PRODUCT INFORMATION-TONIGHT (DOXYLAMINE SUCCINATE)

1.NAME OF THE MEDICINE

Doxylamine succinate

2.QUALITATIVE AND QUANTITATIVE COMPOSITION

Each tablet contains 25mg doxylamine succinate.

For the full list of excipients, see Section 6.1 List of excipients

3. PHARMACEUTICAL FORM

Oval cream-white tablets with score line on one side.

4.CLINICAL PARTICULARS

4.1 THERAPEUTIC INDICATIONS

An aid to the relief of temporary sleep disturbance.

4.2 DOSE AND METHOD OF ADMINISTRATION

Adults: Half a tablet to one tablet about an hour before bedtime. Tonight should not be used for more than ten days consecutively.

Children: Do not give to children under 12 years of age

Impaired hepatic and renal function: Dosage reduction may be necessary.

4.3 CONTRAINDICATIONS

Patients with hypersensitivity to doxylamine, other antihistamines in the ethanolamine class, or any of the excipients listed in Section 6.1 should not use this product. Doxylamine should not be given to premature or new born infants due to their heightened susceptibility to antimuscarinic effects.

4.4 SPECIAL WARNINGS AND PRECAUTIONS FOR USE

Avoid concurrent use with alcohol and medications which suppress the CNS as the effects of both may be enhanced.

A risk-benefit approach should be adopted for patients with glaucoma. Increased ocular pressure could precipitate an attack of angle closure glaucoma. Use with caution in patients with asthma, bladder neck obstruction, urinary retention, chronic bronchitis, stenosing peptic ulcer, pyloroduodenal obstruction, symptomatic prostatic hypertrophy and epilepsy.

Use in hepatic impairment:

Use with caution.

Use in renal impairment

Use with caution.

Use in the elderly:

Use with caution as studies indicate a longer duration of action especially for elderly men. This and enhanced susceptibility to antimuscarinic side effects suggest dosage reduction may be necessary.

Paediatric Use: Do not give to children under 12 years of age due to heightened sensitivity towards paradoxical stimulation.

Effects on Laboratory Tests: Antihistamines may inhibit the cutaneous histamine response. Discontinue at least 72 hours before skin testing begins.

4.5 INTERACTIONS WITH OTHER MEDICINES AND OTHER FORMS OF INTERACTIONS

Doxylamine has additive antimuscarinic effects with atropine like drugs, tricyclic antidepressants and MAOIs. Concurrent use with other drugs and substances which suppress the CNS should be avoided. These include alcohol, sedatives (such as benzodiazepines and barbiturates), tranquillizers (e.g. antipsychotics) and opioid analgesics. Use with ototoxic medications e.g. aminoglycoside antibiotics may mask the symptoms of ototoxicity such as tinnitus, dizziness or vertigo.

4.6 FERTILITY, PREGNANCY AND LACTATION

Effects on fertility

No data available

Use in pregnancy

Category A. Medical or pharmacist advice is required before use in pregnancy. Non pharmacological interventions for insomnia should be considered as first line therapy.

Use in lactation

Medical or pharmacist advice is required before use in breast-feeding. Doxylamine may be excreted into breast milk in small amounts and cause unusual excitement or irritability in infants. Anticholinergic effects may inhibit lactation.

4.7 EFFECTS ON ABILITY TO DRIVE AND USE MACHINES

Drowsiness and hang-over affects may affect ability to drive or operate machinery the day following use.

4.8 ADVERSE EFFECTS (UNDESIRABLE EFFECTS)

More common reactions: Drowsiness, dizziness, lassitude, disturbed coordination, headache, psychomotor impairment and muscular weakness. Antimuscarinic effects include dry mouth, nose and throat and thickened respiratory tract secretions.

Less Common Reactions: Paradoxical stimulation of the CNS with the possibility of

insomnia, unusual excitement, tremors, nervousness and restlessness. These effects are more likely to occur in children.

Other adverse reactions include tachycardia, palpitations, hypotension, blurred vision, urinary difficulty or retention, constipation and increased gastric reflux.

Reporting suspected adverse effects

Reporting of suspected adverse reactions:

Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Any suspected adverse events should be reported to the Ministry of Health according to the National Regulation by using an online form https://sideeffects.health.gov.il

4.9 OVERDOSE

Symptoms of overdose include severe drowsiness, severe dryness of the mouth, nose and throat, flushing or redness in the face, shortness of breath, tachycardia, CNS stimulation, hallucinations, seizures, insomnia, hypotension, delirium, convulsions and fixed and dilated pupils. Coma progressing to respiratory failure and cardiovascular collapse may occur. Cardiorespiratory collapse and death may occur several days after onset of toxic symptoms. Children are at higher risk for cardiorespiratory arrest. Rhabdomyolysis and subsequent acute renal failure may also occur in certain individuals (adults).

5. PHARMACOLOGICAL PROPERTIES

5.1 PHARMACODYNAMIC PROPERTIES

Mechanism of Action

Doxylamine is an H₁ receptor antagonist antihistamine belonging to the ethanolamine group. This group characteristically produce pronounced sedative effects with low incidence of gastrointestinal disturbance. The significant sedative properties result from inhibition of histamine N-methyltransferase and blockage of central histaminergic receptors. Antagonism of other CNS receptor sites such as those for serotonin, acetyl choline and alpha-adrenergic stimulation may be involved. Anticholinergic activity at muscarinic receptors also occurs.

Clinical Trials

No data available

5.2 PHARMACOKINETIC PROPERTIES

Absorption: The drug is well absorbed from the gastrointestinal tract. Following oral administration of a 25mg dose therapeutic effects start within 15 to 30 minutes and are fully developed within one hour. Peak plasma concentration of 100ng/ml occurs between 2 and 4 hours. The duration of action is 6-8 hours. After 24 hours, the mean plasma level is 21ng/ml.

Distribution: The drug is well absorbed from the gastrointestinal tract and is widely distributed throughout the body

Metabolism: Metabolism occurs in the liver. The major metabolic pathway is N-demethylation to N-desmethyldoxylamine and N, N-didesmethyldoxylamine. N-acetyl conjugates of these metabolites have been identified. The activity of these metabolites is unknown. N-glucuronidation has been identified as a minor metabolic route. Additional metabolic pathways found in animal studies include N-oxidation, aromatic hydroxylation and ether cleavage.

Excretion: The elimination half- life has been reported at 10.1 and 12 hours. It is prolonged in geriatric males at 15.5 ± 2.1 hours.

5.3 PRECLINICAL SAFETY DATA

Genotoxicity

Doxylamine succinate is considered not to be genotoxic

Carcinogenicity There is inadequate evidence in humans for the carcinogenicity of doxylamine succinate. There is limited evidence in experimental animals for the carcinogenicity of doxylamine succinate

6. PHARMACEUTICAL PARTICULARS

6.1 LIST OF EXCIPIENTS

Microcrystalline Cellulose, Dibasic Calcium Phosphate Dihydrate, Sodium Starch Glycolate, Magnesium Stearate.

6.2 INCOMPATIBILITIES

Incompatibilities were not assessed as part of the registration of the medicine

6.3 SHELF LIFE

The expiry date of the product is indicated on the packaging materials.

6.4 SPECIAL PRECAUTIONS FOR STORAGE

Store below 25°C

6.5 NATURE AND CONTENTS OF CONTAINER

Cartons containing 2, 5 or 10 tablets in PVC/PE/PVDC blister. Not all package sizes may be marketed.

6.6 SPECIAL PRECAUTIONS FOR DISPOSAL

None stated

6.7 PHYSIOCOCHEMICAL PROPERTIES

Chemical Structure

2-[(alpha)-(2-dimethylaminoethoxy) (alpha)-methylbenzyl] pyridine succinate

Doxylamine succinate is a white or almost white powder, very soluble in water and freely soluble in alcohol.

Chemical Formula: C₁₇H₂₂N₂OC₄H₆O₄

Molecular Weight:

388.5

CAS Number

562-10-7

7. MANUFACTURER AND LICENSE HOLDER

CTS CHEMICAL INDUSTRIES LTD. POB 385, KIRYAT MALACHI, ISRAEL

9. DATE OF REVISION

This leaflet was revised in 12/2021 according to Ministry of Health guidelines