


ECG ANALYSIS OF ARRHYTHMIAS I.

(SUPRAVENTRICULAR DISTURBANCES OF IMPULSE FORMATION)

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General considerations

- P wave, PP distance, P wave and QRS complex, QRS morphology
- QRS axis, axis deviations
- leads II-III, aVR, aVF, V1-V2 are particularly important
- retrograde atrial activation results in negative P wave in II-III-aVF leads and in positive P wave in V1 (P')

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Supraventricular (SV) disturbances of impulse formation

Nomotopic SV disturbances

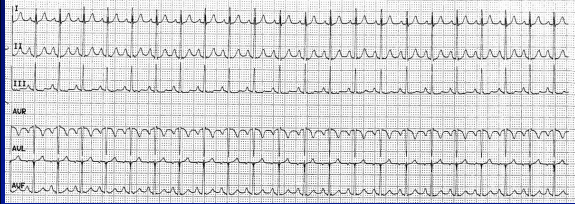
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1. Sinus tachycardia (frequency: 100-180/min.)
2. Sinus bradycardia (frequency: < 60/min. (<50/min.))
3. Sinus node reentry tachycardia
4. Wandering atrial pacemaker
5. Sinus arrhythmia
6. Sick sinus syndrome

Heterotopic SV disturbances

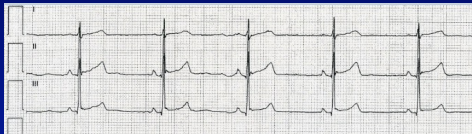
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Sinus tachycardia



4

Sinus bradycardia

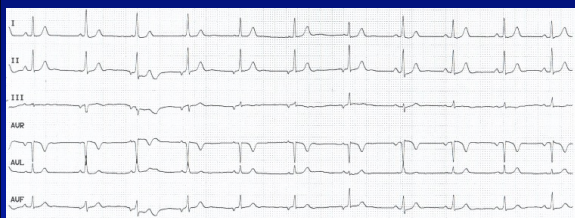


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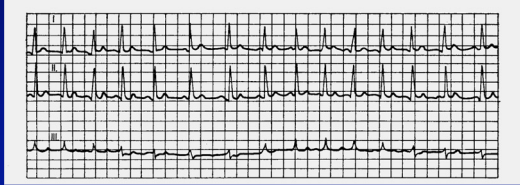
Wandering atrial pacemaker



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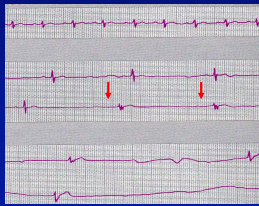
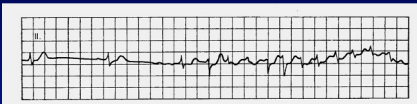


Respiratory sinus arrhythmia



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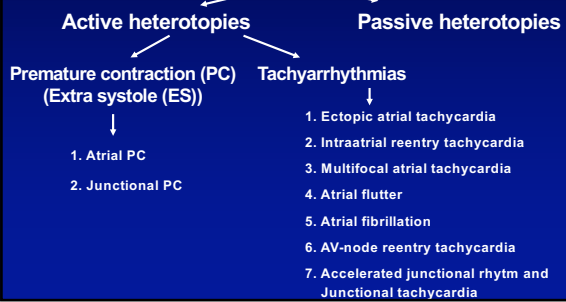
Sick-sinus syndrome



sinus arrest

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Heterotopic SV disturbances of impulse formation



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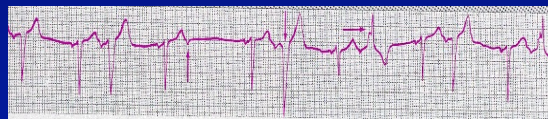
Premature contraction (PC) and related terms

compensated PC



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Atrial premature contractions



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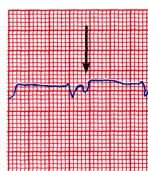
Junctional premature contractions



JPC with inverted P wave preceding QRS

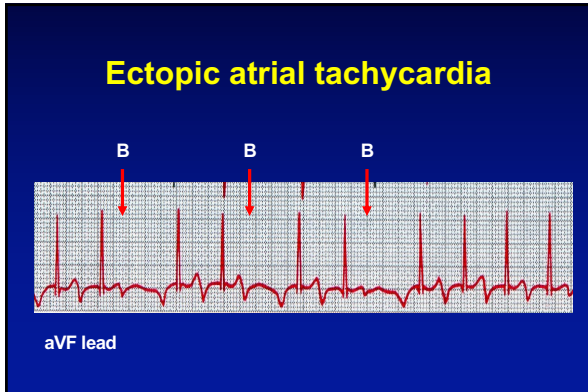


JPC with no P wave visible

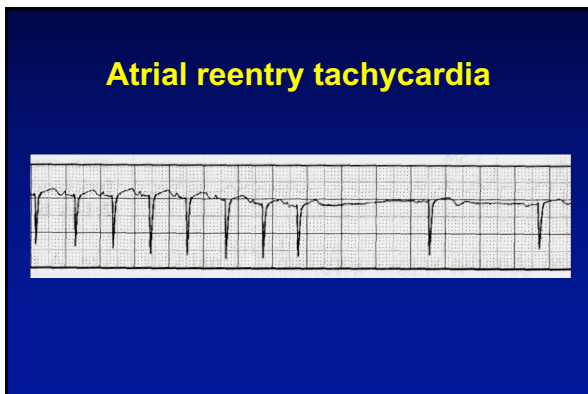


JPC with inverted P wave following QRS

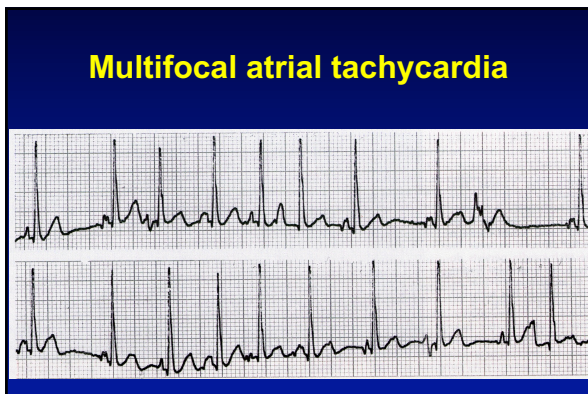
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Atrial flutter

Lead V₁—atrial flutter and 4:1 block

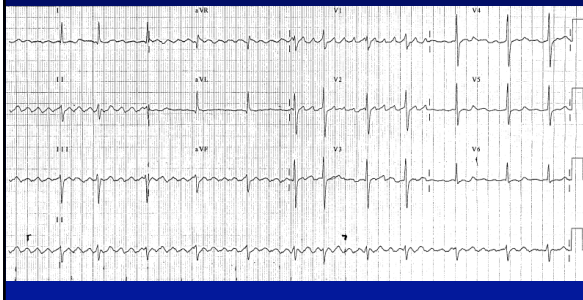


Lead II—atrial flutter with alternating 2:1 and 4:1 block



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Atrial flutter with alternating 2:1 and 4:1 block



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Atrial fibrillation

Lead V₁—atrial fibrillation with slow ventricular response

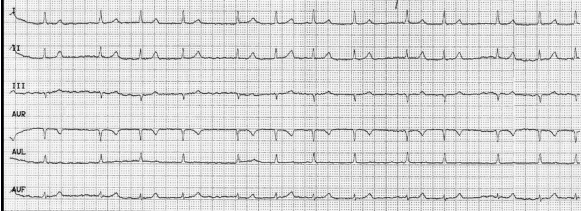


Lead V₁—atrial fibrillation with rapid ventricular response



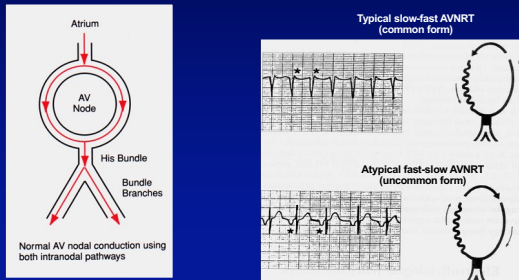
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Atrial fibrillation



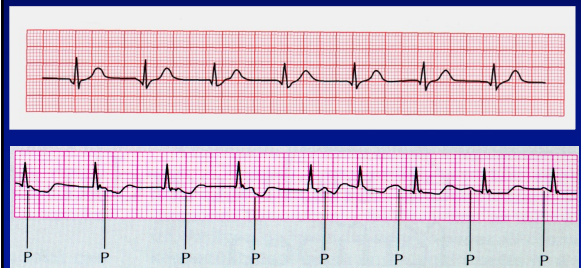
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AV-nodal reentry tachycardia (AVNRT)

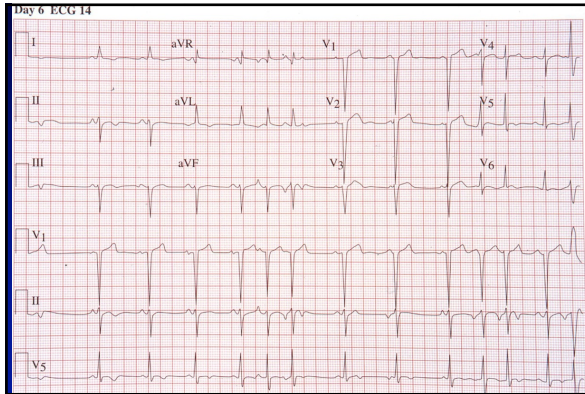


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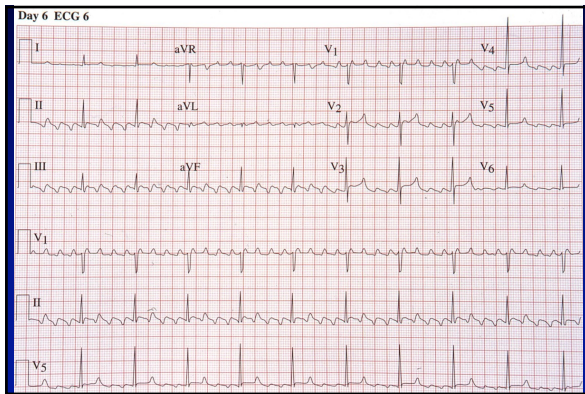
Accelerated junctional rhythm and junctional tachycardia



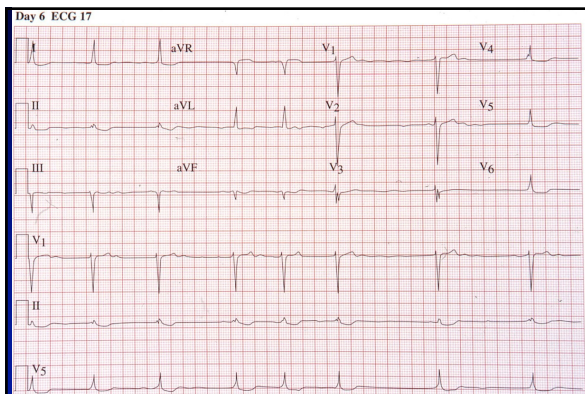
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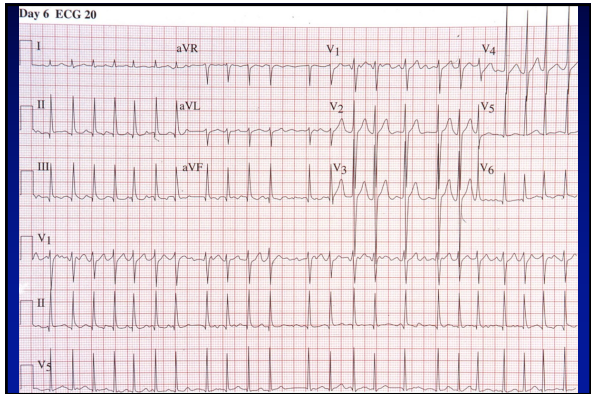
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