Aparkin

Levodopa BP & Benserazide BP

Presentation

Aparkin 50/12.5 Capsule: Each capsule contains Levodopa BP 50 mg and Benserazide Hydrochloride BP equivalent to Benserazide 12.5 mg.
Aparkin 100/25 Capsule: Each capsule contains Levodopa BP 100 mg and Benserazide Hydrochloride BP equivalent to Benserazide 25 mg.
Aparkin 200/50 Capsule: Each capsule contains Levodopa BP 200 mg and Benserazide Hydrochloride BP equivalent to Benserazide 50 mg.

Pharmacology

Levodopa and Benserazide (Aparkin) is an anti-parkinson agent. Levodopa (dopamine precursor) is used as a prodrug to increase dopamine levels since it is able to cross the blood brain barrier whereas dopamine itself cannot. Once levodopa has entered the central nervous system, it is metabolised to dopamine by aromatic L-amino acid decarboxylase. After administration, levodopa is rapidly decarboxylated to dopamine in extracerebral as well as cerebral tissues. As a result, most of the levodopa administered is not available to the basal ganglia and the dopamine produced peripherally frequently causes unwanted effects. It is therefore particularly desirable to inhibit extracerebral decarboxylation of levodopa. This can be achieved by simultaneous administration of levodopa and benserazide, a peripheral decarboxylase inhibitor. Aparkin is a combination of these two substances in a ratio of 4:1 - this ratio having proved optimal in clinical trials and therapeutic use - and is just as effective as large doses of levodopa given alone.

Indication

Levodopa and Benserazide (Aparkin) is indicated for the treatment of all forms of Parkinson's syndrome with the exception of medicine-induced parkinsonism.

Dosage and Administration

Disease	***Dose***	***Dose adjustment***
Parkinson's disease (Not previously treated with Levodopa)	Adult: Initially one Aparkin 50/12.5 mg 3-4 times daily; maintenance dose: 400/100 - 800/200 mg in divided dose	Increased in steps of Aparkin 100/25 mg daily, dose to be increased once or twice weekly
	Elderly: Initially one Aparkin 50/12.5 mg 1-2 times daily; maintenance dose: 400/100 - 800/200 mg in divided dose	Increased in steps of Aparkin 50/25 mg daily; dose to be increased every 3-4 days according to response)
Parkinson's disease (In advance disease)	Initially one Aparkin 100/25 mg 3 times daily; maintenance dose: 400/100 - 800/200 mg in divided dose	Increased in steps of Aparkin 100/25 mg daily; dose to be increased once or twice weekly
Parkinson's disease (Previously treated with other levodopa/decarboxylase inhibitors e.g. Levodopa+Carbidopa)	Previous therapy should be withdrawn for 12 hour. Then initially one Aparkin 50/12.5 mg 3-4 times daily.	Dose to be increased in every 2-3 days

Side effects

Anxiety, appetite decreased, arrhythmia, depression, diarrhea, hallucination, movement disorders, nausea, postural hypotension, sleep disorders, altered taste, vomiting, leucopenia etc.

Contraindications

This combination is contraindicated in: • Patients with known hypersensitivity to levodopa or benserazide or any of the excipients. • Patients receiving non-selective monoamine oxidase (MAO) inhibitors due to the risk of hypertensive crisis. However, selective MAO-B inhibitors, such as selegiline and rasagiline, or selective MAO-A inhibitors, such as moclobemide, are not contraindicated. • Patients with decompensated endocrine, renal or hepatic function, cardiac disorders, psychiatric diseases with a psychotic component or closed angle glaucoma. Because levodopa may activate a malignant melanoma, this combination should not be used in patients with suspicious, undiagnosed lesions or a history of melanoma. •The management of patients with intention tremor and Huntington's chorea. • Patients less than 30 years old (skeletal development must be complete).

Precautions

Cushing's syndrome, diabetes mellitus, endocrine disorders, history of convulsions, history of myocardial infarction with residual arrhythmia, history of peptic ulcer, hyperthyroidism, osteomalacia, pheochromocytoma, psychriatic illness, severe cardiovascular disease, severe pulmonary disease, susceptibility to angle-closure glaucoma.

Drug interactions

Neuroleptics, opioids and antihypertensive medications containing reserpine inhibit the action of Aparkin capsule. It should not be administered concomitantly with sympathomimetics (agents such as adrenaline, noradrenaline, isoproterenol or amphetamine which stimulate the sympathetic nervous system) as levodopa may potentiate their effects. Should concomitant administration Aparkin Capsule prove necessary, close surveillance of the cardiovascular system is essential, and the dose of the sympathomimetic agents may need to be reduced. Concomitant administration of antipsychotics with dopamine-receptor blocking properties, particularly D2-receptor antagonists might antagonise the antiparkinsonian effects of levodopa-benserazide. General anaesthesia with halothane: Levodopa and Benserazide (Aparkin) should be discontinued 12-48 hours before surgical intervention requiring general anaesthesia with halothane as fluctuations in blood pressure and/or arrhythmias may occur.

Use in pregnancy & lactation

Pregnancy – Category B3. Levodopa and Benserazide (Aparkin) is contraindicated during pregnancy and in women of childbearing potential in the absence of adequate contraception. If pregnancy occurs in a woman taking Aparkin Capsule, the medicine must be discontinued.

Pediatric Use

Levodopa and Benserazide (Aparkin) is contraindicated in patients less than 30 years old.

Geriatric Use

Although there may be an age-related decrease in tolerance to levodopa in the elderly, Aparkin Capsule appears to be well-tolerated and side effects are generally not troublesome.

Storage

Do not store above 25°C. Protect from light & keep in a dry place. Keep out of reach of children.

Packaging

Aparkin 50/12.5 Capsule: Each box contains 3x10's capsules in blister pack.
Aparkin 100/25 Capsule: Each box contains 4x8's capsules in blister pack.
Aparkin 200/50 Capsule: Each box contains 4x8's capsules in blister pack.

Manufactured by

ZISKA PHARMA

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