# ZAMID (Tablets)

**Acetazolamide 250 mg**

**COMPOSITION :** Each tablet contains:250 mg Acetazolamide.
**EXCIPIENTS:**Lactose monohydrate,Sodium starch glycolate,corn starch and calcium stearate.
**MECHANISM OF ACTION:** Acetazolamide is an enzyme inhibitor that acts specifically on carbonic anhydrase. this inhibitory action of Acetazolamide decreases the secretion of aqueous humor and results in a drop in intraocular pressure, a reaction considered desirable in cases of glaucoma and even in certain non-glaucomatous conditions.
The diuretic effect of Acetazolamide is due to its action in the kidney on the reversible reaction involving hydration of carbon dioxide and dehydration of carbonic acid.
**INDICATIONS:**
For adjunctive treatment of: edema due to congestive heart failure; drug-induced edema; centrencephalic epilepsies (petit mal, unlocalized seizures); chronic simple (open-angle) glaucoma, secondary glaucoma, and preoperatively in acute angle-closure glaucoma where delay of surgery is desired in order to lower intraocular pressure. Acetazolamideis also indicated for the prevention or amelioration of symptoms associated with acute mountain sickness in climbers attempting rapid ascent and in those who are very susceptible to acute mountain sickness despite gradual ascent.
Abnormal retention of fluids : ACETAZOLAMIDE Tablets can be used in conjunction with other diuretics when effects on several segments of the nepbron are desirable in the treatment of fluid retaining states.
**CONTRAINDICATIONS:**
Acetazolamidetherapy is contraindicated in situations in which sodium and/or potassium blood serum levels are depressed, in cases of marked kidney and liver disease or dysfunction, in suprarenal gland failure, and in hyperchloremia acidosis. It is contraindicated in patients with cirrhosis because of the risk of development of hepatic encephalopathy.
Long-term administration of Acetazolamideis contraindicated in patients with chronic noncongestive angle-closure glaucoma since it may permit organic closure of the angle to occur while the worsening glaucoma is masked by lowered intraocular pressure.
ACETAZOLAMIDE tablets should not be used in patients hypersensitive to sulphonamides.
**WARNING:**
Fatalities have occurred, although rarely, due to severe reactions to sulfonamides including Stevens- Johnson syndrome,
toxic epidermal necrolysis, fulminant hepatic necrosis, agranulocytosis, aplastic anemia, and other blood dyscrasias. Sensitizations may recur when a sulfonamide is readministered irrespective of the route of administration. If signs of hypersensitivity or other serious reactions occur, discontinue use of this drug. Caution is advised for patients receiving concomitant high-dose aspirin and Acetazolamide,
as anorexia, tachypnea, lethargy, coma and death have been reported.
Suicidal ideation and behavior have been reported in patients treated with anti-epileptic agents in several indications.
Therefore patients should be monitored for signs of suicidal ideation and behaviors and appropriate treatment should be considered. Patients (and caregivers of patients) should be advised to seek medical advice should signs of suicidal ideation or behavior emerge.
When ACETAZOLAMIDE tablets is prescribed for long-term therapy, special precautions are advisable. The patient should be cautioned to report any unusual skin rash. Periodic blood cell counts and electrolyte levels are recommended.
In patients with pulmonary obstruction or emphysema where alveolar ventilation may be impaired, ACETAZOLAMIDE tablets may aggravate acidosis and should be used with caution.In patients with a past history of renal calculi, benefit should be balanced against the risks of precipitating further calculi. The occurrence at the treatment initiation of a feverish generalized erythema associated with pustula may be a symptom of acute generalised exanthematous pustulosis (AGEP) . In case of AGEP diagnosis, Acetazolamide should be discontinued and any subsequent administration of acetazolamide contraindicated.
**PRECAUTIONS:**
**General:** Increasing the dose does not increase the diuresis and may increase the incidence of drowsiness
and/or paresthesia. Increasing the dose often results in a decrease in diuresis. Under certain circumstances, however, very large doses have been given in conjunction with other diuretics in order to secure diuresis in complete refractory failure.
**Laboratory Tests:** To monitor for hematologic reactions common to all sulfonamides, it is recommended that a baseline CBC and platelet count be obtained on patients prior to initiating Acetazolamide therapy and at regular intervals during therapy. If significant changes occur, early discontinuance and institution of appropriate therapy are important. Periodic monitoring of serum electrolytes is recommended.
**PREGNANCY:** *Pregnancy Category C*
There are no adequate and well-controlled studies in pregnant women.
Acetazolamide should be used in pregnancy only if the potential benefit justifies the potential risk to the fetus. Acetazolamide tablets should not be used in pregnancy, especially during the first trimester.
**NURSING MOTHERS:** Because of the potential for serious adverse reactions in nursing infants from Acetazolamide, a decision should be made whether to discontinue nursing or to discontinue the drug taking into account the importance of the drug to the mother.
**PEDIATRIC USE:**
The safety and effectiveness of Acetazolamide in children have not been established.
**Effects on ability to drive and use machines:**
Increasing the dose does not increase the diuresis and may increase the incidence of drowsiness and/or paraesthesia. Less commonly, fatigue, dizziness and ataxia have been reported. Disorientation has been observed in a few patients with oedema due to hepatic cirrhosis. Such cases should be under close supervision. Transient myopia has been reported.These conditions invariably subside upon diminution or discontinuance of the medication.
**ADVERSE REACTIONS:**
Adverse reactions, occurring most often early in therapy, include paresthesias, particularly a “tingling” feeling in the extremities, hearing dysfunction or tinnitus, loss of appetite, taste alteration and gastrointestinal disturbances such as nausea, vomiting and diarrhea, polyuria, and occasional instances of drowsiness and confusion.
Metabolic acidosis and electrolyte imbalance may occur.
Transient myopia has been reported. This condition invariably subsides upon diminution or discontinuance of the medication. Other occasional adverse reactions include urticaria, melena, hematuria, glycosuria, hepatic insufficiency, flaccid paralysis, photosensitivity and convulsions.
**DRUG INTERACTIONS:**
Acetazolamide is a sulphonamide derivative. Sulphonamides may potentiate the effects of folic acid antagonists. Possible potentiation of the effects of folic acid antagonists, hypoglycaemics and oral anti-coagulants may occur. Concurrent administration of acetazolamide and aspirin may result in severe acidosis and increase central nervous system toxicity. Adjustment of dose may be required when ACETAZOLAMIDE tablets is given with cardiac glycosides or hypertensive agents.
When given concomitantly, acetazolamide modifies the metabolism of phenytoin, leading to increased serum levels of phenytoin. Severe osteomalacia has been noted in a few patients taking acetazolamide in combination with other anticonvulsants. There have been isolated reports of reduced primidone and increased carbamazepine serum levels with concurrent administration of Acetazolamide.
Because of possible additive effects, concomitant use with other carbonic anhydrase inhibitors is not advisable. By increasing the pH of renal tubular urine, Acetazolamide reduces the urinary excretion of amphetamine and quinidine and so may enhance the magnitude and the duration of effect of amphetamines and enhance the effect of quinidine.
Ciclosporin: Acetazolamide may elevate ciclosporin levels.
Methenamine: Acetazolamide may prevent the urinary antiseptic effect of methenamine.
Lithium: Acetazolamide increases lithium excretion and the blood lithium levels may be decreased.
Sodium bicarbonate: Acetazolamide and sodium bicarbonate used concurrently increases the risk of renal calculus formation.
**DOSAGE AND ADMINISTRATION:**
Glaucoma**:**
Acetazolamide should be used as an adjunct to the usual therapy. The dosage employed in the treatment of chronic simple (open-angle) glaucoma ranges from 250 mg to 1 g of Acetazolamide per 24 hours, usually in divided doses for amounts over 250 mg. It has usually been found that a dosage in excess of 1 g per 24 hours does not produce an increased effect. In all cases, the dosage should be adjusted with careful individual attention both to symptomatology and ocular tension. Continuous supervision by a physician is advisable.
In treatment of secondary glaucoma and in the preoperative treatment of some cases of acute congestive (closed-angle) glaucoma, the preferred dosage is 250 mg every four hours, although some cases have responded to 250 mg twice daily on short-term therapy. In some acute cases, it may be more satisfactory to administer an initial dose of 500 mg followed by 125 mg or 250 mg every four hours depending on the individual case. Intravenous therapy may be used for rapid relief of ocular tension in acute cases. A complementary effect has been noted when Acetazolamide has been used in conjunction with miotics or mydriatics as the case demanded.
Abnormal retention of fluid: Congestive heart failure, drug-induced oedema.
Adults: For diuresis, the starting dose is usually 250 - 375mg (1-1½ tablets) once daily in the morning. If, after an initial response, the patient fails to continue to lose oedema fluid, do not increase the dose but allow for kidney recovery by omitting a day. Best results are often obtained on a regime of 250 - 375mg (1-1½ tablets) daily for two days, rest a day, and repeat, or merely giving the ACETAZOLAMIDE tablets every other day. The use of ACETAZOLAMIDE tablets does not eliminate the need for other therapy, eg. digitalis, bed rest and salt restriction in congestive heart failure and proper supplementation with elements such as potassium in drug-induced oedema.
For cases of fluid retention associated with pre-menstrual tension, a daily dose (single) of 125 - 375mg is suggested.
Epilepsy*:*
It is not clearly known whether the beneficial effects observed in epilepsy are due to direct inhibition of carbonic anhydrase in the central nervous system or whether they are due to the slight degree of acidosis produced by the divided dosage. The best results to date have been seen in petit mal in children.
Good results, however, have been seen in patients, both children and adults, in other types of seizures such as grand mal, mixed seizure patterns, myoclonic jerk patterns, etc. The suggested total daily dose is 8 to 30 mg per kg in divided doses. Although some patients respond to a low dose, the optimum range appears to be from 375 to 1000 mg daily. However, some investigators feel that daily doses in excess of 1 g do not produce any better results than a 1 g dose. When Acetazolamide is given in combination with other anticonvulsants, it is suggested that the starting dose should be 250 mg once daily in addition to the existing medications. This can be increased to levels as indicated above.
The change from other medications to Acetazolamide should be gradual and in accordance with usual practice in epilepsy therapy.
Congestive Heart Failure:
For diuresis in congestive heart failure, the starting dose is usually 250 to 375 mg once daily in the morning (5 mg/kg). If after an initial response, the patient fails to continue to lose edema fluid, do not increase the dose but allow for kidney recovery by skipping medication for a day.
Acetazolamide yields best diuretic results when given on alternate days, or for two days alternating with a day of rest.
Failures in therapy may be due to overdosage or too frequent dosage. The use of Acetazolamide does not eliminate the need for other therapy such as digitalis, bed rest, and salt restriction.
Drug-Induced Edema:
Recommended dosage is 250 to 375 mg of Acetazolamide once a day for one or two days, alternating with a day of rest.
Acute Mountain Sickness:
Dosage is 500 mg to 1000 mg daily, in divided doses using tablets or sustained-release capsules as appropriate. In circumstances of rapid ascent, such as in rescue or military operations, the higher dose level of 1000 mg is recommended. It is preferable to initiate dosing 24 to 28 hours before ascent and to continue for 48 hours while at high altitude, or longer as necessary to control symptoms.
**Note:** The dosage recommendations for glaucoma and epilepsy differ considerably from those for congestive heart failure, since the first two conditions are not dependent upon carbonic anhydrase inhibition in the kidney which requires intermittent dosage if it is to recover from the inhibitory effect of the therapeutic agent.
**OVERDOSAGE:**
No data are available regarding Acetazolamide overdose in humans as no cases of acute poisoning with this drug have been reported.
Animal data suggest that Acetazolamide is remarkably nontoxic. No specific antidote is known. Treatment should be symptomatic and supportive.
Electrolyte imbalance, development of an state, and central nervous effects might be expected to occur. Serum electrolyte levels (particularly potassium) and blood pH levels should be monitored.
Supportive measures are required to restore electrolyte and pH balance. The acidotic state can usually be corrected by the administration of bicarbonate.
Despite its high intra erythrocytic distribution and plasma protein binding properties, Acetazolamide may be dialyzable. This may be particularly important in the management of Acetazolamide overdosage when complicated
by the presence of renal failure.
**PAKAGING:** 2Blisters in carton box,each one contain10 tablets.
**STORAGE CONDTIONS:** Store at room temperature between (15-30)° C.
Keep out of reach of children
RX ONLY

*** THIS IS A MEDICAMENT ***

- Keep out of reach of children.
- A medicament is a product which affects your health, and its consumption contrary to instructions is dangerous for you.
- Follow strictly doctor’s prescriptions, the method of use and instructions of the pharmacist who sold the medicament.
- The doctor and pharmacist are experts in medicine, its benefits and risks.
- Do not by yourself interrupt the period of treatment prescribed for you.
- Do not repeat the same prescription without consulting your doctor.

**( Council of Arab Ministers )** **( Union of Arab Pharmacists )**

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