

Cardinol[®] (Tablets)



1029
Ref.No.:INS029/04.18

Atenolol

Beta - Adrenoceptor Antagonist

Antihypertensive

CARDINOL[®] 25 TABLETS (FILM COATED)

CARDINOL[®] 50 TABLETS (FILM COATED)

CARDINOL[®] 100 TABLETS (FILM COATED)

PRESENTATION:

Cardinol[®] 25 Tablets: Orange, circular, biconvex film coated tablet embossed 'COSMOS' on one side and a breakline on the other side. Each film coated tablet contains: Atenolol 25mg.

Cardinol[®] 50 Tablets: Orange, circular, biconvex film coated tablet embossed 'CARDINOL' on one side and '50' on the other side. Each film coated tablet contains: Atenolol 50mg.

Cardinol[®] 100 Tablets: Orange, circular, biconvex film coated tablet embossed 'CARDINOL' on one side and '100' on the other side. Each film coated tablet contains: Atenolol 100mg.

CLINICAL PHARMACOLOGY:

Atenolol is a cardioselective beta blocker. It is reported to lack intrinsic sympathomimetic activity and membrane-stabilising properties. Beta blockers (beta-adrenoceptor blocking drugs or antagonists) are competitive antagonists of catecholamines at beta-adrenergic receptors in a wide range of tissues. Although they have broadly similar properties they differ in their affinity for beta₁ or beta₂ receptor subtypes, intrinsic sympathomimetic activity, membrane-stabilising activity, blockade of alpha-adrenergic receptors, and pharmacokinetic properties including differences in lipid solubility. Beta blockers have different affinities for beta₁ or beta₂ receptors. Beta₁ receptors are found mainly in the heart while beta₂ receptors are found in noncardiac tissue including bronchial tissue, peripheral blood vessels, uterus, and pancreas.

Pharmacokinetics:

About 50% of a dose is absorbed following oral administration. Peak plasma concentrations are reached in 2 to 4 hours. Atenolol has low lipid solubility. It crosses the placenta and is distributed into breast milk where concentrations higher than those in maternal plasma have been achieved. Only small amounts are reported to cross the blood-brain barrier, and plasma-protein binding is minimal. The plasma half-life is about 6 to 7 hours. Atenolol undergoes little or no hepatic metabolism and is excreted mainly in the urine.

USES:

Atenolol is used in the management of hypertension, angina pectoris, cardiac arrhythmias and myocardial infarction. It may also be used in the prophylactic treatment of migraine.

DOSAGE AND ADMINISTRATION:

Hypertension: Atenolol is given by mouth in a dose of 25 to 100 mg daily as a single dose, although 50mg daily is generally adequate. The full effect is usually evident within 1 to 2 weeks.

Angina Pectoris: 50 to 100 mg daily by mouth, given as single or in divided doses.

Cardiac Arrhythmias: Having controlled the arrhythmia with intravenous Atenolol, a suitable oral maintenance dosage of 50 to 100 mg is given daily.

Myocardial infarction: Treatment should be given within 12 hours of the onset of chest pain; Atenolol 5mg should be given by slow intravenous injection at a rate of 1mg per minute and followed after 15 minutes with 50mg by mouth.

Migraine: A dose of 50 to 200mg daily by mouth.

CONTRA-INDICATIONS AND WARNINGS:

Precautions:

Beta blockers should not be given to patients with bronchospasm or asthma or to those with a history of obstructive airways disease. Other contra-indications include metabolic acidosis, cardiogenic shock, hypotension, severe peripheral arterial disease, sinus bradycardia, second- or third-degree atrioventricular block; caution should be observed in first-degree block. Although beta blockers are used in the management of heart failure, they should not be given to patients with uncontrolled heart failure and treatment should

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