Furosemide belongs to a family of medicines called diuretics. Diuretics are medicines that increase the excretion of fluids from the body. By increased fluid excretion diuretics also lead to the increased excretion of salt from the body. These effects lower blood pressure and reduce the fluid retention in the body and edema.

**Furosemide indications**

- Water retention in the body caused by heart failure or certain kidney diseases
- High blood pressure due to water retention

**Contraindications**

- Known furosemide allergy
- If you have hypovolemia, or if you lose a large amounts of water, mainly due to severe diarrhea, vomiting, sweating or decreased fluid intake;
- If you are suffering from anuria (*your body produces less amount of urine than normal*)
- If you have kidney failure
- If you have severe hyponatremia or hypokalemia (*low blood levels of sodium or potassium*);
- If you are breastfeeding
Warnings and Precautions

- Patients who have problems with urination, for example: prostate diseases or kidney diseases and urinary tract infections. In such patients, this medicine can cause urinary stasis.
- If you have low blood pressure
- If you have hypovolemia
- If you feel faint or dehydrated, because you lose water due to vomiting, diarrhea, heavy urination or problems with taking food and liquids, caution should be exercised when applying Furosemide. This condition causes eg. sodium, potassium and creatinine in your blood and, if not corrected, the doctor will temporarily discontinue therapy with this medicine.

Your doctor will monitor the progress of your treatment, especially if you have: low blood pressure, diabetes, gout (*joint disease*), liver damage or low concentration of protein in the blood (*hypoproteinemia*).

Drugs to avoid while using Furosemide

Tell your doctor or pharmacist if you are taking any of the following medications:

- Certain antibiotics (*eg, aminoglycosides and cephalosporins*);
- Corticosteroids;
- Lithium and reboxetine (*both used for certain psychiatric disorders*);
- Muscle relaxants;
- Salicylates (*e.g. aspirin*);
- Aminoglutethimide;
- Methotrexate;
- Probenecid;
- Carbenoxolone (*used to treat gastric and duodenal ulcer*);
- Amphoterin (anti-fungal agent);
- Medications used to treat high blood pressure and medications used to treat heart diseases (*e.g, digoxin*). This is particularly important for family of medicines known as ACE inhibitors and angiotensin II receptor antagonists. Your doctor will probably decrease your dose of Furosemide if he wants you to use ACE inhibitors or angiotensin II receptor antagonists.
- Carbamazepine and phenytoin (*used to treat epilepsy*);
- Cyclosporine
- Radiocontrast agents;
- Licorice and its preparations;

Tell your doctor or pharmacist about all the medications you are taking including OTC products.

Furosemide and its use in pregnant woman and breastfeeding mothers

Before you start to use any medicine, you should consult your doctor or pharmacist.
Pregnancy

If you become pregnant, inform your doctor about Furosemide use, and the doctor will decide if the treatment should be continued or not.

Breastfeeding

It is recommended to avoid Furosemide while breastfeeding. But if the treatment must be continued, than you must stop breastfeeding.

Driving motor vehicles and operating machinery

Furosemide may decrease alertness, therefore you should be careful when driving a car or operating machinery.

How to use

Dosage for water retention due to kidney, liver, heart or lung disease

Adults and children over 12 years

Initially 20-80 mg once a day in the morning. In certain cases in order to ensure a rapid urine excretion, dose may be repeated, but only after a lapse of 8 hours after previously administered dose.

The maintenance dose is 20-40 mg per day. The dose may be increased to 80 mg per day in the case of diuretic-resistant edema.

Children aged 6-12 years

In these patients Furosemide should be used only when necessary, in a dose of 1-3 mg/kg of body weight per day, but not more than 40 mg per day.

Furosemide dosage in elderly patients

The dose should be carefully adjusted in elderly patients. Your doctor will decide which dosage is right for you.

Dosage for high blood pressure

Adults

The initial dose of Furosemide is 80 mg, in two divided doses of 40 mg per day. Dosage should be adjusted depending on the therapeutic response of patient. Changes in systolic blood pressure should be monitored carefully if Furosemide is administered concurrently with other medications to treat high blood pressure. In order to prevent a sudden drop in blood pressure, your doctor will probably reduce the dose of these medicine by 50% before you start your treatment with Furosemide.

Furosemide dosage in elderly patients to treat high blood pressure
The dose should be carefully adjusted in elderly patients.

## Side effects

Furosemide can cause following side effects:

- Drop in blood pressure that can result in headaches, dizziness or fainting
- Lack of concentration
- Drowsiness
- Physical weakness
- Vision problems
- Dry mouth.
- Hearing problems (e.g, ringing in the ears)
- Paresthesia ("tingling sensation")
- Allergic reaction
- Kidney damage (blood in the urine and lower back pain)
- Skin rash including purple or red blisters
- Abnormal reaction to sunlight
- Fever
- Itching
- Sore throat
- Bone marrow disorders
- Anemia accompanied by fatigue
- Stomach problems (diarrhea and vomiting)
- Confusion
- Muscle aches
- Muscle weakness
- Muscle spasm
- Heart rhythm disorders
- Dehydration (increased thirst)
- Gout
- Jaundice
- Pancreatitis, which can result in nausea, vomiting and pain in the abdomen

You should see your doctor if you are experiencing any adverse effects.