WHAT IS A-FIB?

- Most common arrhythmia
- The atria beat very fast and in an irregular rhythm that is out of sync with the ventricles
- The atria quiver
- Different types of A-fib
 - Paroxysmal A-fib
 - o Usually when first diagnosed
 - o Periods of A-fib that come and go
 - o A-fib usually goes away on its own
 - Persistent A-fib
 - You need medications to correct A-fib
 - Longer and more frequent episodes of A-fib
 - Permanent A-fib
 - Have had A-fib for a long time and the heart is unable to return to NSR.
- Recognizing A-fib on an EKG
 - wavy Baseline
 - No discernible P waves
 - Ventricle rate 110-160
 - QRS complex <120ms

WHAT CAUSES A-fib?

- Unknown
 - Risk factors
 - o Age
 - Family history
 - Smoking
 - Hypertension
 - Obesity
 - Conditions increasing risk
 - o Heart failure
 - Diabetes
 - Coronary heart disease



WHAT COULD HAPPEN TO SOMEONE IN A-fib?

- Increases risk of heart failure, stroke, and death
- Signs and symtpoms (may not have any symptoms at all)
 - Light-headedness
 - Dizziness
 - Shortness of Breath (SOB)
 - Chest pain (CP)
 - Palpitations
 - Weakness
- Remodeling
 - Increased heart size
 - Thickening of walls
- Stroke, Pulmonary Embolism (PE)
 - Blood pools in the heart causing a clot that can break free.

HOW DO YOU TREAT A-fib?

- Rate Control
 - Rate control medications
 - o Adenosine
 - o Cardizem
- Maintenance of normal rhythm
 - Rhythm control medications
 - o Amiodarone
- Stroke prevention
 - Heparin
 - Lovenox
 - Coumadin
- Medical procedures (if medicine has not been effective)
 - Cardioversion
 - o Electrical current is used to restore electrical heart rhythm
 - Surgical ablation
 - o Destroys the cells that are causing abnormal heart rhythm



- Catheter ablation (radio frequency ablation)
 - o Stops the heart from setting off the faulty electrical signals
- Atrial Pacemaker
 - o Placed under the skin to generate electrical signals to regulate heart beat

WHAT IS AFLUTTER?

- Atria beat faster than the ventricles
- Electrical signals from SA node are fast, AV node slows them down for the ventricles.
- Similar to A-fib but regular.
- Recognizing AFlutter on an EKG
 - Sawtooth pattern
 - Regular fast heart rate

WHAT CAUSES AFLUTTER?

- Heart conditions:
 - Rheumatic or ischemic heart disease
 - Heart failure
 - Previous heart attack
 - Pericarditis
 - Septal defects
 - Hypertension
 - Pre-excitation syndromes
 - Atrioventricular (AV) valve disease
- Non-cardiac conditions:
 - Thyroid dysfunction
 - Thyrotoxicosis
 - Diabetes
 - Pulmonary emboli (PE)
 - Alcoholism

WHAT COULD HAPPEN TO SOMEONE IN AFLUTTER?

- Signs and symtpoms
 - Palpitations
 - Fast steady heart beat
 - Shortness of breath (especially upon exertion)
 - Anxiety/ Nervousness
- If untreated can lead to cardiomyopathy, heart failure, and A-fib
- Chest pain
- Dizziness
- Lightheadedness
- Syncope



HOW DO YOU TREAT AFLUTTER?

- Medications
 - Ibutilide (Corvert)
 - Amiodarone (Coradarone)
 - Diltiazem (Cardizem)
- Severely compromised
 - Cardioversion (treatment of choice)
 - Rapid atrial overdrive pacing
 - Radiofrequency catheter ablation

WHAT IS PAROXYSMAL SUPRAVENTRICULAR TACHYCARDIA (PSVT)?

- Rapid tachycardia that originates in the atria and happens intermittently, lasting various lengths of time
- Often referred to as SVT
- Recognizing PSVT EKG changes
 - Rapid heart rate (100+ bpm)
 - Narrow QRS complex
 - Regular rhythm
 - Inverted P waves (sometimes)- this is called retrograde P waves
 - P Waves may be hidden in previous T wave
- What causes PSVT?
 - Drug induced:
 - o Digoxin
 - Theophylline
 - Faulty electrical connections in the heart
 - Risk factors:
 - o Alcoholism
 - Caffeine or drug use
 - o Smoking
 - Signs and symptoms:
 - o Anxiety
 - Shortness of breath
 - o Tachycardia
 - Palpitations
 - Dizziness
 - Syncope



WHAT COULD HAPPEN TO SOMEONE IN PSVT?

- Heart failure
- Hypotension
- Cardiomegaly

HOW DO YOU TREAT PSVT?

- Valsalva Maneuver
 - Hold breath and bear down like having a bowel movement
- Submerging face into cold water or splashing cold water on the face
- Coughing while positioned sitting forward
- Carotid massage (only to be done by a physician!!)
- Cardioversion
- Medications:
 - Adenosine (Adenocard)

