

## Atrioventricular Blocks

Impulse is delayed within the AV node, bundle of His or His-Purkinje system.

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## First-Degree AV Block

- All components of the ECG tracing are within normal limits except the PR interval.
- $PRI > .20$  seconds and constant.
- Atrial and ventricular rates the same.
- Atria and ventricular regular.
- P waves normal in size and shape.
- QRS normal



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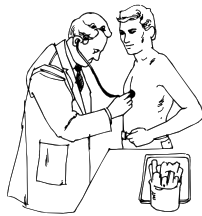
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## Second Degree Heart Block Mobitz type I: (Wenkebach)

- S/A impulses take longer & longer to conduct through AV node . Block is **within** AV node
- Lengthening of PRI until finally a sinus impulse is blocked.
- A P wave with no QRS occurs.
- The cycle begins again.
- Atrial rate is greater than ventricular
- Atrial rhythm regular (P's plot out)
- Ventricular rhythm is irregular.
- P waves normal in size and shape
- QRS normal, periodically dropped.



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### Second Degree AV Block Type II (Mobitz Type II) Sorry no catchy name

- SA node generating impulses normally. PRI constant, will not get longer and longer. Block is **below** AV node.
- Atrial rhythm regular, ventricular irregular.
- Conduction is all-or-nothing phenomenon.
- Not every P will have QRS.
- QRS can be normal or wide.
- EKG shows two or more normal beats with normal PRI. Then one or two P waves that is not followed by QRS.
- When there is a PQRS- they are together – unlike 3<sup>rd</sup> degree heart block on the next page
- Syllabus pg 89 shows wide QRS because one bundle branch is completely blocked. What else do you see on strip on pg. 89?



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### Third Degree Heart Block (Complete Heart Block)

- Atria & Ventricles beat independently of each other.
- Atrial rate regular and > ventricular.
- P waves plot through, normal shape
- No PRI
- Impulses from AV node are blocked before reaching ventricles.
- Secondary pacemaker (junctional or ventricular) stimulates ventricles.
- Narrow QRS equals junctional pacer
- Wide QRS equals ventricular pacer



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