

BETA BLOCKERS

Sympathetic Nervous System - "Fight or Flight"

- SNS stimulates receptors throughout the body to create "fight or flight response"
- Receptors
 - Alpha - vessels
 - Beta 1 - Heart
 - Beta 2 - Lungs

Beta 1 Receptors

- When stimulated by SNS they cause:
 - Increase Cardiac Output
 - Increase HR in SA node (Chronotropic effect)
 - Increase atrial contractility (Inotropic effect)
 - Increase conduction and automaticity of AV node
 - Increase conduction and automaticity of ventricles

Goal of Beta Blocker Therapy

- Goal is to block stimulation of B1 receptors in heart = ↓ HR

Common B - Blockers

- Metoprolol
- Esmolol
- Propranolol

Side Effects of B-Blockers

- Bradycardia
- ↓ Blood Pressure
- Bronchoconstriction
- Blood sugar abnormalities