



FACULTY OF NURSING SCIENCES

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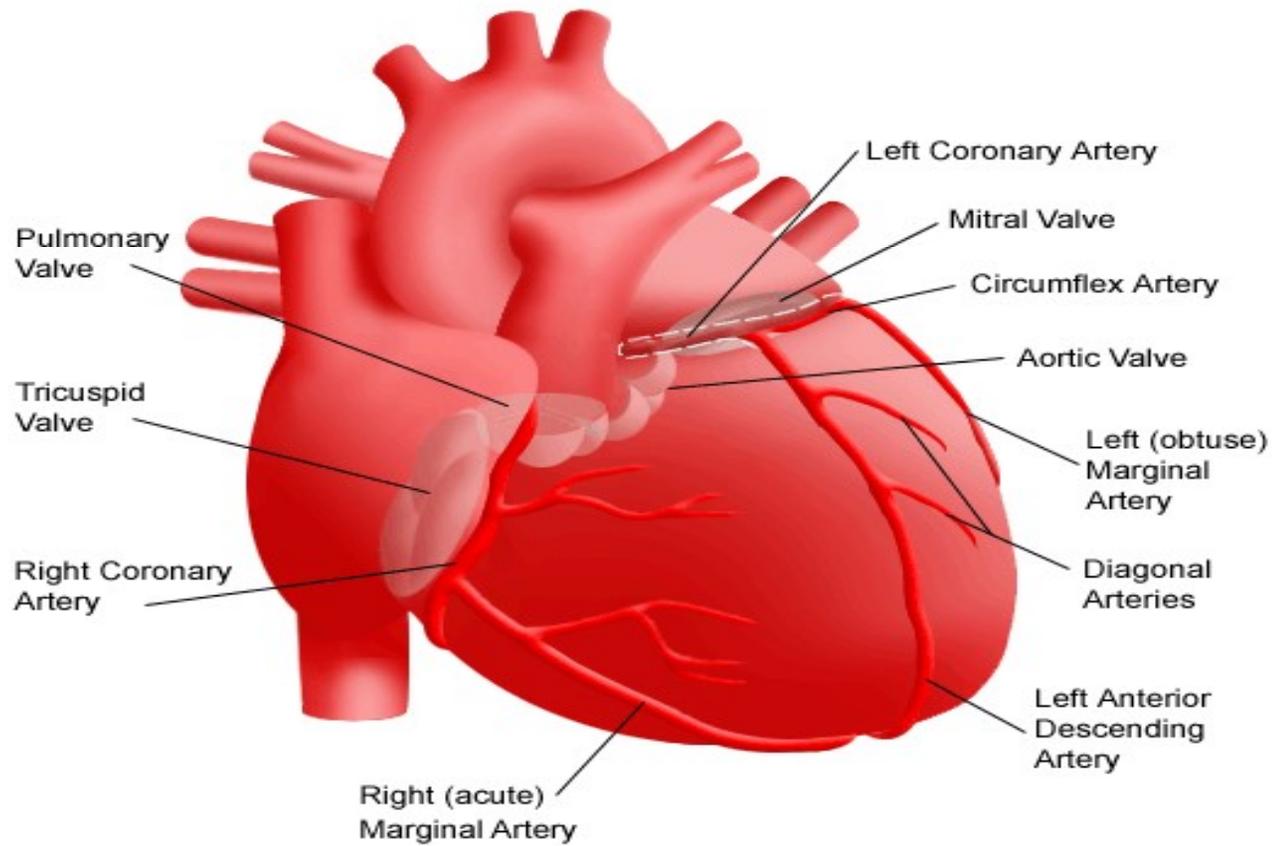
*ATRIAL FIBRILLATION,*

*ATRIAL FLUTTER,*

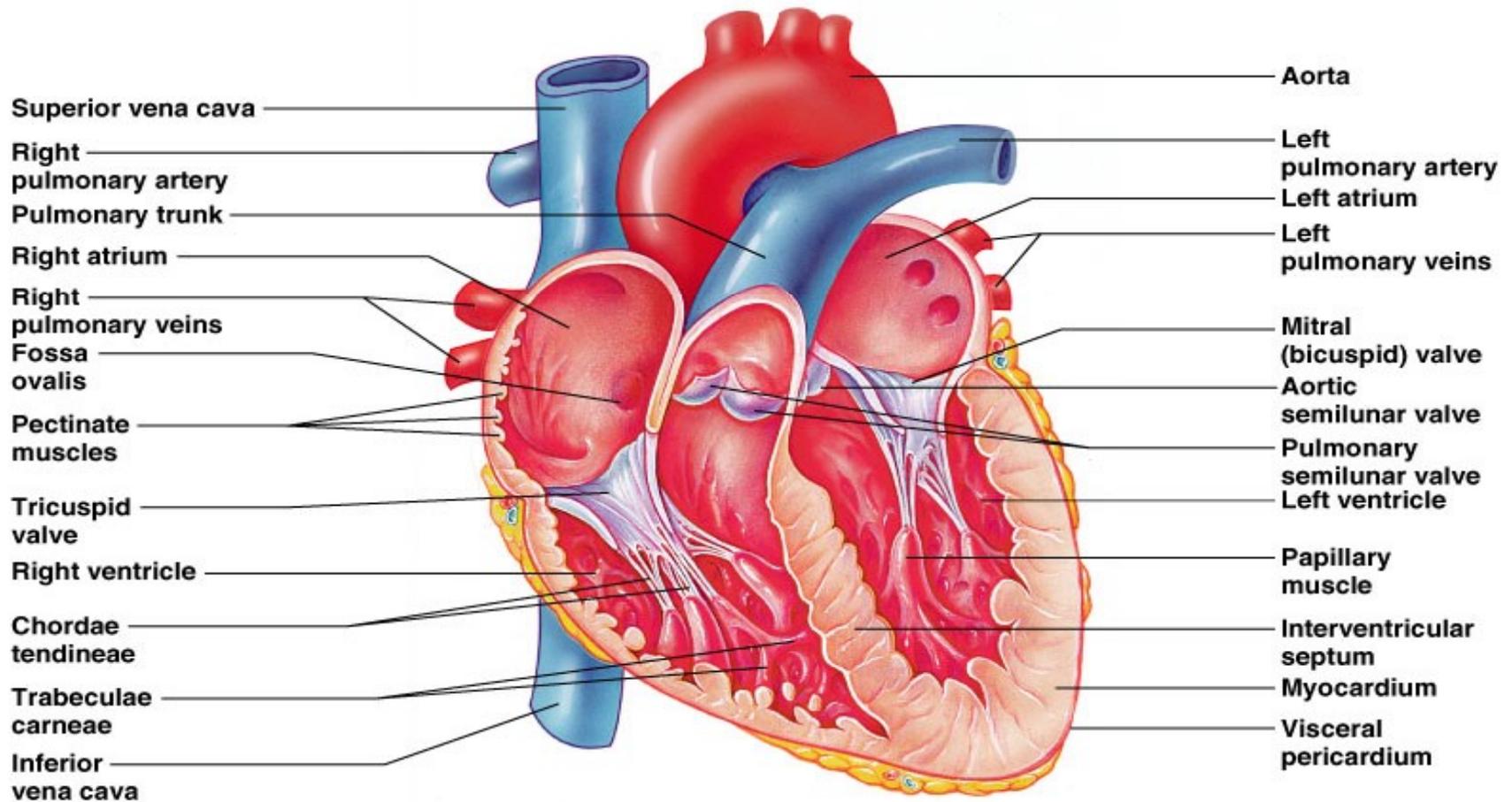
*PAC, PVC.*

# INTRODUCTION

**Anterior View of the Heart**

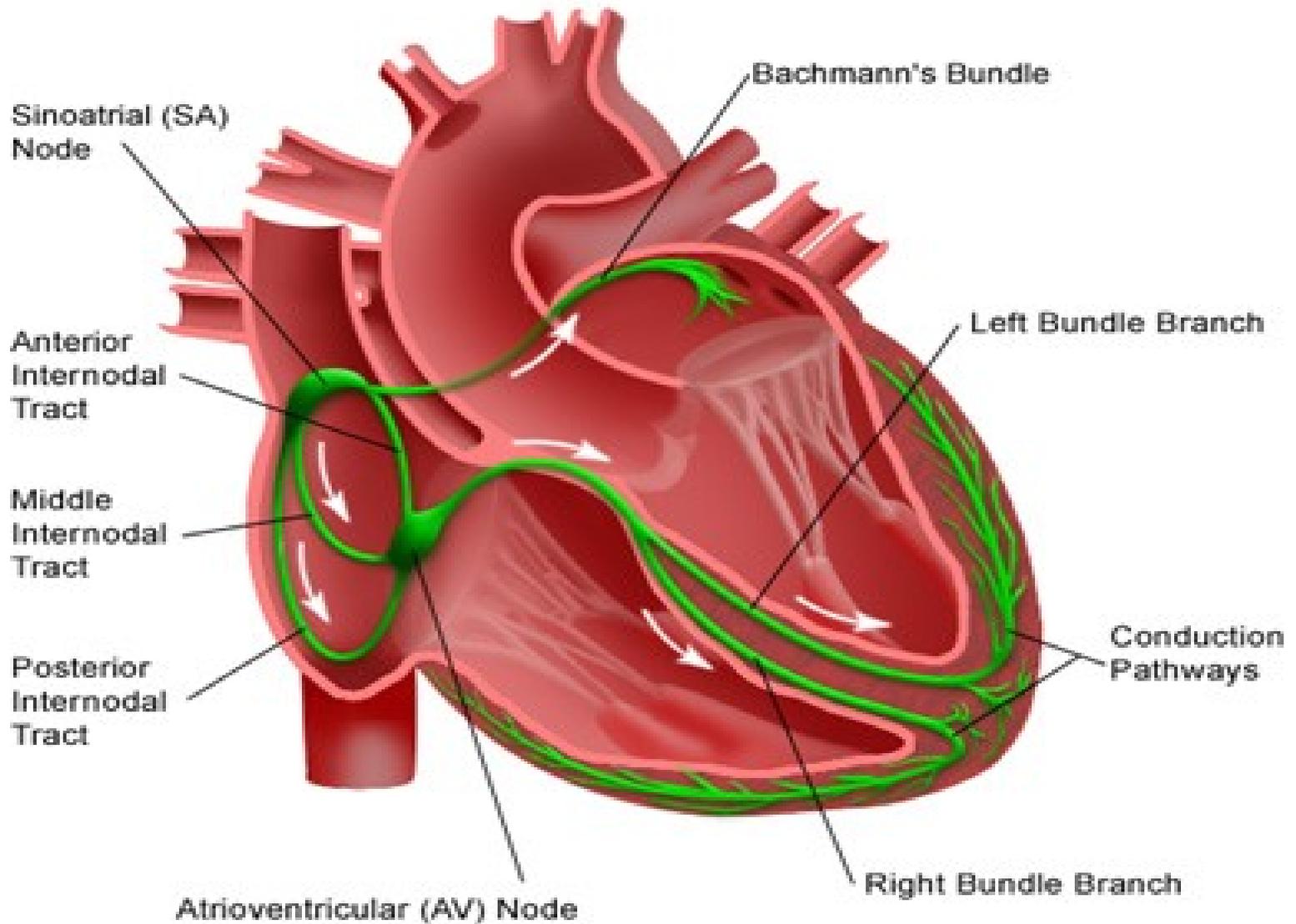


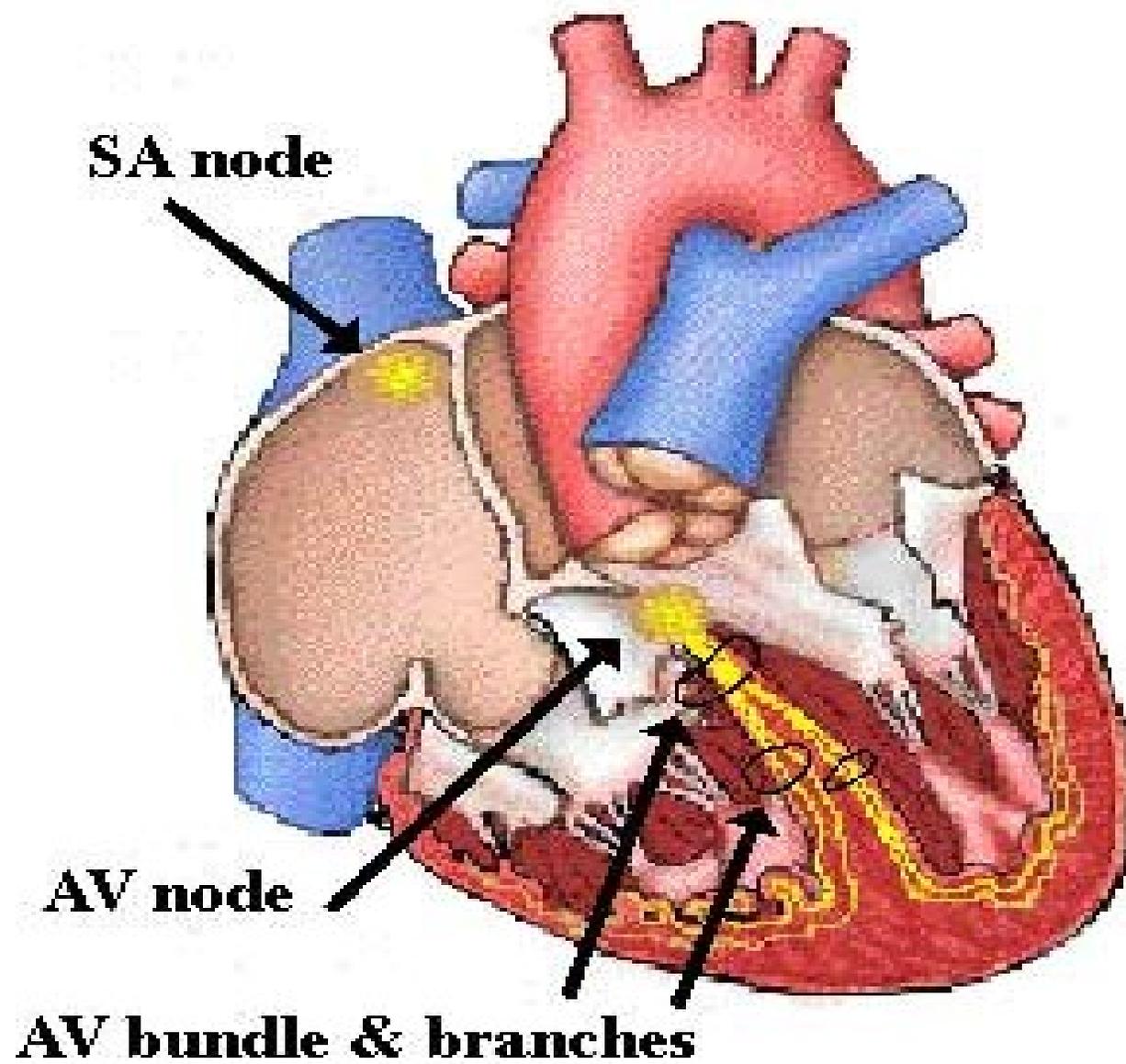
# ANATOMY AND PHYSIOLOGY OF HEART

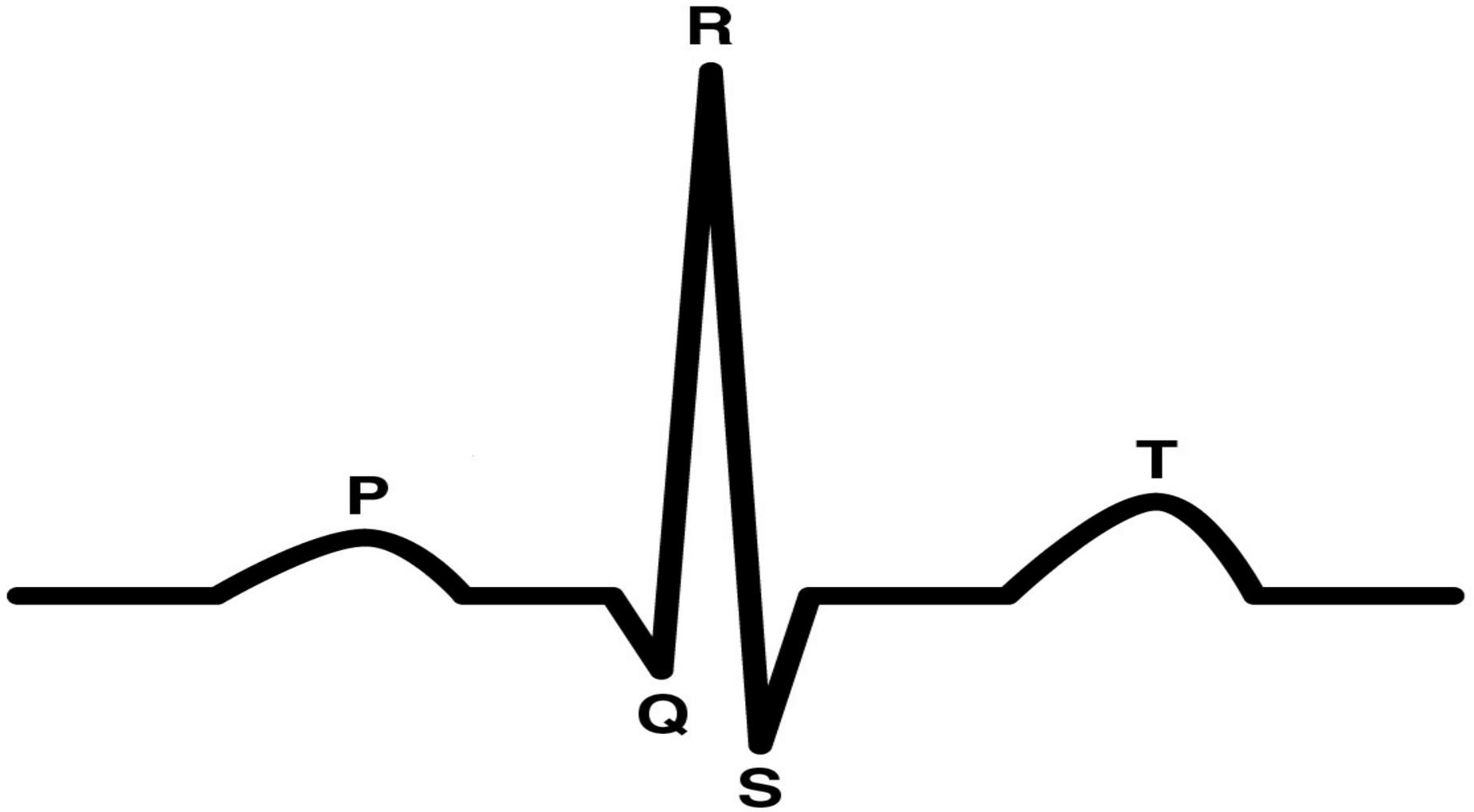


**(e)**

# Electrical System of the Heart







R

P

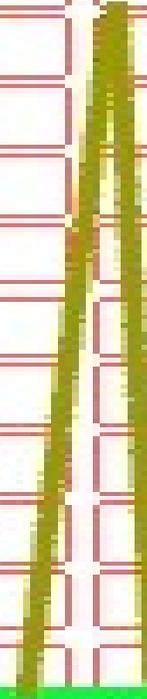
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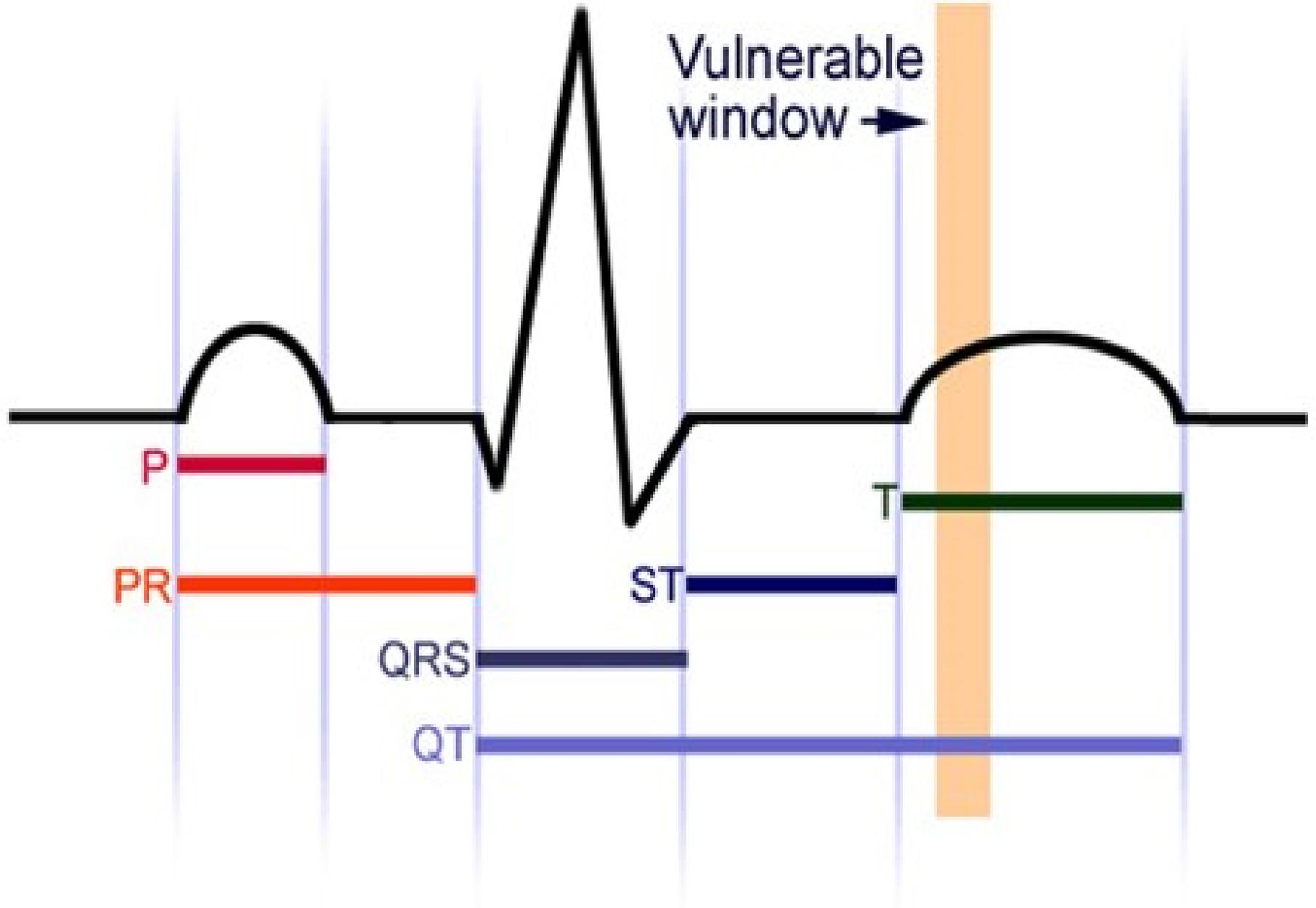
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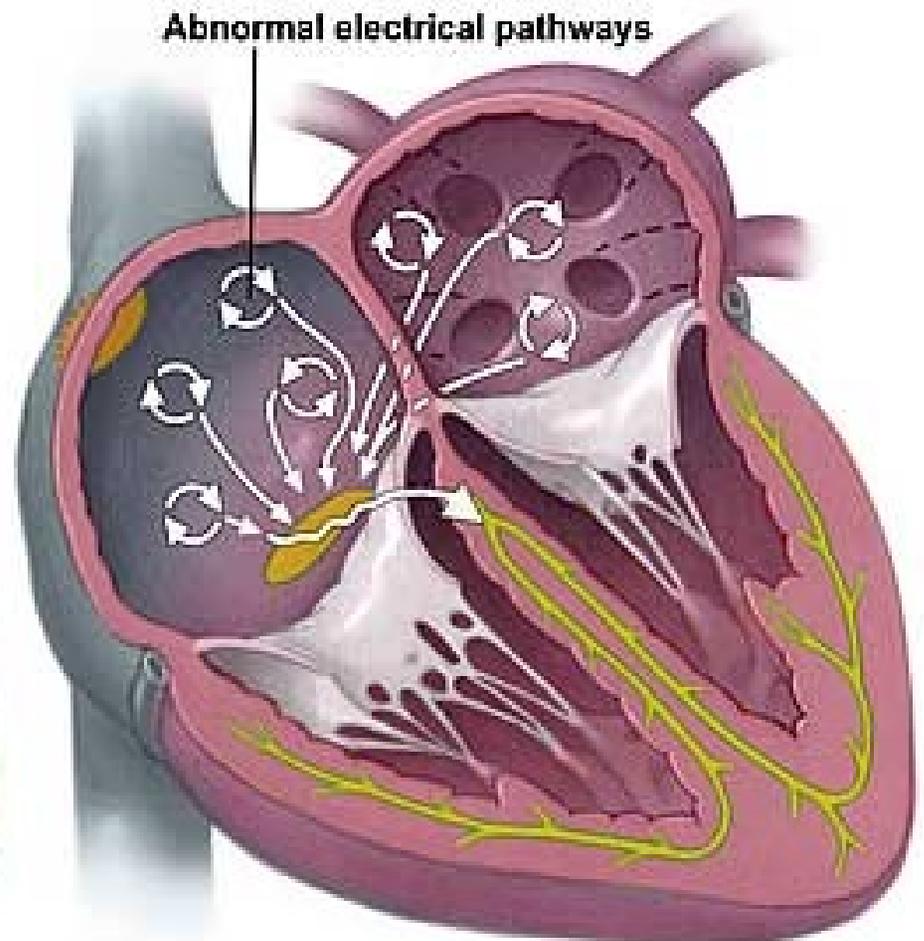
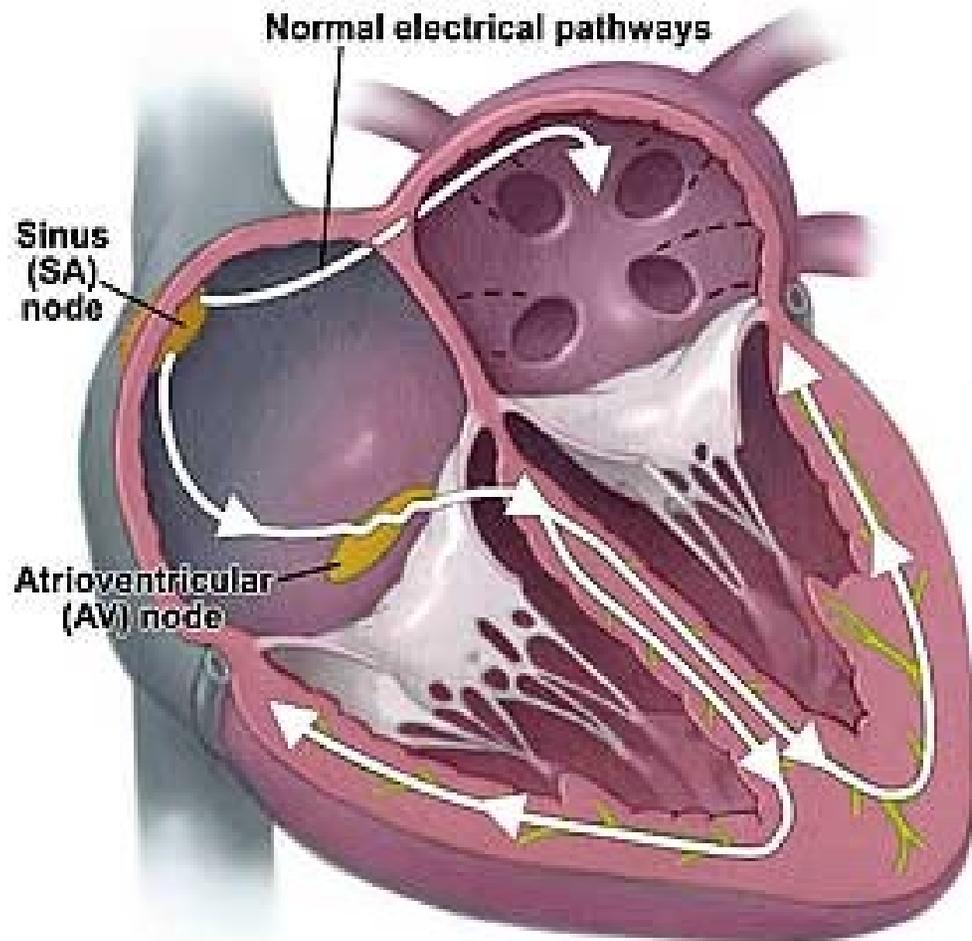


# ATRIAL FIBRILLATION

## DEFINITION

Atrial fibrillation is characterized by rapid, chaotic atrial depolarization from a reentry disorder.

Ectopic atrial foci produces impulses between 400 and 700 beats/min.



**Normal sinus rhythm**

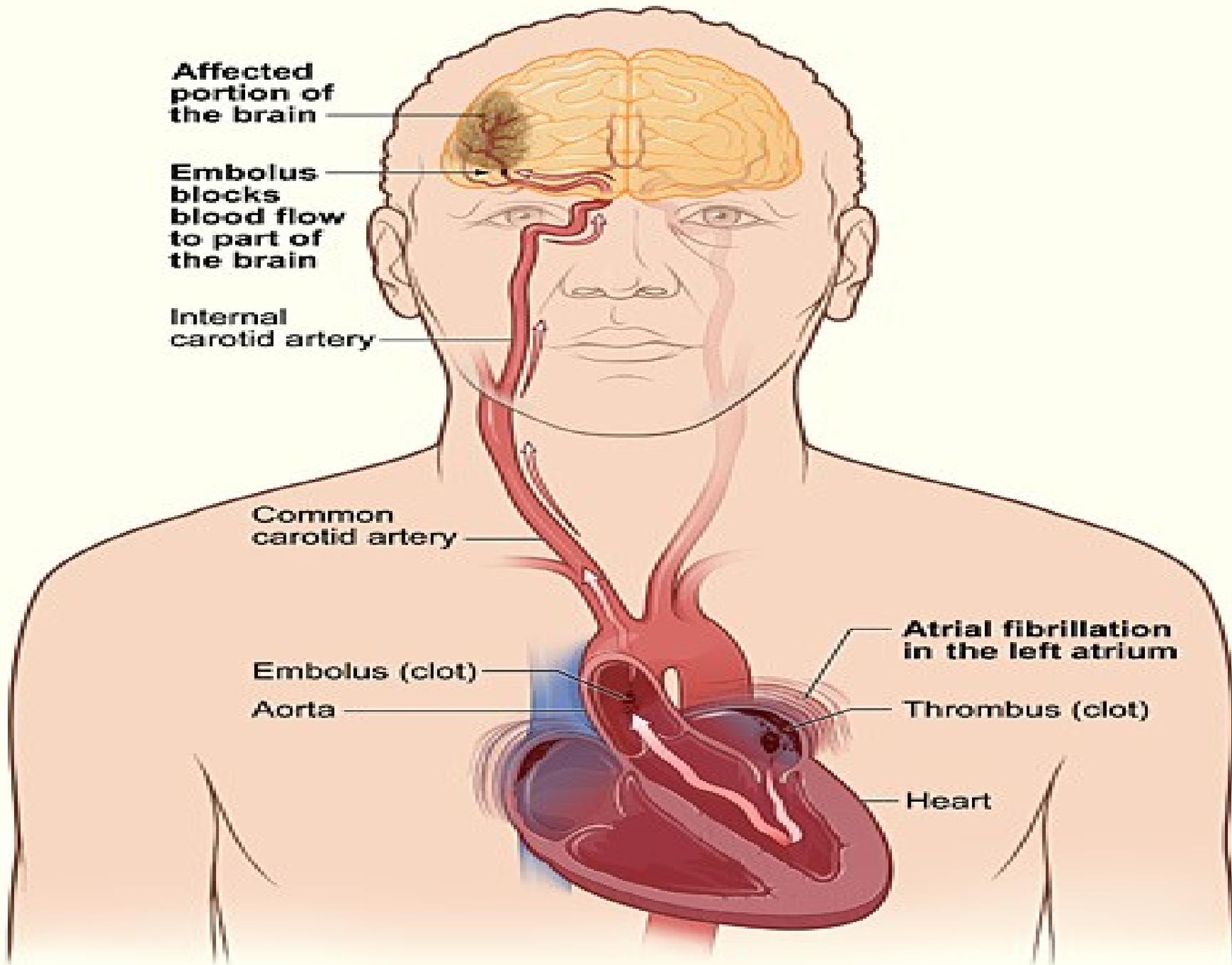


**Atrial fibrillation**



## ETIOLOGY

- Fibrotic changes associated with the aging process , acute MI, valvular disease and digoxin preparation may cause atrial fibrillation
- CHD , heart valve problem and heart failure
- The conduction of a QRS complex is so random that the rhythm is extremely irregular



# ANALYSIS

- **RATE:** atrial fibrillation is usually immeasurable
- **RHYTHM :** 'Irregular Irregularity'
- **P WAVE:** Sometimes called 'little F waves'
- **PR interval:** Not measurable
- **QRS Complex:** normally conducted complex
- **T Waves:** Normally conducted

## SIGNS AND SYMPTOMS

- Dizziness
- Anxiety
- Generalized weakness
- Mild short of breath
- Chest pain
- Severe shortness of breath

# DIAGNOSTIC EVALUATION

- Electrocardiogram
- Physical examination
- Chest radiography
- TSH test
- CBC Blood Test

# MANAGEMENT

- Beta-adrenergic blocker or calcium channel blockers
- Digoxin
- Cardio version
- Anticoagulation therapy
- Antiarrhythmic drug
- Pacemakers

# SURGICAL MANAGEMENT

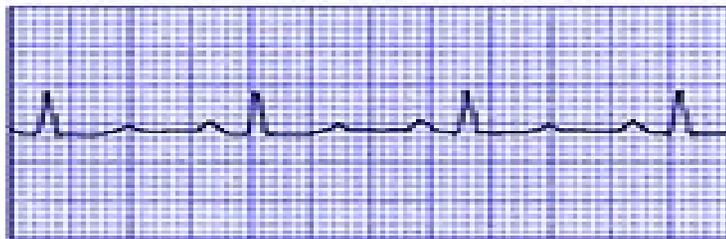
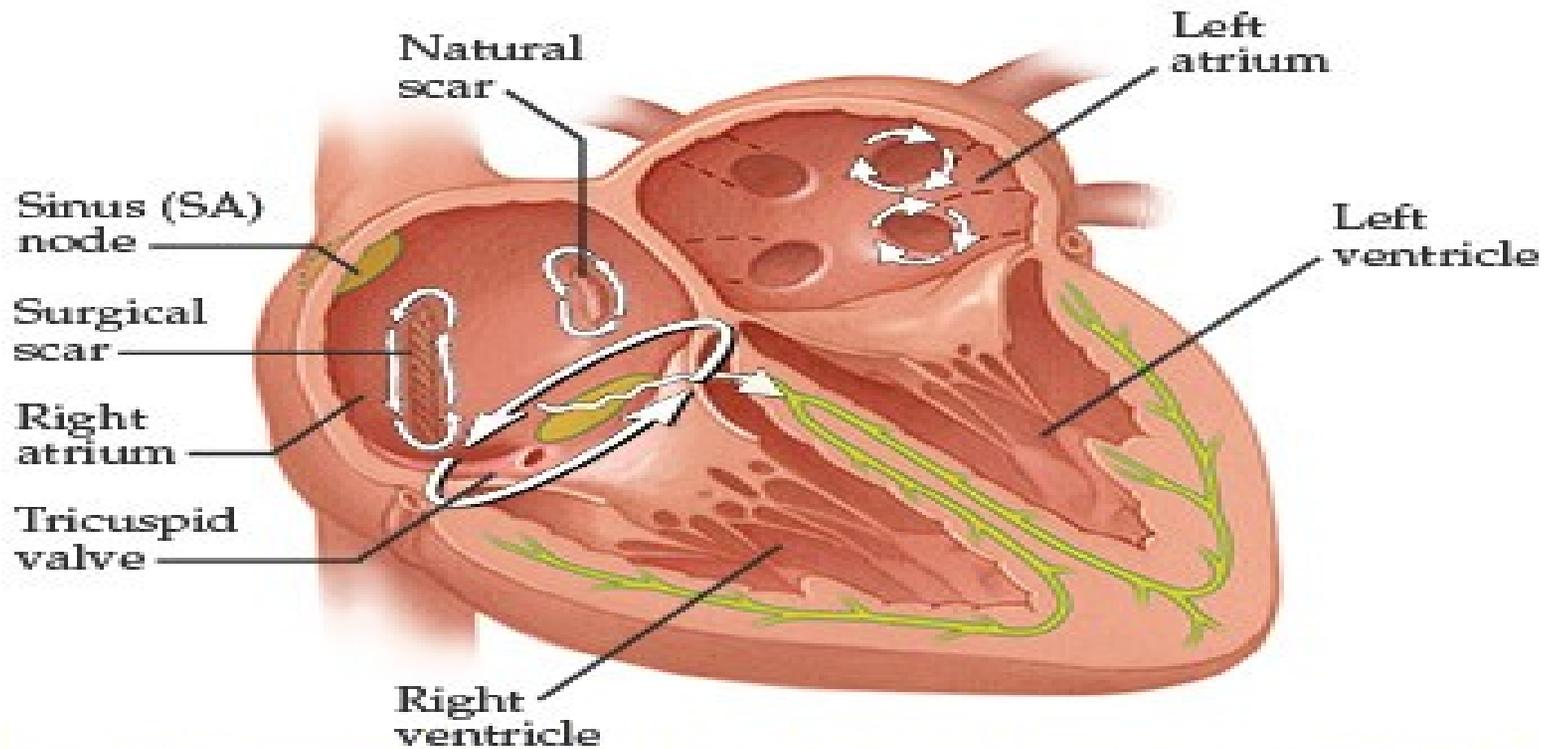
- Chemical ablation
- Mechanical ablation

# ATRIAL FLUTTER

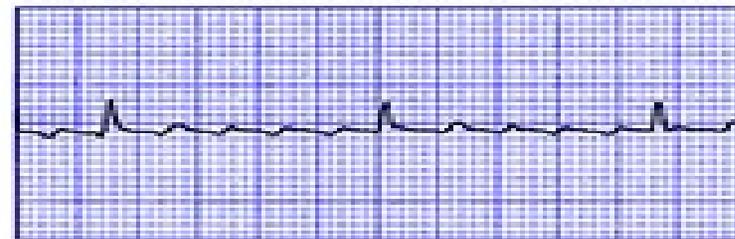
- **DEFINITION:**

Atrial flutter is a dysrhythmia arising from an ectopic pace maker or the site of a rapid reentry circuit in the atria characterized by rapid 'saw-toothed' atrial wave formation and usually by a slower, regular ventricular response.

# Atrial Flutter



Normal sinus rhythm



Atrial flutter

# ETIOLOGY

- CAD
- Mitral valve diseases
- Pulmonary embolus
- MI
- Heart valve disease
- Hyperthyroidism
- Ischemic heart diseases
- Pericardial diseases

## ANALYSIS

- **Rate:** Atrial rate between 250 to 400 beats/min.
- **Rhythm:** The atrial rhythm is regular the ventricular rhythm is usually regular but may be irregular
- **QRS Shape and Duration:** Usually normal but may be abnormal or absence
- **PR interval:** Not measurable
- **T wave:** present

# SIGNS AND SYMPTOMS

- Chest pain
- Shortness of breath
- Low blood pressure

# MANAGEMENT

- Cardio version
- Digoxin
- Beta adrenergic blocker such as esmolol

# PREMATURE ATRIAL CONTRACTION

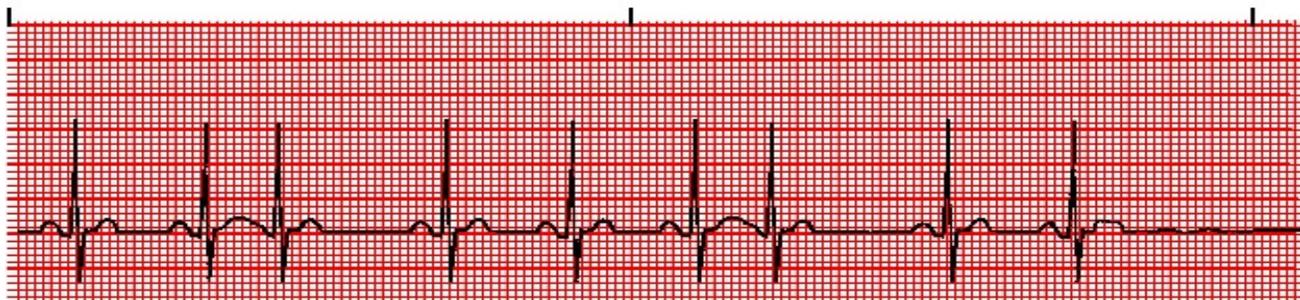
- **DEFINITION:**

premature atrial contractions are early beats arising from ectopic atrial foci , interrupting the normal rhythm

## Premature Atrial Beat



PREMATURE ATRIAL CONTRACTION



# ETIOLOGY

- Stress, Alcohol
- Heart failure
- MI
- Valvular disease
- Coronary artery diseases
- chronic lung disease
- Electrolyte abnormalities
- hyperthyroidism

# ANALYSIS

- **Rate** : may be slow or fast
- **Rhythm**: will be irregular
- **P-wave**: will be present for premature contraction will be distorted in shape
- **PR Interval**: may be normal but also be shortened
- **QRS complex**: normal limits because all conduction below the atrial is normal
- **T wave**: normally conducted

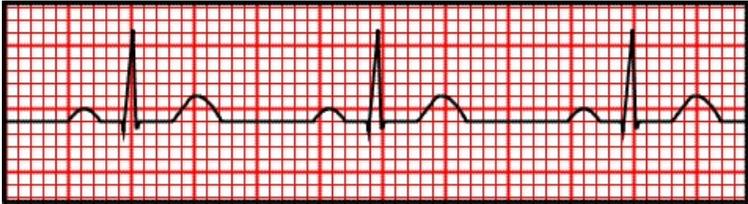
# TREATMENT

- Generally requires no treatment
- PACs should be monitored for increasing frequency

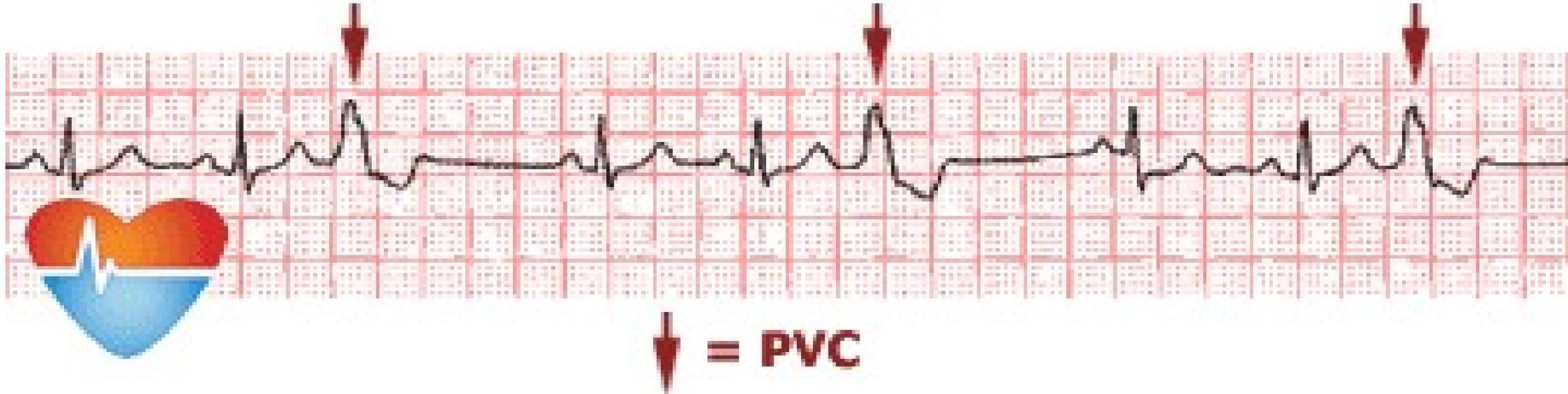
# PREMATURE VENTRICULAR CONTRACTION

- **DEFINITION:**

A ventricular impulses form the next expected from the SA node and take place of the normal beat



# Trigeminal PVCs



# ETIOLOGY

- Heart diseases
- Pulmonary diseases
- Electrolyte disturbance
- Metabolic instability
- Drug abuse

# ANALYSIS

- **Rate:** may be slow or fast
- **Rhythm:** will be irregular
- **P-wave:** will be absent
- **PR Interval:** not measurable
- **QRS complex:** will be widened greater than 0.12 sec , bizarre in appearance when compared with normal QRS complex

# MANAGEMENT

- Anti-dysrhythmic
- Short term therapy
- Long term therapy
- Pharmacological therapy

NURSING MANAGEMENT

NURSING DIAGNOSIS

SUMMARY

CONCLUSION

THEORY APPLICATION

ASSIGNMENT

JOURNAL ABSTRACT

BIBLIOGRAPHY



THANK YOU

