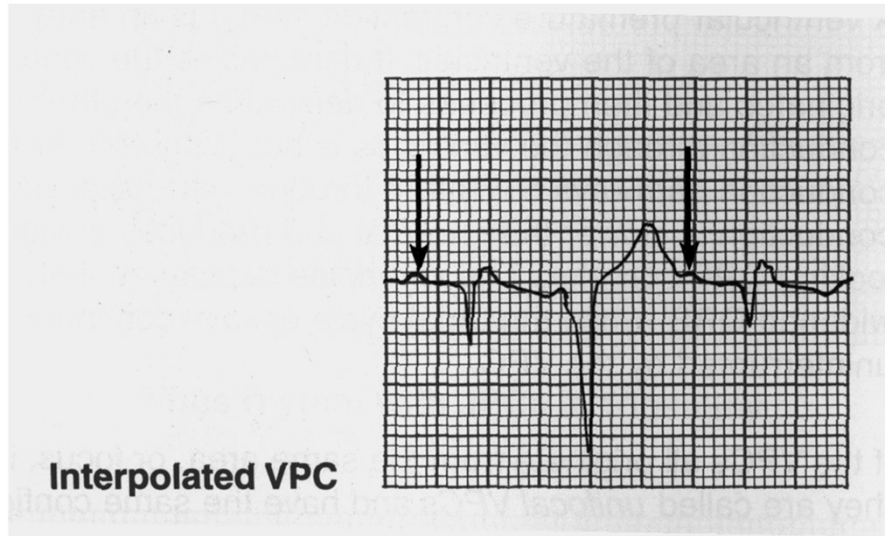
# Idioventricular escape beat and idioventricular escape rhythm



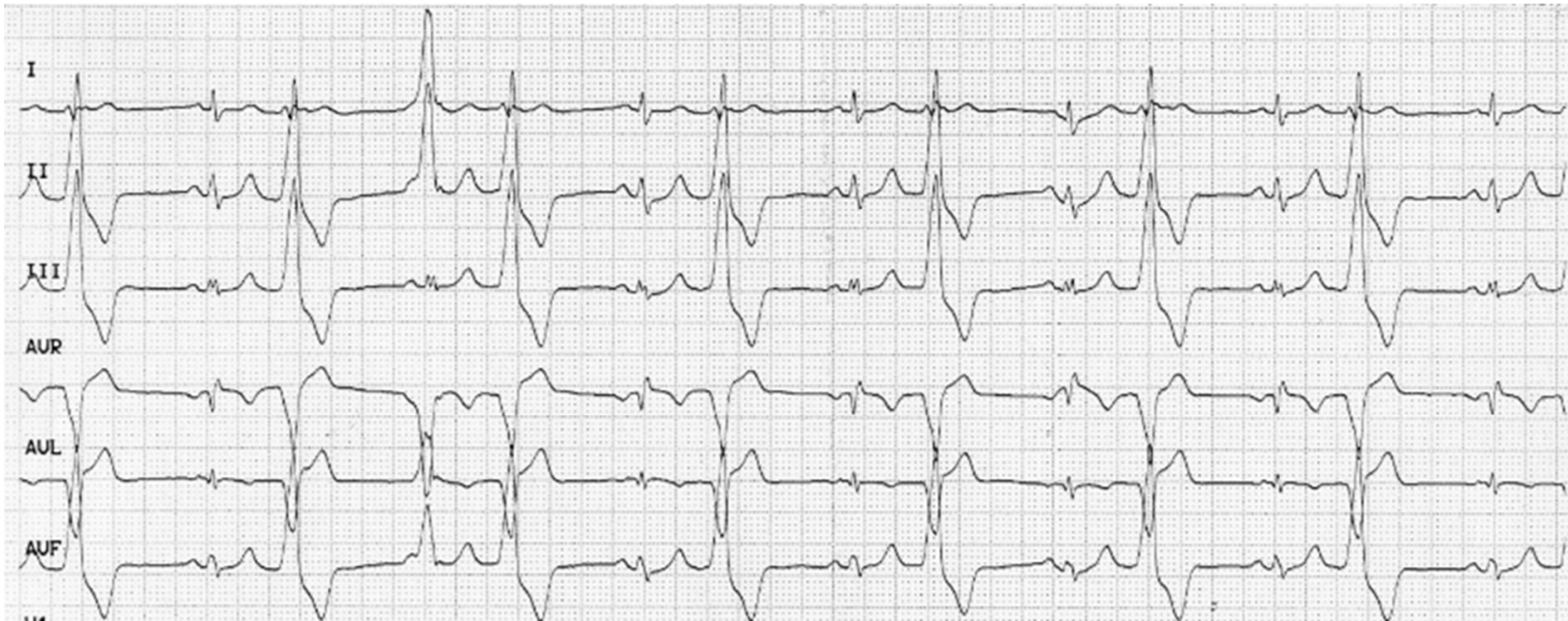
# Ventricular premature contractions I.



# Ventricular premature contractions II.

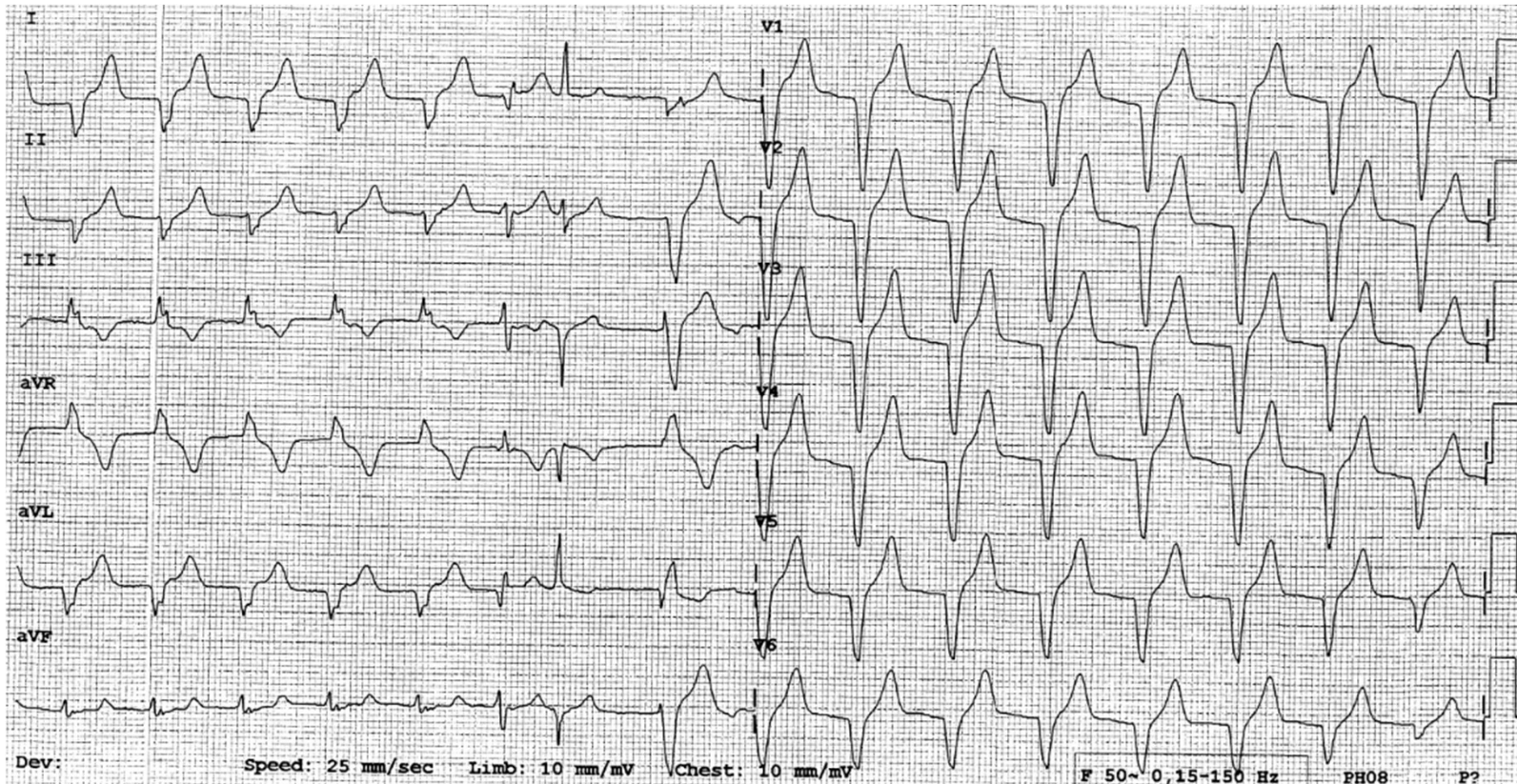
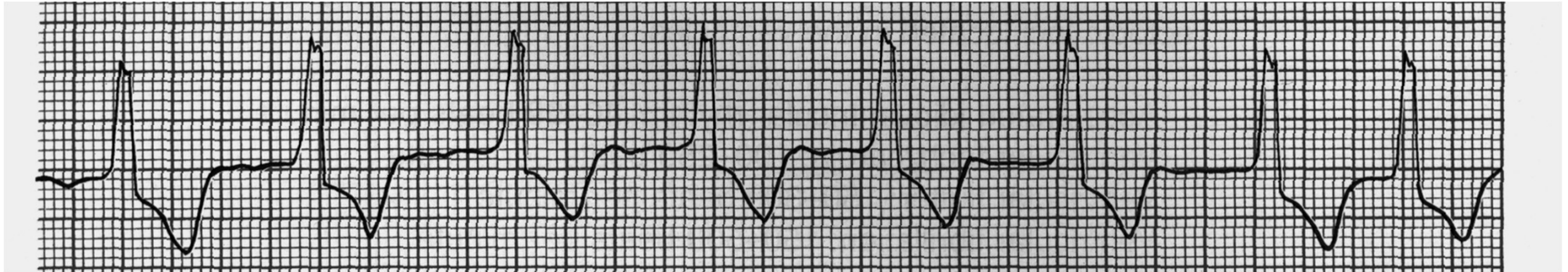


# Ventricular premature beats with a bigeminal pattern

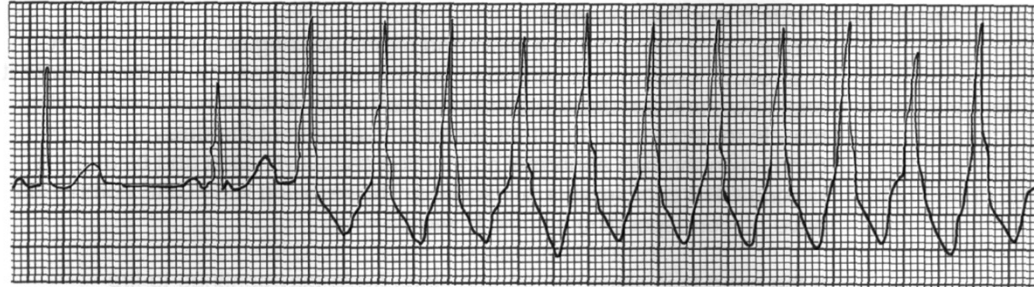




# Idioventricular acceleration

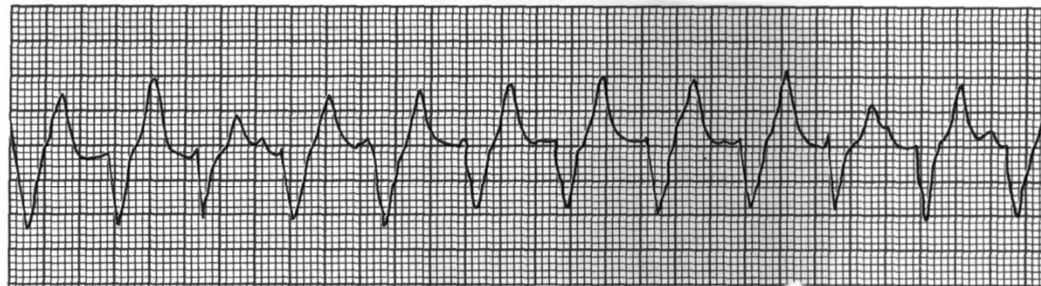


# Ventricular tachycardia

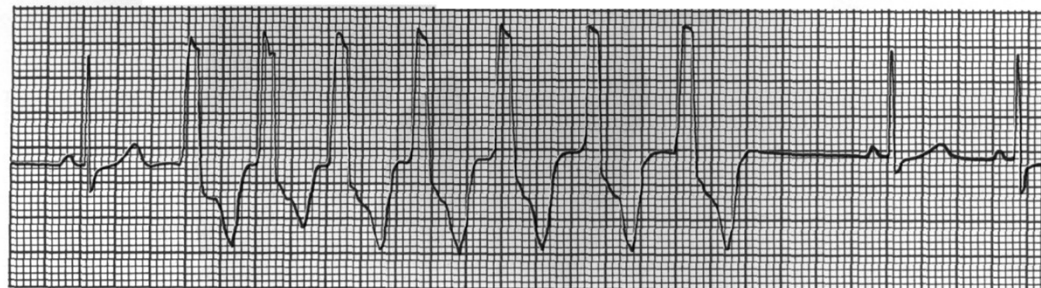


VA bello et al  
Lead aVR  
Lead aVL  
Lead aVF  
Lead I  
Lead II  
Lead III  
Lead V1  
Lead V2  
Lead V3  
Lead V4  
Lead V5  
Lead V6

**Sinus bradycardia with a run of ventricular tachycardia**

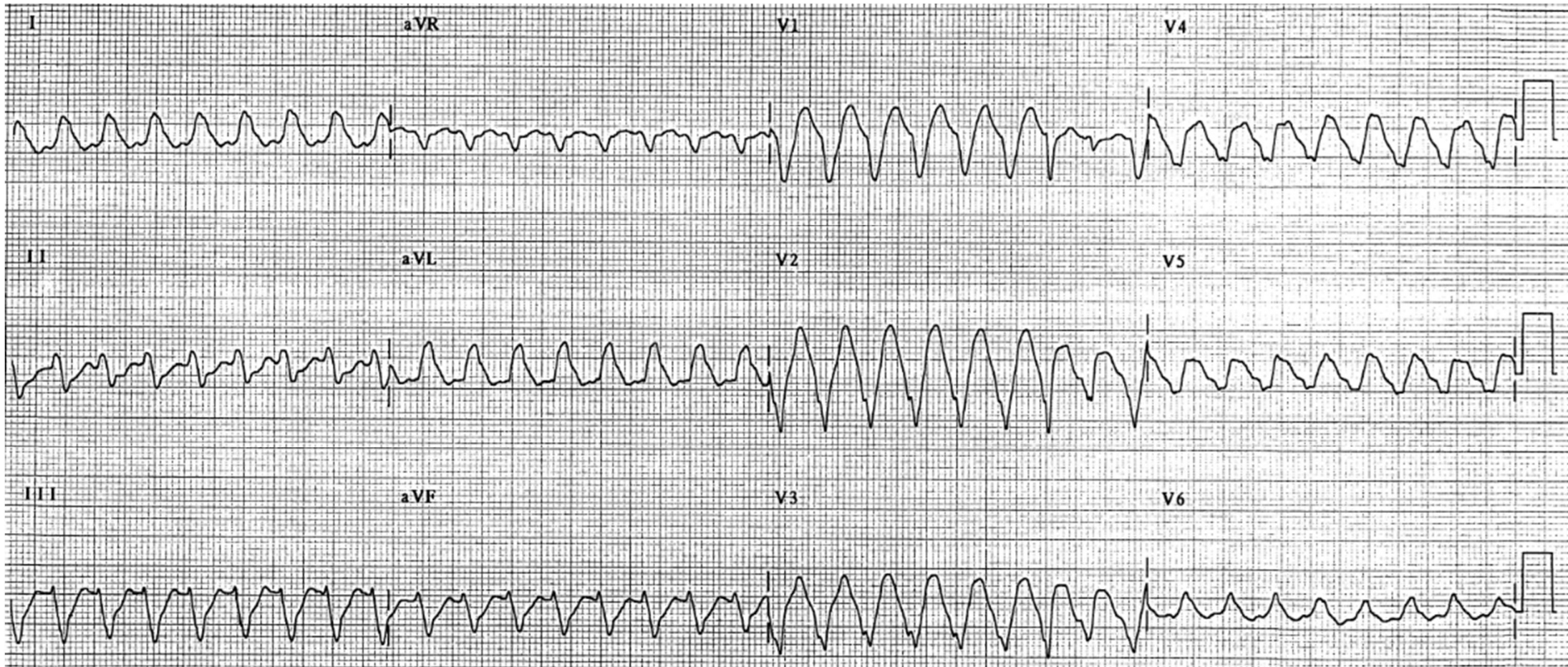


**Ventricular tachycardia and AV dissociation with sinus tachycardia controlling the atria**

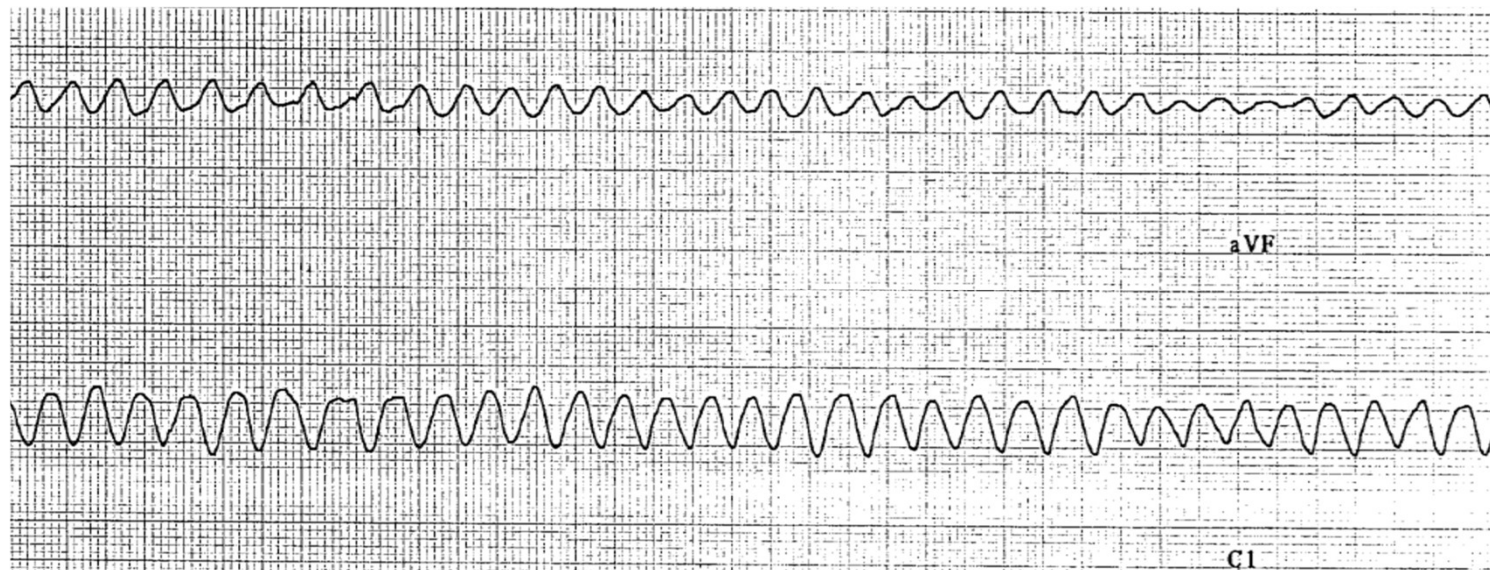
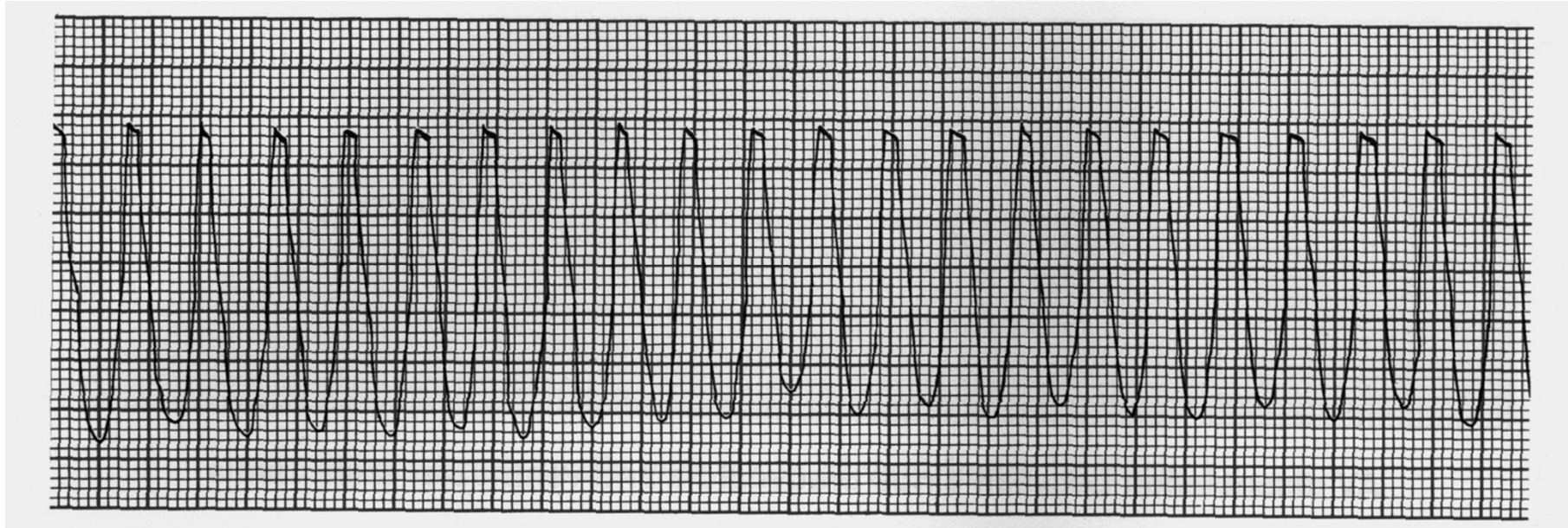


**Sinus rhythm with a short burst of ventricular tachycardia**

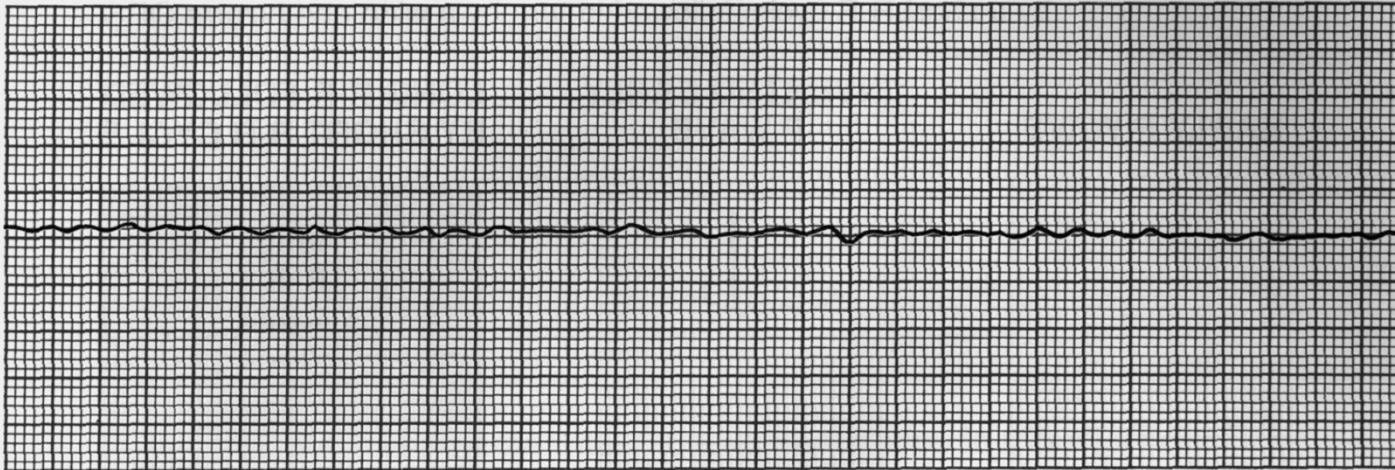
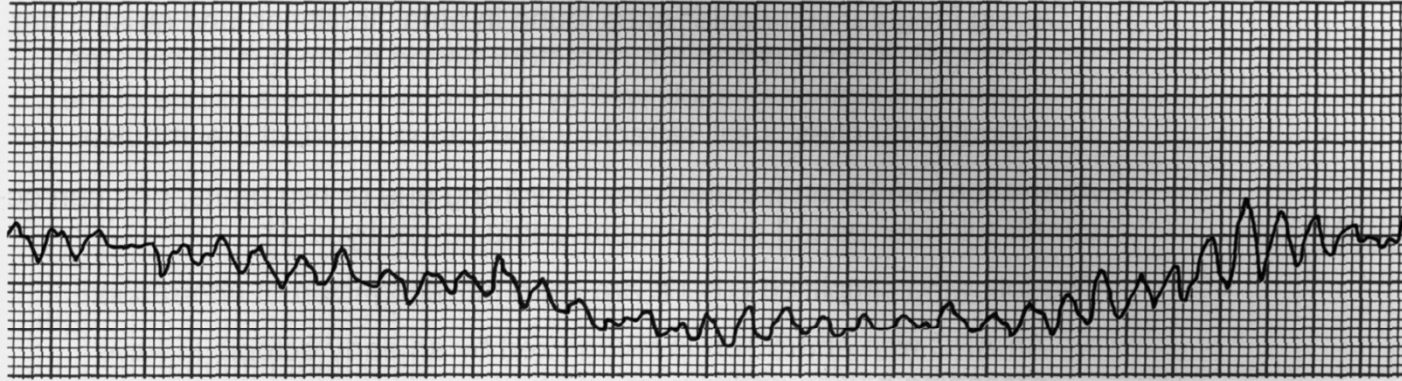
# Ventricular tachycardia



# Ventricular flutter



# Ventricular fibrillation



# Final exam test bank – Int-1.12

Normal mean electrical axis in the front plane, except for:

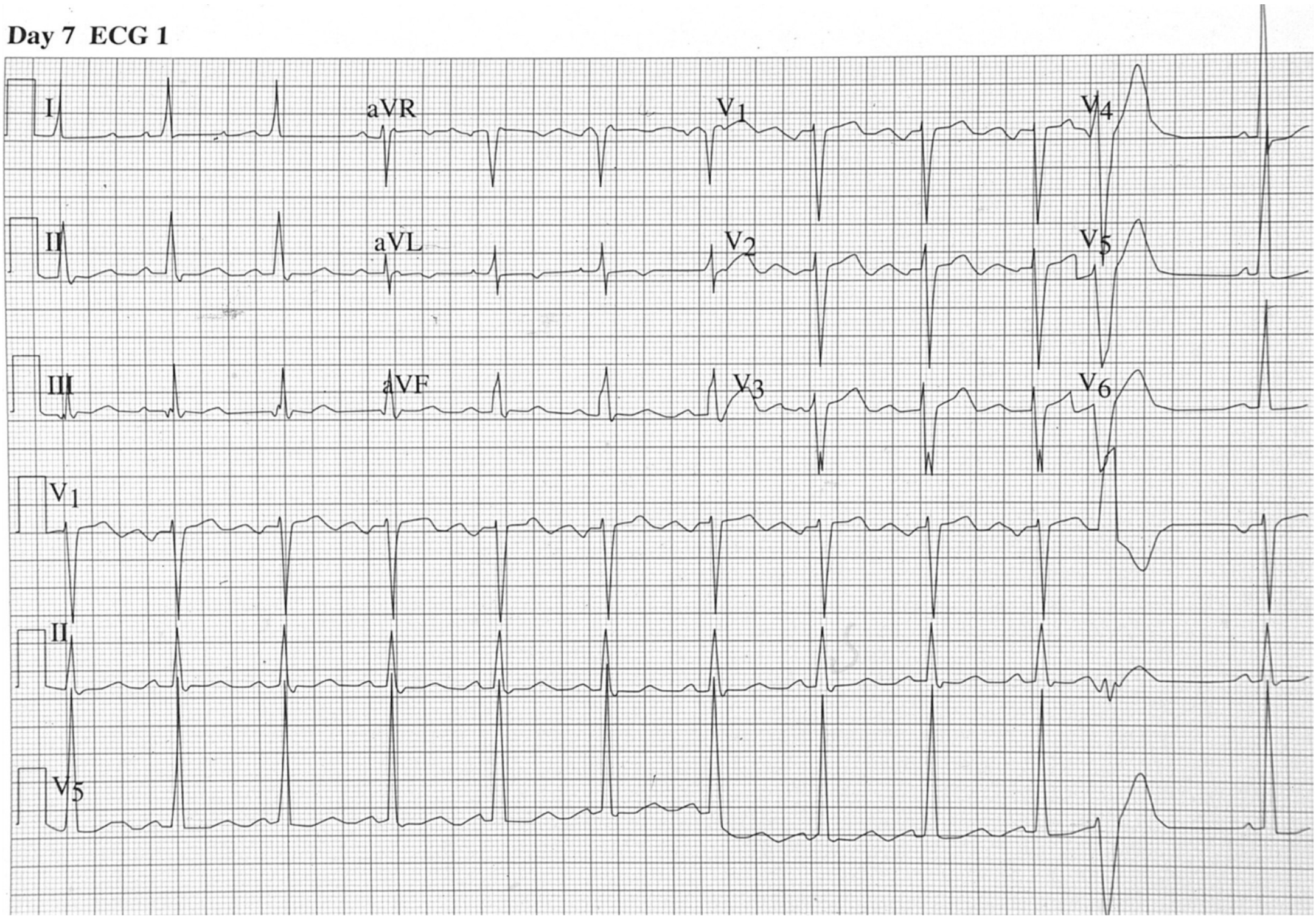
- A)  $+60^\circ$
- B)  $+90^\circ$
- C)  $-45^\circ$
- D)  $0^\circ$
- E)  $+45^\circ$

# Final exam test bank – Int-1.26

**Which one is the most common permanent arrhythmia?**

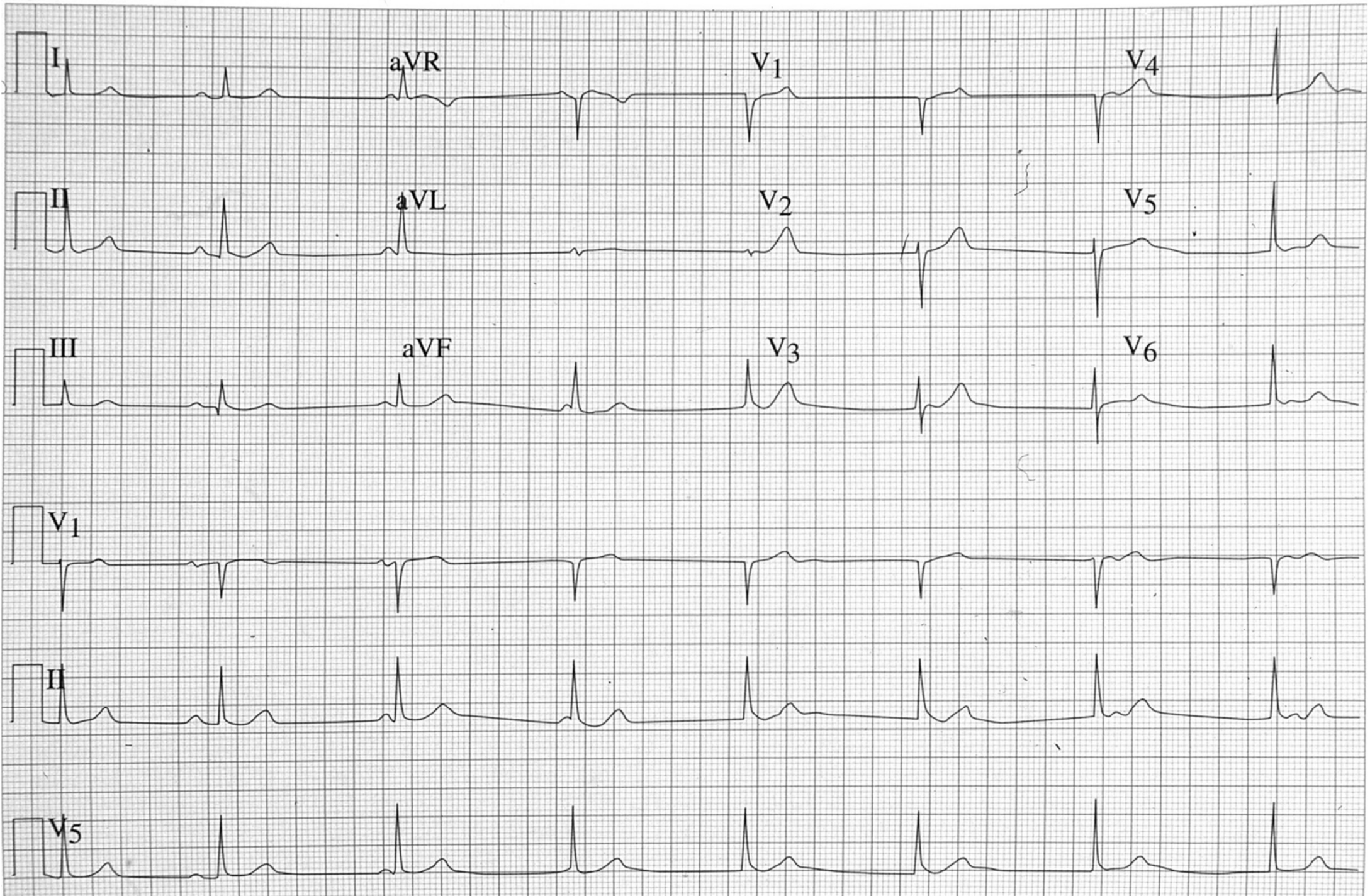
- A) ventricular extrasystoles
- B) atrial fibrillation
- C) ventricular tachycardia
- D) supraventricular tachycardia
- E) junctional escape rhythm

Day 7 ECG 1

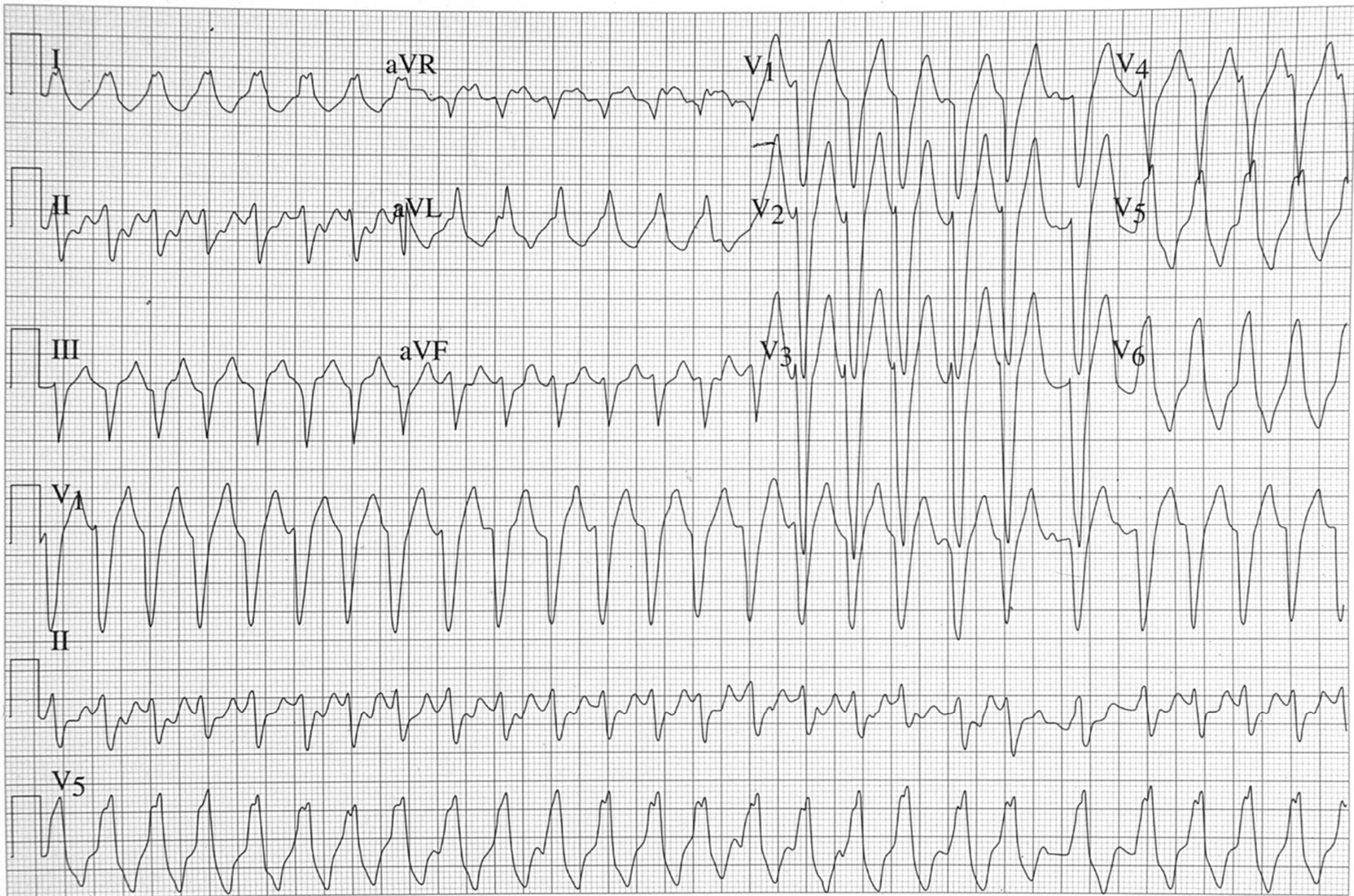




Day 6 ECG 26



# Day 8 ECG 4



Day 6 ECG 15

