



Fusid[®]

Frusemide
Diuretic

COMPOSITION

Fusid[®] Tablet : Each tablet contains Frusemide BP 40 mg.

Fusid[®] Injection : Each 2 ml ampoule contains Frusemide BP 20 mg.

PHARMACOLOGY

Fusid[®] (frusemide) is a monosulphonyl diuretic. It is an effective diuretic that retains its activity even in low glomerular filtration rate (GFR). Fusid[®] have a distinctive action on renal tubular function. It affects a peak diuresis far greater than that observed with other agents. Other features are (I) prompt onset of action (II) inhibition of sodium and chloride transport in the ascending limb of the loop of Henle and (III) independence of their action from acid-base balance changes.

Fusid[®] acts primarily to inhibit electrolyte reabsorption in the thick ascending limb of the loop of Henle.

Frusemide is readily absorbed from the gastrointestinal tract and considerable proportions are bound to plasma proteins. It is rapidly excreted in the urine. With an hour after intravenous injection, its effect is evident in about 5 minutes and last for about 2 hours.

INDICATION

Tablet:

Fusid[®] is a diuretic recommended for use in all indications when a prompt and effective diuresis is required. Indications for Fusid[®] tablet 40 mg include cardiac, pulmonary, Hepatic and renal oedema, peripheral oedema due to mechanical obstruction or venous insufficiency and hypertension.

Injection:

Fusid[®] is a diuretic recommended for use when a prompt and effective diuresis is required. The intravenous formulation is appropriate for use in emergencies or when oral therapy is precluded. Indications include cardiac, pulmonary, hepatic and renal oedema.

DOSAGE AND ADMINISTRATION

Tablet:

The usual initial daily dose is 40 mg. In mild cases, 20 mg daily or 40 mg on alternate days may be sufficient, whereas in cases of resistant oedema, daily doses of 80 mg and above may be used.

Children:

Oral doses for children range from 1 to 3 mg /kg body weight daily up to a maximum total dose of 40 mg/day.

Elderly:

In the elderly, Frusemide is generally eliminated more slowly. Dosage should be titrated until the required response is achieved.

Injection:

Fusid[®] injection must always be given slowly. The diuretic effect of Fusid[®] is proportional to the dosage. Doses of 20-50 mg intramuscularly or intravenously may be given initially. If larger doses are required, they should be given by slow infusion and titrated according to response.

Children:

Parenteral doses for children range from 0.5-1.5 mg/kg body weight daily up to a maximum total dose of 20 mg.

Elderly :

In the elderly, frusemide is generally eliminated more slowly. Dosage should be titrated until the required response is achieved.

CONTRAINDICATION AND PRECAUTION

Fusid[®] is contraindicated in anuria, electrolyte deficiency and pre-comatose states associated with liver cirrhosis. Hypersensitivity to frusemide or sulphonamides.

Patients with prostatic hypertrophy or impairment of micturation have an increased risk of developing acute retention. A marked fall in blood pressure may be seen when ACE inhibitors are added to frusemide therapy. The toxic effects of nephrotoxic antibiotics may be increased by concomitant administration of potent diuretics such frusemide.

SIDE EFFECT

As with other diuretics, electrolytes and water balance may be disturbed as a result of diuresis of prolonged therapy. Prolonged use can produce alkalosis. It may also cause uric acid retention and may rarely produce acute gout. Fusid may provoke hyperglycemia and glycosuria.

DRUG INTERACTION

A marked fall in blood pressure may be seen when ACE inhibitors are added to frusemide therapy. Serum lithium levels may be increased when lithium is

Fusid[®]

given concomitantly with frusemide. The toxic effects of nephrotoxic antibiotics may be increased by concomitant administration of potent diuretics such as frusemide.

USE IN PREGNACY AND LACTATION

Fusid[®] should be cautiously used in cardiogenic shock complicated by pulmonary oedema and in the first trimester of pregnancy. Blood pressure and pulse during rapid diuresis should be monitored. Caution should be observed in patients liable to electrolyte deficiency. In case of nursing mother, Fusid[®] may inhibit lactation or may pass into breast milk. In that case it should be used with caution.

STORAGE CONDITION

Fusid[®] tablet/injection should be stored protected from light and in a cool dry place.

HOW SUPPLIED

Fusid[®] tablet : Box containing 10 x 10 tablets in strip pack.

Fusid[®] injection : Box containing 2 x 5 ampoules in blister pack.





Anzitor[®]

Atorvastatin
Statin

COMPOSITION

Anzitor[®] 10 : Each film coated tablet contains Atorvastatin INN 10 mg as Atorvastatin Calcium.

Anzitor[®] 20 : Each film coated tablet contains Atorvastatin INN 20 mg as Atorvastatin Calcium.

PHARMACOLOGY

Anzitor[®] is a selective, competitive inhibitor of HMG-CoA reductase, the rate-limiting enzyme responsible for the conversion of 3-hydroxy-3-methylglutaryl-coenzyme A to mevalonate, a precursor of sterols, including cholesterol. Triglycerides (TG) and cholesterol in the liver are incorporated into VLDL and released into the plasma for delivery to peripheral tissues. Low-density lipoprotein (LDL) is formed from VLDL and is catabolised primarily through the high affinity LDL receptor.

Anzitor[®] lowers plasma cholesterol and lipoprotein levels by inhibiting HMG-CoA reductase and cholesterol synthesis in the liver and increases the number of hepatic LDL receptors on the cell surface for enhanced uptake and catabolism of LDL. Anzitor[®] reduces LDL production and the number of LDL particles. Anzitor[®] produces a profound and sustained increase in LDL receptor activity coupled with a beneficial change in the quality of circulating LDL particles.

Anzitor[®] as well as some of its metabolites are pharmacologically active in humans. The liver is the primary site of action and the principal site of cholesterol synthesis and LDL clearance.

Absorption:

Anzitor[®] is rapidly absorbed after oral administration; maximum plasma concentrations occur within 1 to 2 hours. Extent of absorption increases in proportion of Atorvastatin dose. Anzitor[®] tablets are bioequivalent to Atorvastatin solutions. The absolute bioavailability of Anzitor[®] is approximately 14% and the systemic availability of HMG-CoA reductase inhibitory activity is approximately 30%.

Distribution:

Mean volume of distribution of Anzitor[®] is approximately 381 L. Atorvastatin is $\geq 98\%$ bound to plasma proteins.

Metabolism:

Anzitor[®] is extensively metabolized to ortho- and parahydroxylated

LIPID MODIFYING PREPARATIONS