8005151-805

For the use only of a Registered Medical Practitioner or a Hospital or a Laboratory

DOMSTAL OD

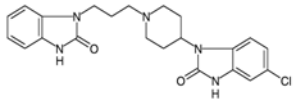
(Domperidone Sustained Release Tablets, 30mg)

COMPOSITION

Each uncoated bilayered sustained release tablet contains Domperidone Maleate B.P. equivalent to Domperidone 30 mg

PROPERTIES

Domperidone is white or almost white powder, practically insoluble in water, soluble in dimethylformamide, slightly soluble in alcohol and in methanol. Chemically it is 5-chloro-1-[1-[3-(2,3- dihydro-2-oxo-1*H*-benzimidazol-1-yl)propyl]piperidin-4-yl]-2,3dihydro-1*H*-benzimidazol-2-one.Its empirical formula is $C_{22}H_{24}ClN_5O_2$ and molecular weight is 425.9. The structure of Domperidone is:



PHARMACOLOGICAL PROPERTIES

PHARMACODYNAMICS

Domperidone is a unique gastrokinetic and antiemetic drug. It is a peripheral dopamine 2-receptor antagonist, regulates the motility of gastric and small intestinal smooth muscle and has been shown to have some effects on the motor function of the esophagus. It increases the duration of antral and duodenal contractions and also lower esophageal sphincter resting pressure thus stimulating gastric emptying both in animals and in man. Antiemetic activity is due to the blockade of dopamine receptors in the chemoreceptor trigger zone. Domperidone increases the frequency, amplitude and duration of duodenal contractions and reduces small bowel transit time. Because very little Domperidone crosses the blood-brain barrier, reports of central nervous system adverse effects, such as dystonic reactions, are rare. It also stimulates prolactin release.

PHARMACOKINETICS

Absorption

Domperidone is rapidly and almost completely (93%) absorbed from gastro-intestinal tract with mean peak concentration (Cmax) values of 18.8, 15.0 and 2.7ng/ml attained at 0.9, 1.2 and 0.6 hours after the administration of base tablet, maleate tablet and solution respectively.

Maximum plasma concentration for sustained release Domperidone formulation [30 mg] was obtained at a T_{max} of 2.417 ± 0.669 hours.

Distribution

The apparent volume of distribution of Domperidone in humans is 440L or 5.7L/kg. It is about 93% bound to the human plasma protein.

Metabolism

Domperidone undergoes rapid and extensive biotransformation by hydroxylation and oxidative N-dealkylation in liver and gut wall.

Excretion

1.4% of the administered drug is excreted unchanged in urine while 10% is excreted in feces; rest is excreted mainly as a glucuronide conjugate in urine. The plasma half-life of Domperidone is 7.5 hours, which may increase up to 20.8 hours in patients with renal failure.

Special populations

Renal Impairment

The plasma half-life of Domperidone may increase up to 20.8 hours in patients with renal failure. However, the contribution of renal clearance to total plasma clearance of Domperidone is so small that accumulation of Domperidone should not occur. Though care must be observed in patients having renal impairment.

Hepatic Impairment

Domperidone gets metabolized in liver; hence in patients with hepatic impairment, plasma concentration might increase.

INDICATIONS

Motility

a. Chronic non-ulcer dyspepsia, functional dyspepsia and postprandial dyspepsia.
b. Gastro paresis.

Nausea and Vomiting

a. Prevention and symptomatic relief from nausea and vomiting of central or local origin.
b. Prevention of cytotoxic therapy, radiotherapy and chemotherapy induced vomiting.
c. Nausea and vomiting associated with L-dopa , bromocriptine and anti-inflammatory drugs.
d. Migraine induced vomiting.

CONTRAINDICATIONS

a. Conditions associated with rise in prolactin level (**prolactinoma**).
b. Known hypersensitivity to the active or inactive ingredients of this formulation.
c. Conditions like **gastrointestinal haemorrhage, obstruction** or **perforation** or any **other condition** where stimulation of gastric motility could be harmful.

PRECAUTIONS

Domperidone can cause a rise in serum prolactin level resulting in **galactorrhea** in females and less frequently **gynecomastia** in males. Hypertensive crises may occur in patients with **phaeochromocytoma**. Caution should be taken in patients with **renal impairment** or those at risk of fluid retention. As Domperidone is highly metabolized in the liver, care should be taken in patients with **hepatic impairment** and in the elderly patients.

Use In Pregnancy and Lactation

Pregnancy

There are no adequate and well-controlled studies of Domperidone during pregnancy. It should be used during pregnancy only if the potential benefit outweighs the potential risk to the fetus.

Lactation

Safety of Domperidone in lactating mothers is not established. Therefore the drug should only be used during such period if considered essential, after advice from the doctor.

ADVERSE REACTIONS

Domperidone is very well tolerated. Adverse reactions generally mild and transient in nature.

Endocrinological : Domperidone as other dopamine antagonist produces a rise in serum prolactin levels which inturn is associated with **galactorrhea, gynecomastia, breast enlargement,** and **reduced libido**.

CNS : Domperidone does not readily cross blood brain barrier and is less likely to interfere with central dopaminergic function but few incidences of **sedation** and acute **extrapyramidal dystonic reactions** were reported with Domperidone.

Hypersensitivity : Occasionally Domperidone can cause **allergic reaction, skin rash** and **urticaria**.

Others: Dry mouth, diarrhea, abdominal cramps, and rarely nervousness.

DRUG INTERACTIONS

Concomitant use of **anticholinergic drugs** and **opioids** may antagonise the beneficial effects of Domperidone on Gastrointestinal tract. Bioavailability of Domperidone is decreased by prior administration of **cimetidine** or **sodium bicarbonate**. Domperidone may reduce the hypoprolactinemic effect of **Bromocriptine**.

DOSAGE AND ADMINISTRATION

For the treatment of chronic non-ulcer dyspepsia, functional dyspepsia, postprandial dyspepsia and gastro paresis.

Adults and Elderly: A single tablet of **DOMSTAL OD** daily 15-30 minutes before meals. A course should not exceed 12 weeks.

For the treatment of nausea and vomiting

Adults and Elderly: A single tablet of **DOMSTAL OD** daily 15-30 minutes before meals.

Children: Not recommended.

DIRECTION FOR USE

SWALLOW WHOLE TABLET, DO NOT CRUSH OR CHEW.

DRUG ABUSE AND DEPENDENCE

DOMSTAL OD has no known potential for abuse or dependence.

OVERDOSAGE

Overdosage has not been reported with Domperidone. There is no specific antidote to Domperidone but in the event of overdosage gastric lavage may be useful.

EXPIRY DATE

Do not use later than the date of expiry.

STORAGE

Store in a cool dry place, protected from light & moisture.

KEEP MEDICATIONS OUT OF REACH OF CHILDREN

PRESENTATION

DOMSTAL OD is available as brown red/peach coloured, round, flat, uncoated bilayered tablets, in strips of 10 tablets.

torrent

Manufactured by :
TORRENT PHARMACEUTICALS LTD.
Vill. Bhud & Makhnu Majra, Baddi-173 205,
Teh. Nalagarh, Dist. Solan (H.P.), INDIA.

Size : 80 x 207