

ANTI-ANGINAL DRUGS

Angina Pectoris :- The Failure in $\heartsuit$ working due to lack of oxygen in blood.
 $\Rightarrow$ It is a Ischemic $\heartsuit$ disease.

Cause :-

- $\rightarrow$ Access work load
- $\rightarrow$ Ise Sympathetic load
- $\rightarrow$ Atherosclerosis
- $\rightarrow$ genetic factor
- $\rightarrow$ Nutritional imbalance.

Symptoms

- $\rightarrow$ Pain in $\heartsuit$
- $\rightarrow$ Pain in left side of arm region
- $\rightarrow$ Shortness of Breathing.

Treatments

- $\rightarrow$ β -Adrenergic Blockers
- $\rightarrow$ Nitrates
- $\rightarrow$ Ca^{++} Channel Blocker
- $\rightarrow$ K^{+} Channel opener
- $\rightarrow$ Na^{+} Channel Blocker

Mechanism of Action:-

★ β -Blockers:-

↓ Use Sympathetic Activity



↓ Use $\heartsuit$ workload



↓ Use oxygen demand



Normalise Problem.

Example:- Atenolol, Bisoprolol, Carvedilol etc.

★ Nitrates:- Help in dissolution of Atheroma



Also Reduces oxygen demand



Normalise condition

Example:- Nitroglycerine, Mononitrate (Isosorbide), Isorbide dinitrate etc.

★ Ca^{++} channel Blocker:- help in Ca^{++} Level

Secretion



(Ca^{++} is responsible for vasodilation)

↓ Use in constriction of vessels



Normalise condition

Example:- Amlodipine, diltiazem, Felodipine etc.

★ Na⁺ Channel Blocker:-

Blocks Sodium channels (↓ Movement of Na⁺ from out to inside)



Reduce +ve charge inside cell



Use in Vasoconstriction



help in Relaxation and Dilation of vessels



Normalize

Example - Ranolazine etc.

★ K⁺ Channel opener:- (Potassium move from inside to outside)

↓ Use +ve charge inside cells



↓ Use Vasoconstriction



Normalize

Example - Nicorandil etc.