

گولیاں

کارٹیکس۔ ایچ®

کینڈیزارٹن سیلکزیٹیل ۱۶ ملی گرام، ہائیڈروکلورو تھانیا زائیڈیو۔ ایس۔ پی ۱۲.۵ ملی گرام

دافع بلند فشار خون

خوراک:

عمومی ابتدائی تجویز کردہ خوراک ۱۶ ملی گرام دن میں ایک مرتبہ ہے تاہم ۸ سے ۳۳ ملی گرام خوراک دن میں ایک یا دو مرتبہ بھی دی جاسکتی ہے ہائیڈروکلورو تھانیا زائیڈیو کی خوراک ۲۰.۵ ملی گرام تا ۵۰ ملی گرام دن میں ایک مرتبہ ہے یا ڈاکٹر کی ہدایات کے مطابق استعمال کریں۔

ہدایات:

- * دوا کو ٹھنڈی اور خشک جگہ پر رکھیں۔
- * دوا کو گرمی، روشنی اور نمی سے محفوظ رکھیں۔
- * یہ دوا ڈاکٹر کی ہدایات کے مطابق استعمال کریں۔
- * تمام دوائیں بچوں کی پہنچ سے دور رکھیں۔

پیشکش:

کارٹیکس۔ ایچ گولیاں (۱۰×۲) ایلو۔ ایلو بلستر پیک میں دستیاب ہیں۔



Manufactured by:

Schazoo Zaka (Pvt) Ltd.

Kalalwala, 20-Km Lahore-Jaranwala Road,
Distt: Sheikhupura, Pakistan.

Tablets

Cartex-H®

Candesartan Cilexetil Sch. Specs.
Hydrochlorothiazide U.S.P.

COMPOSITION: Each tablet contains:
Candesartan Cilexetil Sch. Specs. 16mg
Hydrochlorothiazide U.S.P. 12.5mg

CLINICAL PHARMACOLOGY:

Mechanism of action:

Candesartan cilexetil:

Candesartan is a selective AT₁ subtype angiotensin II receptor antagonist. Angiotensin II is formed from angiotensin I by angiotensin converting enzyme (ACE, kinase II). Angiotensin II is the principal pressor agent of the Renin – angiotensin system, with effects that include vasoconstriction, stimulation of synthesis and release of aldosterone, cardiac stimulation, and renal reabsorption of sodium. Candesartan blocks the vasoconstriction and aldosterone – secreting effects of Angiotensin II by selectively blocking the binding of angiotensin II to the AT₁ receptors in many tissues, such as vascular smooth muscle and the adrenal gland. Blockade of the renin – angiotensin with ACE inhibitors, which inhibit the biosynthesis of Angiotensin II from Angiotensin I is widely used in the treatment of hypertension.

Hydrochlorothiazide:

Hydrochlorothiazide is a Thiazide diuretic. Thiazides affect the renal tubular mechanisms of electrolyte reabsorption, directly increasing excretion of sodium and chloride in approximately equivalent amounts.

Pharmacokinetics:

Absorption:

Candesartan cilexetil:

Candesartan cilexetil is a prodrug which is rapidly and completely bioactivated by ester hydrolysis during absorption from gastrointestinal tract to candesartan. Candesartan and its inactive metabolites do not accumulate in serum upon repeated once daily dosing. Following administration of Candesartan cilexetil, the absolute bioavailability of Candesartan was estimated to be 15%. After tablet ingestion, the peak serum concentration (C_{max}) is reached after 3 to 4 hours. The plasma concentration of candesartan was higher in elderly (C_{max} was approximately 50% higher, and AUC was approximately 80% higher) compared to younger subjects administered the same dose. In hypertensive patients with renal insufficiency, serum concentration of candesartan was elevated.

Hydrochlorothiazide:

When plasma levels have been followed for at least 24 hours, the plasma half life has been observed to vary between 5.6 and 14.8 hours

Distribution:

Candesartan cilexetil:

The apparent volume of distribution of Candesartan is approximately 0.13 L/Kg. Candesartan is highly bound to plasma proteins (>99%) and does not penetrate red blood cells.

Hydrochlorothiazide:

Hydrochlorothiazide crosses the placental but not the blood brain barrier and is excreted in breast milk.

Metabolism and elimination:

Candesartan cilexetil:

The volume of distribution of Candesartan is 0.37 ml/ min/ kg, with renal clearance of

0.19ml/min/kg. When candesartan is administered orally, about 26 % of the dose is excreted unchanged in urine. Biliary excretion contributes to elimination of Candesartan.

Hydrochlorothiazide:

Hydrochlorothiazide is not metabolized but is eliminated rapidly by the kidney. At least 61% of the oral dose is eliminated unchanged within 24 hours.

INDICATIONS:

Cartex-H is indicated for the treatment of hypertension. This fixed dose combination is not indicated for initial therapy.

DOSAGE & ADMINISTRATION:

Cartex-H can be taken with or without food. The usual recommended starting dose of candesartan cilexetil is 16 mg once daily when it is used as monotherapy in patients who are not volume depleted. Cartex-H can be administered once or twice daily with total daily doses ranging from 8 mg to 32 mg. Patients requiring further reduction in blood pressure should be titrated to 32 mg. Doses larger than 32 mg do not appear to have a greater blood pressure lowering effect.

Hydrochlorothiazide is effective in doses of 12.5 to 50 mg once daily. To minimize dose-independent side effects, it is usually appropriate to begin combination therapy only after a patient has failed to achieve the desired effect with monotherapy. The side effects of candesartan cilexetil are generally rare and apparently independent of dose; those of hydrochlorothiazide are a mixture of dose-dependent phenomena (primary hypokalemia) and dose-independent phenomena (e.g. pancreatitis), the former much more common than the latter.

Therapy with any combination of candesartan cilexetil and hydrochlorothiazide will be associated with both sets of dose-independent side effects.

Replacement Therapy: The combination may be substituted for the titrated components.

CONTRA-INDICATIONS:

Cartex-H is contra-indicated in patients who are hypersensitive to any component of this product. Due to hydrochlorothiazide component, this product is contraindicated in patients with anuria or hypersensitivity to other sulfonamide-derived drugs.

PRECAUTIONS & WARNINGS:

Symptomatic Hypotension:

A patient receiving Cartex-H should be cautioned that lightheadedness can occur, especially during the first days of therapy and it should be informed to the physician. The patients should be told that if syncope occurs, candesartan should be discontinued until the physician has been consulted. All patients should be cautioned that inadequate fluid intake, excessive perspiration, diarrhea or vomiting can lead to an excessive fall in blood pressure, with the same consequences of lightheadedness and possible syncope.

Potassium Supplements:

A patient receiving Cartex-H should be told not to use potassium supplements or salt substitutes containing potassium without consulting the prescribing physician.

DRUG INTERACTIONS:

A- Candesartan Cilexetil:

No significant drug interactions have been reported in concomitant use of candesartan and other drugs such as glyburide, nifedipine, digoxin, warfarin, hydrochlorothiazide and oral contraceptives or given with enalapril to patients with heart failure. Candesartan is not significantly metabolized by the cytochrome P450 system and at therapeutic concentrations has no effects on P450 enzymes therefore interactions with drugs that inhibit or are metabolized by those enzymes would not be expected.

Lithium: Reversible increases in serum lithium concentrations and toxicity have been reported during concomitant administration of lithium with ACE inhibitors and with some angiotensin II receptor antagonists. An increase in serum lithium concentration has been reported during concomitant administration of lithium with Candesartan, so careful monitoring of serum lithium levels is recommended during concomitant use.

B- Hydrochlorothiazide:

When administered concurrently the following drugs may interact with thiazide diuretics: **Alcohol, barbiturates, or narcotics:** Potentiation of orthostatic hypotension may occur. **Antidiabetic drugs (oral agents and insulin):** Dosage adjustment of the antidiabetic

drug may be required.

Cholestyramine and colestipol resins: Absorption of hydrochlorothiazide is impaired in the presence of anionic exchange resins. Single doses of either cholestyramine or colestipol resins bind the hydrochlorothiazide and reduce its absorption from the gastrointestinal tract by up to 85 and 43 percent, respectively.

Corticosteroids, ACTH (AdrenoCortic Tropic Hormone): Intensified electrolyte depletion, particularly hypokalemia.

Skeletal muscle relaxants, nondepolarizing (e.g, tubocurarine): Possible increased responsiveness to the muscle relaxant.

Lithium: Generally should not be given with diuretics. Diuretic agents reduce the renal clearance of lithium and add a high risk of lithium toxicity.

Non-steroidal Anti-inflammatory Drugs: Administration of a non-steroidal anti-inflammatory agent can reduce the diuretic, natriuretic, and antihypertensive effects of loop, potassium-sparing and thiazide diuretics.

Pregnancy:

Like other anti-hypertensive drugs candesartan acts on the renin-angiotensin system during the second and third trimesters of pregnancy associated with fetal and neonatal injury. So When pregnancy is detected, it should be discontinued as soon as possible.

Nursing mothers:

It is not known whether candesartan is excreted in human milk. Because of the potential for adverse effects on the nursing infant, a decision should be made whether to discontinue nursing or discontinue the drug, taking into account the importance of the drug to the mother.

Pediatric Use:

Safety and effectiveness in pediatric patients have not been established.

SIDE EFFECTS:

The most common side effects are:

Digestive system:

Nausea, epigastric distress, constipation, anorexia, abdominal pain and diarrhoea.

Cardiovascular system:

ECG abnormal

Nervous system:

Dizziness and headache

Skin and appendages:

Eczema, sweating increased, pruritus, dermatitis, rash

Special senses:

Tinnitus and blurred vision

Urogenital system:

Urinary tract infection, hematuria, cystitis

Respiratory system:

upper respiratory tract infection

Body as a whole:

Fever, back pain and influenza like syndrome

Musculoskeletal System Disorders:

Arthralgia, myalgia, arthrosis, arthritis, leg cramps, sciatica

OVERDOSAGE:

The most likely manifestation of overdosage with Candesartan would be hypotension, dizziness and tachycardia; bradycardia could occur from parasympathetic (vagal) stimulation. If symptomatic hypotension should occur, supportive treatment should be instituted. Candesartan cannot be removed by hemodialysis.

STORAGE:

- * Store in a cool and dry place.
- * Protect from heat, light and moisture.
- * Keep all medicines out of the reach of children.

PACKING:

Cartex-H tablets are available in Alu-Alu blister pack of (2 x 10)tablets.