Heart Rhythms

SINUS TACHYCARDIA

- rate is > 100 but normal sinus rhythm.
- causes include: exercise, anemia, dehydration, shock, fever, sepsis, infection, medications, etc.
- treat the cause!

SINUS BRADYCARDIA

- rate is < 60 but normal sinus
- causes include. old age, hyper/hypokalemia, cardiac ischemia, certain drugs, CVA, being an athlete
- treatment: only IF symptomatic

ATROPINE

VENTRICULAR TACHYCARDIA "V-TACH"

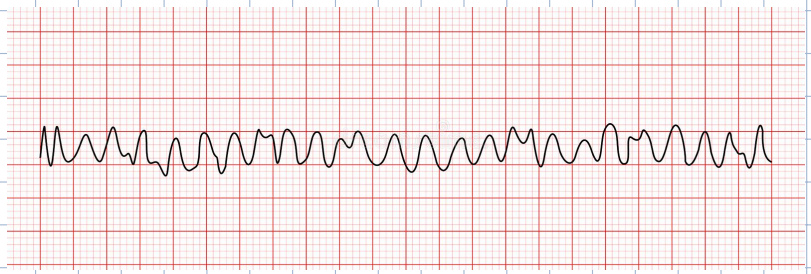
↑ ventricles beat too fast

- rate will be >100, treated with amiodarone, cardioversion, & CPR if pulseless.
- causes include: MI, HF, hypokalemia, hypomagnesemia

* Remember SCREAM for pulseless vtach *

Shock CPR Rhythm Epinephrine AMiodarone

VENTRICULAR FIBRILLATION "V-FIB"

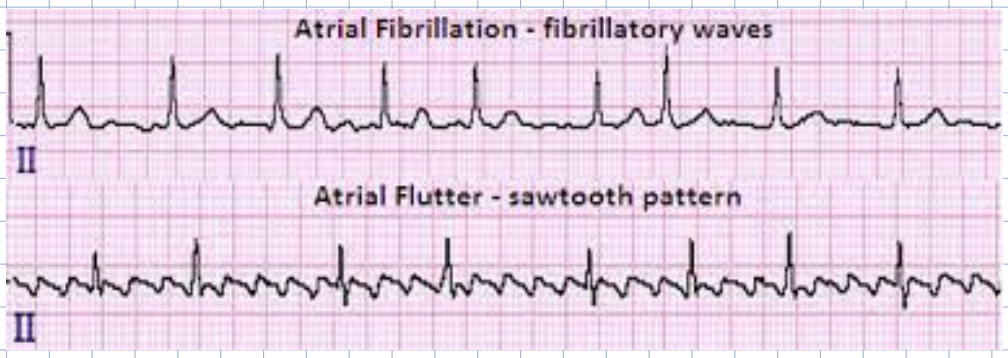


- one of the most deadly rhythms
- rate: → 500 bpm → literally no cardiac output
- cause: v-tach, MI

Shock CPR Rhythm Epinephrine AMiodarone

↳ for ALL V-fib

A-FIB VS ATRIAL FLUTTER



Afib

- the atriums are shaking
- no p waves, each QRS is irregularly spaced
- cause: damage to the heart, MI, HF, HTN
- Atrial rate ↑ 350 bpm

Atrial Flutter

- 3 P waves before each QRS complex
- causes: same as A-fib
- Atrial rate ↑ 250

Complications of A-fib & A-flutter

- clots in the atria as blood is staying in them when it shouldnt, this requires anticoagulants.

Beta Blockers
Amiodarone
CC Blockers
Digoxin
Ablation

AV Blocks

The Heart Block Poem

by the Princeton Surgical Group & nurseslabs

If the **R** is far from **P**,
then you have a **FIRST DEGREE**.

→ caused by MI, electrolyte imbalances, etc
* antidysrhythmics

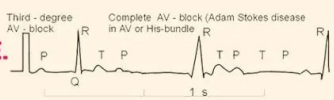
Longer, longer, longer, drop!
Then you have a **WENKEBACH**.

→ typically doesnt need treatment but if hypotension & bradycardia occur, atropine may be needed

If some **P**s don't get through,
then you have **MOBITZ II.**

→ requires pacing
* implies structural damage to AV conduction system.

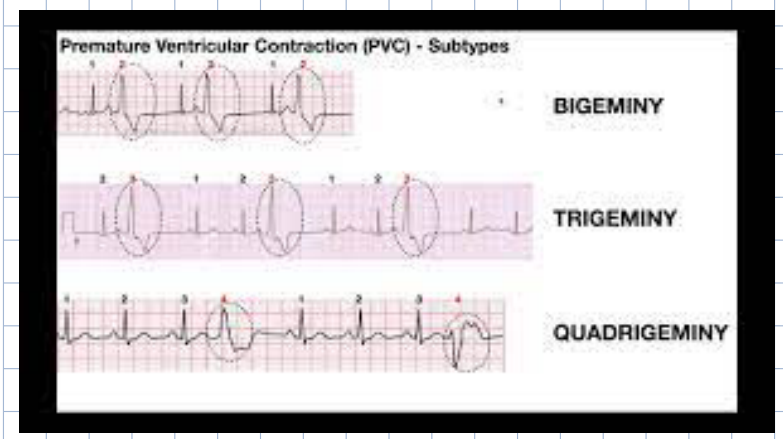
If **P**s and **Q**s don't agree,
then you have a **THIRD DEGREE.**



→ P wave can be anywhere. atrium & ventricles are not communicating.

- causes are heart damage.
- rate ↓ 40, resulting in low cardiac output
  - hypotension, weakness, dizziness, syncope
- Treatment: transcutaneous pacing

PVC'S (upside-down QRS)



- causes: mi, hypokalemia, hypoxia, ↑SNS
- rate: 60-100 bpm
- treatment: Beta Blockers, CC blockers
- complications: can turn into V-tach / Vfib