

Amlodipine BP 5 mg and Atenolol BP 50 mg

PRESENTATION Vasopin Plus<sup>®</sup> Tablet: Each film-coated tablet contains Amlodipine besilate BP equivalent to Amlodipine 5 mg plus Atenolol BP 50 mg.

# DESCRIPTION

Vasopin Plus<sup>®</sup> 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 on 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 out flow from CNS. Atenolol also causes a reduction in myocardial oxygen demand by virtue of its negative inotropic and negative chronotropic effects.

#### INDICATIONS AND USES

Hypertension not controlled by monotherapy, patients with angina pectoris & hypertension as co-existing diseases, post MI, refractory angina pectoris where nitrate therapy has failed.

#### DOSAGE & ADMINISTRATION

The therapy is initiated with a single dose of Amlodipine 5 mg plus Atenolol 50 mg. Depending upon the therapeutic response, titration of the dosage is recommended. In elderly patients, it is advisable to initiate the therapy with ½ tablet of fixed dose combination of Amlodipine & Atenolol i.e. 2.5 mg of Amlodipine & 25 mg Atenolol.

#### CONTRAINDICATIONS

Hypersensitivity to any of the component, sinus bradycardia, second and higher degrees of heart block, cardiogenic shock and hypotension.

### SIDE EFFECTS

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

#### PRECAUTION 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 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

## DRUG INTERACTION

Disopyramide: Atenolol reduces the clearance of disopyramide by 20%. Additive 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 less potential for these actions. The heart rate may not be reliable as an early warning of hypoglycaemia.

## USE IN PREGNANCY AND LACTATION

Pregnancy The combination should be used during pregnancy only if the expected benefit outweighs the potential foetal risk.

# Lactation

Nursing mothers should not use the combination. If its use is considered necessary, breast feeding should be stopped.

## STORAGE CONDITION

Store in a cool and dry place. Protect from light and moisture.

## COMMERCIAL PACK

Vasopin Plus® Tablet: Each box contains 30 tablets in blister pack.



Pharmaceuticals Limited Maijdee, Noakhali, Bangladesh