SUMMARY OF PRODUCT CHARACTERISTICS

1. NAME OF THE MEDICINAL PRODUCT

Almetamin Tablet

2. QUALITATIVE AND QUANTITATIVE COMPOSITION

Each tablet contain Dexchlorpheniramine Maleate + Betamethasone

For the full list of excipients, see section 6.1.

3. PHARMACEUTICAL FORM

Tablet

4. CLINICAL PARTICULARS

4.1 Therapeutic indications

DAEHWA ALMETAMIN tablet is indicated for the treatment of acute urticaria, hay fever, chronic bronchial asthma, allergic rhinitis, drug eruption, atopic dermatitis, eczema, contact dermatitis and allergic conjunctivitis.

4.2 Posology and method of administration

- ❖ Adults and children over 12 years: Initial dosage is 1 ~ 2 tablets 1 ~ 4 times daily.
- ❖ Children 6 to 12 years: Initial dosage is 1/2 ~ 1 tablets 2 ~ 3 times daily.
- ❖ Infants 3 to 6 years: Initial dosage is 1/4 ~ 1/2 tablets 2 ~ 3 times daily.
- ❖ If symptoms are improved, reduce dosage gradually to the minimal maintenance dose and then discontinue the administration. Do not use DAEHWA ALMETAMIN tablet for a long time.

4.3 Contraindications

DAEHWA ALMETAMIN tablet is contraindicated in following patients :

- ⇒ Patients with history of hypersensitivity to this medicine.
- ⇒ Patients with glaucoma or patients who are in danger of glaucoma because of optical occlusion
- ⇒ Patients with lower tract obstructive disease (e.g. prostatomegaly etc.)
- ⇒ Neonate and premature infant
- ⇒ Patients with virus (specially hepatitis, herpes, varicella) infections, Patients with infection without effective antibacterial agent or systemic mycosis
- ⇒ Patients receiving live vaccine therapy

4.4 Special warnings and precautions for use

Special warnings

1. Carefully administer to these patients.

1) Patients with tuberculous diseases, peptic ulcer, psychosis, herpes simplex keratitis, hypertension, thrombosis, subcapsular cataract, diabetes, osteoporosis and contagious disease.

2. Storage and handling

1) Keep out of children.

2) Protect from the light and keep in a cool place.

3) Do not change the container to prevent from misuse and guarantee quality.

3. Use in pregnancy

Teratogenic effects have been reported with the use of ALMETAMIN in animals.

In case of neonate born of mother who was taking adrenocortical hormones during the period of pregnancy, adrenal insufficiency can occur.

Safety in pregnancy has not been established. ALMETAMIN should not be used in pregnant women prior to or during labor unless the potential benefits outweigh the risks.

Precautions

1. Since dizziness and drowsiness may occur, patients should be cautioned about the hazards of operating machinery or automobiles or engaging in other potentially dangerous tasks.

2. Slowly decrease dosage because symptoms such as fever, headache, anorexia, asthenia, myalgesia, arthralgia and shock syndrome may occur if patients suddenly discontinue administration after ALMETAMIN use continuously.

4.5 Interaction with other medicinal products and other forms of interaction

In case of administering this drug with following drugs, it may potentiate actions of both drugs. : Central nervous system depressant, MAO inhibitor and alcoholic beverages.

4.6 Fertility, pregnancy and lactation

Pregnancy

In animals, there have been studies of teratogenicity with Almetamine tablets. Infants whose mothers took adrenal hormones during pregnancy may have adrenal insufficiency. The safety of the drug during pregnancy has not been established. Therefore, Almetamine tablets should not be used by pregnant women. Except in cases where there is a doctor's prescription for taking the drug.

Lactation

Betamethasone is excreted in breast milk and may be harmful to a young child. Because the Drug can inhibit growth and cause other undesirable effects such as decreased adrenal function. When using this drug, the benefit to the mother must be weighed against the potential harm to the infant.

Dexchlorpheniramine is excreted in human milk; side effects of antihistamine use have been described as having a higher risk in neonates and premature infants. The manufacturer has recommended that, due to the potential for serious adverse reactions in the nursing infant, a decision should be made whether to discontinue nursing or discontinue the drug. In addition, the importance of the drug to the mother should be considered.

4.7 Effects on ability to drive and use machines

None reported.

4.8 Undesirable effects

- ✓ Hypersensitivity reaction: rash.
- ✓ Psychiatric: mental disorder, nervousness, agitation, double vision, headache, insomnia, drowsiness and oppressive feeling.
- ✓ Gastrointestinal: gastric ulcer, hydrodipsomania, heart burn, stomachache, nausea, vomiting, increase of appetite and diarrhea.
- ✓ Urinary system: polyuria, dysuria.
- ✓ Cardiovascular: hypertention.
- ✓ Blood: leukocytosis, thrombosis.
- ✓ Dermatological: edema, acne, pigmentation, subcutaneous bleeding, purpura, streak, hypertrichosis, alopecia, itching and dyshydrosis.
- ✓ Endocrine: menstrual irregularity, diabetes, acute adrenocortical insufficiency and suppression of growth in infant.
- ✓ Musculoskeletal: osteoporosis, steroid myopathy, myalgesia and arthralgia.
- ✓ Ophthalmic: subcapsular cataract and glaucoma.
- ✓ Others: infections, malaise, moon shaped face, fever and weight gain.

4.9 Overdose

None reported.

5. PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Dexchlorpheniramine Maleate

Pharmacotherapeutic Group: Antihistamines for systemic use – substituted alkylamines.

Mechanism of Action of Dexchlorpheniramine Maleate

In allergic reactions, an allergen binds to IgE antibodies on mast cells and basophils. Once this occurs IgE receptors crosslink with each other triggering a series of events that eventually leads to cell-degranulation and the release of histamine (and other chemical mediators) from the mast cell or basophil. Histamine can react with local or widespread tissues through histamine receptors. Histamine, acting on H1-receptors, produces pruritis, vasodilatation, hypotension, flushing, headache, tachycardia, and bronchoconstriction. Histamine also increases vascular permeability and potentiates pain. Dexchlorpheniramine, is a histamine H1 antagonist of the alkylamine class. It competes with histamine for the normal H1-receptor sites on effector cells of the gastrointestinal tract, blood vessels and respiratory tract. It provides effective, temporary relief of sneezing, watery and itchy eyes, and runny nose due to hay fever and other upper respiratory allergies.

Betamethasone

Pharmacotherapeutic Group: Corticosteroid

Mechanism of Action of Betamethasone: Corticosteroids bind to the glucocorticoid receptor inhibiting pro-inflammatory signals, while promoting anti-inflammatory signals. Corticosteroids have a wide therapeutic window as patients may require doses that are multiples of what the body naturally produces. Patients who require long-term treatment with a corticosteroid should be counselled regarding the risk of hypothalamic-pituitary-adrenal axis suppression and increased susceptibility to infections.

Glucocorticoids inhibit neutrophil apoptosis and demargination, and inhibit NF-Kappa B and other inflammatory transcription factors. They also inhibit phospholipase A2, leading to decreased formation of arachidonic acid derivatives. In addition, glucocorticoids promote anti-inflammatory genes like interleukin-10.

Corticosteroids like betamethasone can act through nongenomic and genomic pathways. The genomic pathway is slower and occurs when glucocorticoids activate glucocorticoid receptors and initiate downstream effects that promote transcription of anti-inflammatory genes including phosphoenolpyruvate carboxykinase (PEPCK), IL-1-receptor antagonist, and tyrosine amino transferase (TAT). On the other hand, the nongenomic pathway is able to elicit

a quicker response by modulating T-cell, platelet and monocyte activity through the use of existing membrane-bound receptors and second messengers.

5.2 Pharmacokinetic properties

Pharmacokinetic properties of Dexchlorpheniramine Maleate: The absorption, distribution, metabolism and elimination of dexchlorpheniramine have not been specifically described. However, since dexchlorpheniramine is the primary active isomer of the racemic compound chlorpheniramine, the pharmacokinetics of dexchlorpheniramine are likely to be similar to that of chlorpheniramine. Dexchlorpheniramine is administered orally. H1-antagonists are generally well absorbed from the GI tract. The onset of action of immediate release formulations of chlorpheniramine is about 30-60 minutes. The Cmax of chlorpheniramine occurs in about 2 hours, the maximum therapeutic effect in about 6 hours, and the duration of action lasts between 4-8 hours. Protein binding is approximately 72%. Chlorpheniramine is widely distributed in body tissues and fluids, and it crosses the placenta and is excreted into breast milk. The metabolism of chlorpheniramine is extensive and rapid, first occurring in the gastric mucosa and then on firstpass through the liver, which may be saturable. N-dealkylation produces several metabolites, which are excreted in the urine along with the parent compound. The half-life in healthy adults and children is 20-24 hours and 10-13 hours, respectively. Excretion rates are dependent on the pH of urine and urinary flow, with the rate decreasing as the pH rises and urinary flow decreases.

Pharmacokinetic properties of Betamethasone:

Absorption:

The vast majority of corticosteroids, including betamethasone, are absorbed from the gastrointestinal tract.

Biotransformation:

Corticosteroids are metabolised mainly in the liver but also in the kidney, and are excreted in the urine.

Synthetic corticosteroids, such as prednisolone, have increased potency when compared to the natural corticosteroids, due to their slower metabolism and lower protein-binding affinity.

5.3 Preclinical safety data

No safety information.

6. PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Microcrystalline cellulose

Corn Starch
lactose hydrate
Talc
Red No. 40
Magnesium Stearate
Sodium Starch Glycolate

6.2 Incompatibilities

Not applicable.

6.3 Shelf life

36 months

6.4 Special precautions for storage

Store in a dry place below 30°C.

6.5 Nature and contents of container <and special equipment for use, administration or implantation>

10 tablets/blister, 10 blisters/box

6.6 Special precautions for disposal <and other handling>

Any unused medicinal product or waste material should be disposed of in accordance with local requirements.

7. MARKETING AUTHORISATION HOLDER

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8. MARKETING AUTHORISATION NUMBER(S)

06609/08027/REN/2021

9. DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

Date of latest renewal: Oct 19, 2021

10. DATE OF REVISION OF THE TEXT

July, 2023

11. Reference