1242/01

#### Levodopa BP & Carbidopa BP

#### DESCRIPTION

On oral administration, levodopa is rapidly converted to dopamine in extracerebral tissues. Only large doses of levodopa (if given alone) are effective since only a small portion of it penetrates unchanged into the brain. Carbidopa is an inhibitor of dopadecarboxylase present in peripheral tissues. Its administration with levodopa prevents unnecessary peripheral decarboxylation of levodopa. Thus, Levopa reduces the amount of levodopa required, by about 75% and increases both plasma levels and the plasma half-life of levodopa.

#### MECHANISM OF ACTION

Symptoms of Parkinson's disease are currently believed to be attributed to depletion of dopamine in the corpus striatum. Levodopa (in Levopa) is the metabolic precursor of dopamine which crosses the spinal fluid & blood-brain barrier and is converted in basal ganglia to the active metabolite. The dopamine thus available relieves the symptoms of Parkinson's disease.

#### COMPOSITION

Levopa 110: Each tablet contains Levodopa BP 100 mg and Carbidopa BP 10 mg. Levopa 275: Each tablet contains Levodopa BP 250 mg and Carbidopa BP 25 mg.

#### INDICATION

Levopa is used to treat symptoms of Parkinson's disease.

#### DOSAGE AND ADMINISTRATION

Patients not presently receiving levodopa: 1 tablet of Levopa 110, 3 times daily; increase by 1 tablet every 1-2 days until a dosage of 6 tablets per day is reached.

When it is evident that more levodopa is needed, Levopa 275, at a dosage of 1 tablet 3-4 times a day, should be substituted.

If still further titration is necessary, dosage with Levopa 275 may be increased by ½ or 1 tablet every 1-2 days to a maximum of 8 tablets per day; alternatively dosage may be titrated to 6 tablets of Levopa 275 a day and further adjusted with increments of levodopa.

Patients receiving levodopa: When patients are receiving levodopa, it must be discontinued at least 8 hours before Levopa is started. A daily dosage of Levopa should be chosen that will provide approximately 25% of the previous levodopa daily dosage.

Levodopa Requirement > 1500 mg/day: For most patients the suggested starting dose is 1 tablet of Levopa 275, 3-4 times a day.

 $\label{lem:lemont} \textbf{Levodopa Requirement < 1500mg/day: } 1 \text{ tablet of Levopa } 110, 3-4 \text{ times a day.} \\ \text{Adjustment in dosage may be made as necessary by adding or omitting } \% \text{ or } 1 \text{ tablet a day.} \\$ 

Current evidence indicates that other antiparkinsonian drugs may be continued while Levopa is being administered but

OR AS DIRECTED BY THE PHYSICIAN.

# CONTRAINDICATIONS

Levodopa & Carbidopa is not advocated in individuals hypersensitive to its ingredients, narrow angle glaucoma, suspicious undiagnosed skin lesion or a history of melanoma (since levodopa is known to activate a malignant melanoma), nursing mothers and in those taking monoamine oxidase inhibitors.

# SIDE EFFECTS

The most common adverse reaction with Levodopa & Carbidopa are nausea, choreiform dystonia and other involuntary movements. Other significant reactions are convulsions, dementia and mental changes. The mental changes include paranoid ideation, psychotic episodes and depression with or without suicidal tendencies.

# PRECAUTIONS

Levodopa & Carbidopa should be administered with caution in severe cardiovascular or pulmonary disease, bronchial asthma, renal, hepatic or endocrine disease and in presence of peptic ulcer or chronic wide angle glaucoma.

Use of Levodopa & Carbidopa in women of childbearing potential requires that the anticipated benefits of the drug be weighed against possible hazards to mother and child; safety of the formulation has not been established in patients under 18 years of age.

If general anesthesia is required, therapy with Levodopa & Carbidopa may be continued as long as the patient is permitted to take fluids and medications by mouth. If therapy is interrupted temporarily, the usual daily dosage may be administered as soon as the patient is able to take oral medication.

# DRUG INTERACTIONS

Levodopa & Carbidopa can cause symptomatic postural hypotension and hence must be given cautiously to patients on antihypertensive drugs. Since phenothiazines, butyrophenones, phenytoin and papaverine may reduce the therapeutic effects of levodopa, concomitant administration of these drugs with Levopa should be advocated with care.

# WARNINGS

Levodopa & Carbidopa combination permits more levodopa to reach the brain and thus dyskinesias may occur at lower dosage and sooner as compared to levodopa therapy. Monoamine oxidase inhibitors, if taken by patients, must be discontinued at least 2 weeks prior to institution of Levopa therapy.

As with levodopa, periodic evaluations of hepatic, hematopoietic, cardiovascular and renal function are recommended during extended therapy. The occurrence of blepharospasm is a sign of overdosage with Levodopa & Carbidopa combination.

# SUPPLY

Levopa 110: Each Box contains 3x10 tablets in aluminium strips. Levopa 275: Each Box contains 3x10 tablets in aluminium strips

Store in a cool & dry place, protected from light. Keep all medicines out of reach of children.

\* Further information is available on request.

Manufactured by: **The ACME Laboratories Ltd.**Dhamrai, Dhaka, Bangladesh

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