AMLOTAN®

एमलोटान

(Losartan potassium & Amlodipine besilate)

DESCRIPTION:
AMLOTAN is a combination of Losartan Potassium and Amlodipine besilate. The combination provides additive reduction in blood pressure in hypertension patients.
Losartan belongs to the class of Angiotensin II receptor antagonist. It is used in the treatment of cardiovascular disease.
Amlodipine belongs to the class of dihydropyridine derivative selective calcium-channel blockers with mainly vascular effects.

CLINICAL PHARMACOLOGY:
Mechanism of Action
Losartan:
During losartan administration, removal of angiotensin II negative feedback on rennin secretion leads to increase in angiotensin II in plasma. It does not affect the response to bradykinin, whereas ACE inhibitors increase the response to bradykinin. The drug and its active metabolites selectively block the vasoconstrictor and aldosterone secreting effects of angiotensin II by selectively antagonizing the binding of angiotensin II to AT`1 receptor.
Amlodipine:
Amlodipine inhibits calcium ion influx across cell membranes selectively, with a greater effect on vascular smooth muscle cells than on cardiac muscle cells to cause a reduction in peripheral vascular resistance and reduction in blood pressure.
Losartan shows a remarkable anti-hypertensive effect which occurs from midnight to dawn when RAAS (Renin - Angiotensin -Aldosterone System) is actively strong. Amlodipine suppresses the hypertension caused by stress vasospasm when a patient is awake. Therefore, therapeutic activity can be further increased by combination of these drugs.

Pharmacokinetics:
Absorption: **Amlodipine:** Plasma levels peak 6-12 hr after oral administration. Absolute bioavailability is estimated to be 64-90%. **Losartan:** well absorbed; undergoes substantial first pass metabolism by CYP450 enzymes; systemic bioavailability is about 33%; about 14% of an oral dose is converted to active metabolites.
Distribution: **Amlodipine:** 93% bound to plasma proteins. **Losartan and its active metabolites:** Highly bound to plasma proteins, mainly albumin.
Metabolism: **Amlodipine:** About 90% converted to inactive metabolites hepatically. **Losartan:** Losartan is an orally active agent that undergoes substantial first-pass metabolism by cytochrome P450 enzymes. It is converted, in part, to an active carboxylic acid metabolite that is responsible for most of the angiotensin II receptor antagonism that follows losartan treatment.
Excretion: **Amlodipine:** 10% of parent compound and 60% of the metabolites are removed in the urine; elimination from the plasma is biphasic with terminal half-life of about 30-50 hr. **Losartan and its active metabolites:** Biliary excretion; terminal half-life: about 2hr (losartan) and 6-9hr.

INDICATIONS:
- Mild to moderate essential hypertension
- Angina pectoris Prinzmentals angina.
- Isolated systolic hypertension, left ventricular hypertrophy and diabetic nephropathy.
- Congestive heart failure, systolic dysfunction, myocardial infarction and coronary artery disease in those intolerant of ACE inhibitors.
- Hypertension not responding to monotherapy.

DOSAGE & ADMINISTRATION:
Amlotan may be taken with or without food. It is recommended to administer with water. Usual initial dosage is one tablet daily. If blood pressure control is inadequate after a week or two, the dose may be increases to two 55mg tablets daily. The dosage, however, should be individualized.

ADVERSE DRUG REACTIONS:
Headcahe, dizziness, back pain, myalgia, respiratory tract disorders, asthenia/fatigue, first dose hypotension, rash, cough, angioedema, neutropaenial GI disturbances, and transient elevation of liver enzymes, taste disturbances and hyperkalaemia.
Potentially fatal: Hypotension, bradycardia, conductive system delay, Congestive cardiac failure.

CONTRAINDICATIONS:
Known hypersensitivity; Avoid concomitant K (Potassium) supplements; Pregnancy; Caution when used during lactation.

DRUG INTERACTIONS:
No significant interactions are observed during concomitant administration with hydrochlorothiazide, digoxin, cimetidine, Phenobarbital and warfarin.
Amlodipine: Increased metabolism with rifampin. Reduced hypotensive effect with calcium. Potentiates effects of thiazide diuretics and ACE inhibitors. Avoid combination with β-blockers in patients with impaired left ventricular function.
Losartan: Concurrent use with NSAIDs may further worsen renal function. Cimetidine may increase the AUC of losartan by about 18%. Phenobarbital and other enzyme inducers may decrease levels of losartan and its active metabolite. Ketoconazole inhibits the conversion of losartan to its active metabolite. Concurrent use with potassium sparing diuretics may increase serum potassium levels. Reduces lithium excretion; monitor lithium levels if used together.

SPECIAL PRECAUTIONS:
Impaired hepatic or renal function, CHF, sick-sinus syndrome, severe ventricular dynsfunction, hypertrophic cardiomyopathy. Elderly, children. Lactation. Volume-depleted patients; patients on diuretics and self restriction; renal artery stenosis. Monitor serum K concentration.

PRESENTATION:
AMLOTAN-27.5:
- Each film coated tablet contains: Amlodipine Besilate BP equivalent to Amlodipine 2.5 mg and Losartan Potassium USP 25 mg
  Packaging:10 Tablets X 10 Blisters

AMLOTAN-30:
- Each film coated tablet contains: Amlodipine Besilate BP equivalent to Amlodipine 5 mg and Losartan Potassium USP 25 mg
  Packaging:10 Tablets X 10 Blisters

AMLOTAN-55:
- Each film coated tablet contains: Amlodipine Besilate BP equivalent to Amlodipine 5 mg and Losartan potassium USP 50 mg
  Packaging:10 TabletsX10 Blisters

ID: 01 pi AMAT 20

Manufactured by:
Deurali-Janta Pharmaceuticals Pvt. Ltd.
679, Budhanilkantha Sadak, Bansbari - 03 | G.P.O. Box: 4239, Kathmandu, Nepal
Tel: +977-01- 4018777 | E-mail: info@deuralijanta.com
Website: www.deuralijanta.com