# Angical 50 Amlodipine 5 mg & Atenolol 50 mg Tablet

#### Composition

Angical-50: Each tablet contains Amlodipine Besilate BP equivalent to Amlodipine 5 mg and Atenolol BP 50 mg.

#### Pharmacology

Angical-50 is a fixed dose combination of Amlodipine and Atenolol. Amlodipine is a dihydropyridine calcium antagonist that inhibits the transmembrane influx of calcium ions into vascular smooth muscle and cardiac muscle; it has a greater effect on vascular smooth muscle cells than cardiac muscle cells. Amlodipine is a peripheral vasodilator that acts directly on vascular smooth muscle to cause a reduction in peripheral vascular resistance and reduction in blood pressure. Amlodipine reduces tone, decreases coronary vasoreactivity and lowers cardiac demand by reducing after load. Atenolol is a cardio-selective beta-blocker. It does not possess any membrane-stabilizing action. The cardio selectivity is dose related. Atenolol causes a reduction in blood pressure by lowering cardiac output, decreasing the plasma renin activity and sympathetic outflow from CNS. Atenolol also causes a reduction in myocardial oxygen demand by virtue of its negative inotropic and negative chronotropic effect.

#### Indication

Hypertension is not controlled by monotherapy, patients with angina pectoris and hypertension as co-existing diseases: post myocardial infarction, refractory angina pectoris where nitrate therapy has failed.

## **Dose & Administration**

Initially, 1 tablet daily. If necessary, the dose may be increased to 2 tablets daily. Elderly patients or patients with hepatic impairment ½ tablet daily. The dosage, however, should be individualized or as directed by the physician.

#### Contraindication

Hypersensitivity to any of the components.

Bronchospasm: The combination should be used with caution in patients with airway obstruction. Renal impairment: The combination can be used in patients with renal impairment. However, caution may be necessary if the creatinine clearance rate is less than 30 mL/min because of possible reduction in the excretion of unchanged Atenolol. Hepatic impairment: Caution may be necessary in the use of the combination in patients with severe liver damage because of prolongation of the elimination half-life of amlodipine. Drug withdrawal: Since coronary heart disease may exist without being recognized, patients should be warned against stopping the drug suddenly. Any discontinuation should be gradual and under observation.

#### Side Effects

The combination of Amlodipine and Atenolol is well tolerated. Overall side effects include fatigue, headache, edema. nausea, drowsiness, anxiety and depression.

#### Use in Pregnancy & Lactation

The combination should be used during pregnancy only if the expected benefit outweighs the potential fetal risk. Nursing mothers should not use the combination. If its use is considered necessary, breast-feeding should be stopped.

### Use in Children & Adolescents

No information is available regarding the use of this drug in children & adolescents.

## **Drug Interactions**

Disopyramide: Atenolol reduces the clearance of disopyramide by 20%. Additive negative inotropic effects on the heart may be produced. Ampicillin: Ampicillin at doses of 1 g and above may reduce Atenolol levels. Oral antidiabetic and insulin: Beta-blockers may decrease tissue sensitivity to insulin and inhibit insulin secretion in response to oral antidiabetics. Atenolol has the less potential for these actions. The heart rate may not be reliable as an early warning of hypoglycaemia.

## Overdosage

Though not documented, hypertension and less frequently congestive cardiac failure may occur in cases of over dosage. Unabsorbed drugs may be removed by gastric lavage or administration of activated charcoal. Symptomatic treatment is suggested.

#### Storage

Keep away from light & moisture and store below 30° C. Keep out of the reach of children.

Angical-50: Each box contains 3 X 10 tablets in blister pack.



Manufactured by Apex Pharma Limited Shafipur, Kaliakair, Gazipur, Bangladesh