



S.M.T.J.A.P. SCIENCE COLLEGE ADVANCING HYPERTENSION THERAPEUTICS: A RESEARCH JOURNEY FROM LAB TO PRESCRIBED PAD.

Created by

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Abstract

- *Atenolol is used alone or in combination with other medicines to treat high blood pressure.*
- *it also is used to prevent angina (chest pain) and improve survival after a heart attack.*
- *Atenolol is in class of medications called beta blockers.*

INTRODUCTION

Drug name: - Atenolol

This drug is synthesized by Dr. James black

Class: - beta blockers / beta one receptor antagonist

Color: - white colour

Generic name: - Tenormin

Brand name in India: - Tenormin 25

Duration of action: - 24 hours

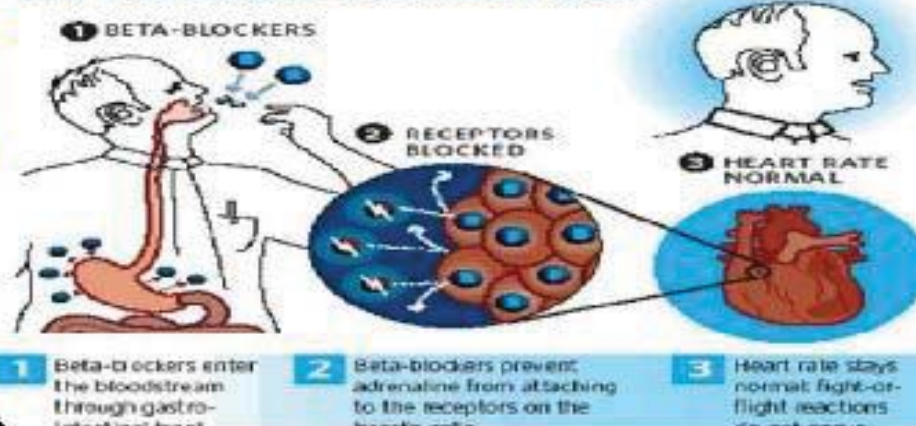
Use: - Treat high blood pressure and irregular heartbeat

MECHANISMS OF ACTIONS

- Atenolol is a second-generation beta-1 selective adrenergic antagonist that reduce heart rate and Blood pressure.
- it decreases myocardial contractility.
- it is FDA approved and indicated in treating hypertension, angina pectoris, and acute myocardial infarction.
- Cardioselective beta-1-adrenergic antagonist such as atenolol works by selectively binding to the beta-1-adrenergic receptors, found in vascular smooth muscle and the heart, blocking the positive inotropic catecholamine such as isoproterenol norepinephrine and epinephrine.

MECHANISM OF ACTION

How beta-blockers short-circuit stress



CONCLUSION

- It works by blocking the action of certain natural chemicals in **in your body**, such as epinephrine, on the heart and blood vessels.
- This effect lowers the heart blood pressure, and strain on the heart