emergency measures, including gastric lavage, should be considered. Administering activated charcoal or cholestyramine, immediately after the intake of lornoxicam can lead to diminished absorption of the preparation. Gastrointestinal disorders can be treated with a prostaglandin analogue or ranitidine.

STORAGE

- **Dosage:** As directed by the physician.
- Stored below 30°C in a dry place, protect from light.
- To be dispensed on the prescription of a registered medical practitioner only.
- Keep out of the reach of children.

HOW SUPPLIED

Lornox (Lornoxicam) Tablet 8mg are available in blister pack of 10's.

- **خوراک:** ڈاکٹر کی ہدایت کے مطابق استعمال کریں۔
- دوا کو ۳۰ ڈگری سینٹی گریڈ سے کم درجہ حرارت پر روشنی سے بچا کر خشک جگہ پر رکھیں۔
- صرف رجسٹرڈ ڈاکٹر کے نسخے پر ہی فروخت کریں۔
- بچّوں کی پہنچ سے دور رکھیں۔

Manufactured by:
Kaizen Pharmaceuticals (Pvt.) Ltd.
E-127-129, North Western Industrial Zone,
Bin Qasim, Karachi-75020, Pakistan.
Art No. 569

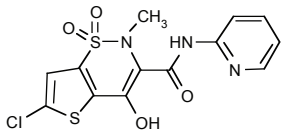
Lornox
(Lornoxicam)
8 mg Film-coated Tablet

لورنوکس
(لورنوکسیکام)
۸ ملی گرام گولیاں

Composition
Lornox 8mg Film-coated Tablet
Each film-coated tablet contains:
Lornoxicam 8mg
(Manufacturer's Specifications)

DESCRIPTION

Lornox (Lornoxicam) is a non-steroidal anti-inflammatory drug (NSAID) of the oxicam class with analgesic properties. Chemically it is described as 6-Chloro-4-hydroxy-2methyl-N-2-pyridinyl-2H-thieno[2,3-e][1,2]-thiazine-3-carboxamide1,1-dioxide.Its molecular formula is $C_{13}H_{10}ClN_3O_4S_2$ and the structural formula is:



Lornoxicam

CLINICAL PHARMACOLOGY

Mechanism of Action

The mode of action of lornoxicam is partly based on inhibition of prostaglandin synthesis (inhibition of cyclo-oxygenaseenzyme). The inhibition of cyclo-oxygenase does not result in an increase formation of leukotriene.
As with other non-steroidal anti-inflammatory drugs the mechanism of the analgesic action of Lornoxicam has not been fully determined.

Pharmacokinetics

Absorption

Lornoxicam is absorbed rapidly and almost completely from the gastrointestinal tract. Maximum plasma concentrations are achieved after approximately 1 to 2 hours. The absolute bioavailability (calculated on AUC) is 90%-100%.

Distribution

Lornoxicam is found in the plasma in unchanged form and as its hydroxylated metabolite. The plasma protein binding of lornoxicam is 99% and not concentration dependent.

Metabolism

Lornoxicam is metabolized completely, and approximately 2/3 is eliminated via liver and 1/3 via kidneys as inactive substance. The hydroxylated metabolite exhibits no pharmacological activity. Lornoxicam (like Diclofenac and other oxicams) is metabolized by cytochrome P450 2C9. Due to genetic polymorphism slow and rapid metabolisers exist for this enzyme, which could result in markedly increased plasma
levels of lornoxicam in slow metabolisers.

Excretion

The mean elimination half-life is 3 to 4 hours. After oral administration about 50% is excreted in the feces and 42% through the kidneys, mainly as 5-hydroxylornoxicam.
levels of lornoxicam in slow metabolisers.

Special population

Elderly

In elderly pateints, the clearance is reduced by 30% to 40%. Apart from this reduced clearance there is no significant change in the kinetic profile of lornoxicam in elderly patients.

Effect of Food
Simultaneous intake of lornoxicam with meals reduces Cmax by approximately 30%, while Tmax increases from 1.5 to 2.3 hours. The absorption of lornoxicam (calculated on AUC) can be reduced by up to 20%.

THERAPEUTIC INDICATIONS
Lornox (Lornoxicam) Tablets are indicated for:
- Short term treatment of moderate pain, such as pain after dental surgery.
- Short term treatment of mild to moderate pain associated with extra articular inflammation.
- Treatment of pain associated with acute lumbo-sciatica.
- Symptomatic treatment of pain and inflammation in osteoarthritis and rheumatoid arthritis.

DOSAGE AND ADMINISTRATION
Lornox (Lornoxicam) Tablets are supplied for oral administration and should be taken before meals with a sufficient quantity of liquid. For all patients the appropriate dosing regimen should be based upon individual response to treatment.

Dosage for the Treatment of Pain
A dose of 8mg to 16mg per day is recommended and should be taken in 2 single doses. The daily dose should not exceed 16mg.

Dosage for the Treatment of Rheumatoid Arthritis and Osteoarthritis .
The recommended daily dose is 8mg-16mg preferably given as 8mg twice daily.

Dosage in case of Impaired Kidney or Liver Function For patients with renal or hepatic impairment the maximal recommended daily dose is reduced to 8mg.

Special population
Elderly
No special dosage modification is required for elderly patients, unless renal or hepatic function is impaired, in which case the daily dosage should be restricted.

ADVERSE REACTIONS
Common
Abdominal pain, diarrhea, dyspepsia, nausea, vomiting, dizziness, headache, increase in blood urea nitrogen and creatinine levels, increase in serum transaminase levels and alkaline phosphatase level.

Uncommon
Constipation, dysphagia, dry mouth, flatulence, gastritis, gastroesophageal reflux, peptic ulceration and/or gastrointestinal bleeding, stomatitis, hemorrhoidal bleeding, thrombocytopenia, increased bleeding time, anemia, decrease in erythrocytes, hemoglobin, leucocytes, alopecia, dermatitis, pruritus, increased sweating ,rash urticaria, purpura, ecchymoses, insomnia,
somnolence, malaise, weakness, flushing, aseptic meningitis, edema, hypertension, palpitations, tachycardia, hypotension, drowsiness, dizziness, vertigo, paraesthesia, tremor,taste perversion, dyspnea, bronchospasm, cough, rhinitis, micturation disorder, agitation, depression, liver function abnormalities, myalgia, leg cramps, conjunctivitis, vision disorders, tinnitus, allergic reactions, alteration in appetite and weight changes.

CONTRAINDICATIONS
Lornoxicam is contraindicated in the following conditions:
- Patients allergic to lornoxicam or any of the component of product.
- Patients who have suffered from hypersensitivity reactions (Asthma, rhinitis, angioedema or urticaria) to other non steroidal anti-inflammatory medicines, including acetylsalicylic acid.
- Patients with gastrointestinal bleeding, cerebrospinal bleeding or other bleeding disorders.
- Patients with active peptic ulceration or with a history of recurrent peptic ulceration.
- Patients with severe liver impairment.
- Patients with severe renal impairment (serum creatinine >700µmol/L).
- Patients with severe heart insufficiency.
- Patients with severe thrombocytopenia.
- Patients who are elderly (>65 years) and weighing less than 50kg and undergoing acute surgery.
- Children (under 18 years).
- During pregnancy and lactation.

PRECAUTIONS
Gastro-intestinal ulceration and bleeding in medical history:
Clinical monitoring at regular intervals is recommended. Patients developing peptic ulceration and/or gastro-intestinal bleeding while taking lornoxicam should discontinue medicine administration with appropriate therapeutic actions being taken.

Renal Impairment
Patients with mild renal impairment (serum creatinine 150- 300µmol/L) should be monitored quarterly, patients with moderate renal impairment (serum creatinine 300- 700µmol/L) should be monitored at 1 to 2 month intervals. Treatment with lornoxicam should be discontinued if renal function deteriorates during treatment.

Patients with coagulation disorders
Careful clinical monitoring and laboratory assessment is recommended (e.g., PTT).

Liver diseases (e.g. liver cirrhosis)
Clinical monitoring and laboratory assessment at regular intervals is recommended (e.g., liver enzymes).

Long term treatment (longer than 3 months)
A regular laboratory assessment of hematology (hemoglobin), renal function (creatinine) and liver enzymes is recommended.

Patients with hypertension and/or obesity
The monitoring of blood pressure and renal function is recommended in this population.

Elderly patients (65 years or above)
In patients 65 years of age and above, it is recommended that the renal and hepatic functions are monitored.

Drug Interactions
Anticoagulants or platelet aggregation inhibitors:
Concomitant administration of lornoxicam with anticoagulants or platelet aggregation inhibitors may prolong the bleeding time.

Sulphonylureas
Concomitant administration of lornoxicam with sulphonylurea may increase the hypoglycemic effect.

Other non-steroidal anti-inflammatory medicines and aspirin Concomitant administration of lornoxicam with other NSAID and aspirin increases the risk of adverse reactions.

Diuretics
Concomitant administration of lornoxicam with diuretics decreases diuretic and antihypertensive effect of loop diuretics and thiazide diuretics.

ACE inhibitors
Concomitant administration of lornoxicam with ACE inhibitor may decrease the antihypertensive effect of the ACE inhibitor and there is a risk of acute renal insufficiency.

Lithium
Concomitant administration of lornoxicam with lithium inhibits renal clearance of lithium, thus causing increased serum concentration of lithium.

Methotrexate
Concomitant administration of lornoxicam with methotrexate may cause an increase in serum concentration of methotrexate and results in increased toxicity.

Cyclosporine
Concomitant administration of lornoxicam with cyclosporine may cause an increase in serum concentration of cyclosporine and may result in nephrotoxicity via renal prostaglandin mediated effects.

Digoxin
Concomitant administration of lornoxicam with digoxin results in decreased renal clearance of digoxin.
Inducers and inhibitors of CYP2C9 Isoenzymes Lornoxicam has interactions with known inducers and inhibitors of CYP2C9 isoenzymes such as phenytoin, amiodarone, miconazole, tranylcypromine and rifampicin.

OVERDOSAGE
An overdose with lornoxicam, the following symptoms can be seen: nausea, vomiting, cerebral symptoms (dizziness, ataxia ascending to coma and cramps). Change of liver and kidney function, may be coagulation disorders.
In the case of a real or suspected overdose, the medication should be withdrawn. Due to its short half-life, lornoxicam is rapidly excreted. Lornoxicam is not dialyzable. No specific antidote is known to date. The usual