PAUCO PHARMACEUTICAL INDUSTRIES NIGERIA LTD.

ASHRELIV TABLET

SUMMARY OF PRODUCT CHARACTERISTICS

(SmPC)

1. Name of the medicinal Product

Ashreliv tablet (Ephedrine HCL BP, Theophylline BP and Chlorphenamine Maleate BP)

2. Qualitative and Quantitative Composition

2.1 Qualitative declaration

Ephedrine HCL BP, Theophylline BP and Chlorphenamine Maleate BP

2.2 Quantitative declaration

Each tablet contains

Ephedrine HCL BP……. 16mg BP,

Theophylline BP……..60mg BP and

Chlorphenamine Maleate BP…….2mg BP

(For full list of Excipients, see section 6.1).

3.0 Pharmaceutical Form

Oral Tablet

A white circular tablet having PAUCO inscription on one side and scored on the other side.

4.0 Clinical Particulars

4.1 Therapeutic Indications

Ashreliv is indicated in suppression and symptomatic relief of bronchial asthma, also used in chronic bronchitis and emphysema.

For both suppressive and therapeutic use.

As a bronchodilator for reversible bronchospasm that may occur in association with bronchitis and emphysema Chronic Obstructive Pulmonary Disease (COPD)

4.2 Posology

Ashreliv tablet should be taken one (1) tablet three times daily plus one tablet at bed time for patients who normally experience attacks during the night.

Ashreliv tablet is not recommended for children below 12years of age.

4.3 Method of Administration

Oral Tablet
Tablet should be swallowed and not chewed.

4.4 Contraindications

Ashreliv is contraindicated in persons who have shown hypersensitivity to any of the components; porphyria, unstable angina, arrhythmias, severe hypertension, coronary disease and in pregnancy.

4.5 Special Warnings and Special Precautions for Use

i. Bronchodilators should not be the only or main treatment in patients with severe or unstable asthma. Severe asthma requires regular medical assessment including lung function testing as patients are at risk of severe attacks and even death.
   Ephedrine HCL should be given with care to patients with hyperthyroidism, diabetes mellitus, angle-closure glaucoma and renal impairment
   i. Ephedrine HCL has a potential life threatening effects in acute cardiovascular and central stimulant effects.
   ii. Patients with rare hereditary problems of galactose intolerance, total lactose deficiency or glucose-galactose malabsorption should not take this medicine.
   iii. The anticholinergic properties of Chlorphenamine may cause drowsiness, dizziness, blurred vision and psychomotor impairment in some patients which may seriously affect ability to drive and use machinery.
   iv. Children and elderly are more likely to experience neurological anticholinergic effect and paradoxical excitation (e.g. increased energy, restlessness and nervousness).

4.6 Interaction with other medicinal products and other forms of interaction

Effect of Ahsreliv may be altered by Cimetidine, erythromycin, ciprofloxacin, oral contrceptives, Tricyclic antidepressants, sympathomimetics, anticonvulsants, diltizem, verapamil, digoxin, rifampicin, diuretics, corticosteroids, guanethidine or methyldopa, interferons and MAOIs

4.7 Pregnancy and Lactation

4.7.1 Pregnancy

Pregnancy: There is no reported case of safety concern with any of the active ingredients used in this product. However, caution should be exercised in the use of this product in pregnancy.

4.7.2 Lactation

Theophylline is secreted in breast milk, and may be associated with irritability in infant, therefore it should only be given to breast feeding women when the anticipated benefits outweigh the risk to the child.

4.8 Effects on ability to Drive and use Machines

Chlorphenamine may cause drowsiness, dizziness, blurred vision and psychomotor impairment in some patients which may seriously affect ability to drive and use machinery.

4.9 Undesirable Effects

Palpitations and changes in the heart beat, flushing, giddiness, headache, tremor, anxiety, restlessness, drowsiness, muscle weakness, nausea, vomiting, indigestion, increased thirst; sweating and problem passing water.

4.10 Overdose

Symptoms of overdose with ephedrine manifests as; marked pallor, pulselessness and profound bradycardia, treatment of ephedrine overdose is mainly supportive. Prompt injection of rapidly acting alpha blocker such as phentolamine, followed by beta blocker such as propranolol to counteract the pressor and aarhythmogenic effects of sympathomimetic.

Overdose with theophylline manifest as nausea, vomiting, diarrhea, agitation, tremor, hypertonicity, hyperventilation, supraventricular arrhythmias, hypotension and seizure. Metabolic disturbance such as hypokalemia, metabolic acidosis and respiratory alkalosis often occur. Overdose of theophylline by mouth could be treated by emptying the stomach by lavage if within two hours of overdose. Elimination may be enhanced by repeated oral doses of activated charcoal regardless of the route of administration. Symptoms of Chlorphenamine overdose is associated with extrapyramidal and CNS effects. CNS depression in adult is more common with drowsiness, coma, convulsions, progressive respiratory failure and cardiovascular collapse. Gastric emptying is recommended followed by supportive therapy.

5.0 Pharmacological Properties

5.1 Pharmacokinetic Properties

i. Ephedrine is readily and completely absorbed from the gastrointestinal tract. It is largely excreted unchanged in the urine, together with small amounts of metabolites produced by hepatic metabolism.

   Ephedrine has been variously reported to have a plasma half-life ranging from 3 to 6 hours depending on urinary pH; elimination is enhanced and half-life accordingly shorter in acid urine.

ii. Theophylline is rapidly and completely absorbed from liquid preparations, capsules and uncoated tablets; the rate, but not the extent of absorption is decreased by food, and food may also affect theophylline clearance.

   Modified release preparations of theophylline can usually provide adequate plasma concentrations when given every 12 hours. However, there is considerable variability in their absorption characteristics and in effect of food. Rectal absorption is rapid from enemas, but may be slow and erratic for suppositories. Absorption following intramuscular injection is slow and incomplete.

iii. Chlorphenamine maleate is absorbed relatively slowly from the gastrointestinal tract, peak plasma concentrations occurring about 2.5 to 6 hours after oral administration.

Bioavailability is low, values of 25 to 50% have been reported. Chlorphenamine appears to undergo considerable first-pass metabolism. About 70% of Chlorphenamine in the circulation is bound to plasma proteins. There is wide inter-individual variation in pharmacokinetics of Chlorphenamine; values ranging from 2 to 43 hours have been reported for the half-life. Chlorphenamine is widely distributed in the body and enters the CNS.

iv. Chlorphenamine maleate is extensively metabolized. Metabolites include desmethyl- and desmethyl Chlorphenamine. Unchanged drug and metabolites are excreted primarily in the urine; excretion is dependent on urinary pH and flow rate. Only trace amounts have been found in the faeces.

5.2 Pharmacodynamics Properties

i. Ephedrine is a sympathomimetic with direct and indirect effect on the adrenergic receptors. It has alpha and beta adrenergic activity and has pronounced stimulating effects on the CNS. It has a more prolonged though less potent action than adrenaline. In therapeutic doses it raises the blood pressure by increasing cardiac output and also by inducing peripheral vasoconstriction. Ephedrine also causes bronchodilation, reduces intestinal tone and motility, relaxes bladder walls while contracting the sphincter muscle but relaxes the detrusor muscle of the uterus. It has a stimulant action on the respiratory center.

ii. Theophylline is a xanthine and relaxes bronchial smooth muscle, relieves bronchospasm, and has a stimulant effect on respiration. It stimulates the myocardium and CNS, decreases peripheral resistance and venous pressure and cause diuresis. Inhibition of the phosphodiesterase with a resultant increase in intracellular cyclic adenosine monophosphate (cyclic AMP) occurs, and may play a role. Other proposed mechanisms of action include adenosine receptor antagonism, prostaglandin antagonism, and effects on intracellular calcium.

iii. Chlorphenamine maleate, an alkylamine derivative, is a sedating antihistamine that causes a moderate degree of sedation; It also has anti-muscarinic activity. Chlorphenamine is a racemic mixture; the dextrorotatory isomer, dexchlorpheniramine has approximately twice the activity of Chlorphenamine by weight. Chlorphenamine maleate and dexchlorpheniramine maleate are used for the symptomatic relief of allergic conditions including urticaria and angioedema, rhinitis and conjunctivitis and in pruritis skin disorders.

5.3 Preclinical Safety Data

Preclinical data reveal no special hazard for humans beyond the information included in other sections of the SmPC.

6. Pharmaceutical Particulars

6.1 List of Excipients

Lactose B.P

Starch B.P

Povidone B.P

Sodium Methyl Paraben

Sodium Propyl Paraben

Micro Crystalline Cellulose Phosphate B.P

Talcum B.P

Magnesium Stearate B.P

6.2 Incompatibilities

Not applicable

6.3 Shelf life: 48 months from the date of production.

6.4 Special precautions for storage

Store below 30°C away from light in a dry place.

Keep medicine out of the reach of children.

6.5 Nature and contents of container

white circular tablet having PAUCO inscription on one side and scored on the other side.

Presentation: 50 tablet in a small white hospital pack (tin)

6.6 Special precautions for disposal: Not applicable.

7. APPLICANT/MANUFACTURER

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