ITP® OD 150mg Tablets

(Itopride Hydrochloride)

DESCRIPTION:
Itopride hydrochloride is an orally active gastroprokinetic agent. Chemically it is N-[4-[2-(Dimethylamino) ethoxy] benzyl]–3,4-dimethoxybenzamide hydrochloride. Emperical formula: $C_{20}H_{26}N_2O_4$ .HCl

COMPOSITION:
ITP OD 150mg tablets
Each extended release film coated tablet contains:
Itopride HCl MS.....150mg

PHARMACOLOGY:
Mechanism of action
Itopride hydrochloride activates gastrointestinal propulsive motility due to its dopamine D2 antagonizing activity and acetylcholinesterase inhibitory activity. Itopride activates acetylcholine release and inhibits its degradation

PHARMACODYNAMICS:
Itopride hydrochloride also has antiemetic action through interaction with D2 receptors located in the chemoreceptor trigger zone. This was demonstrated by dose dependent inhibition of apomorphine-induced vomiting in dogs
In conscious dogs, itopride hydrochloride activates poropulsive gastric motility through dopamine D2 receptor antagonistic actions and dose-dependent inhibition of acetylcholinesterase Itopride hydrochloride has been shown to accelerated gastic emptying in humans, dogs and rats. In single-dose studies in dogs, itopride hydrochloride was shown to promote gastric emptying. The action of itopride hydrochloride is highly specific for the upper gastrointestinal tract. Itopride hydrochloride does not affect serum gastrin levels

PHARMACOKINETICS:
Metabolism
Itopride hydrochloride undergoes extensive hepatic metabolism in humans. Three metabolites have been identified of which only one exerts minor activity without pharmacological relevance (approximately 2-3% of that itopride). The primary metabolite in humans is the N-oxide generated by oxidation of the tertiary amine N-dimethyl group. Itopride hydrochloride is metabolized by a flavin-dependent mono-oxygenase (FMO3). The abundance and efficiency of the human FMO-isoenzymes can be subject to genetic polymorphisms, which can lead to a rare autosomal recessive condition known as trimethylaminuria (fish odor syndrome)

The half-life of itopride hydrochloride may therefore be longer in trimethylaminuria patients. In vivo pharmacokinetic studies on CYP-mediated reactions revealed that itopride hydrochloride showed neither inhibitory nor inductory effect on CYP2C19 and CYP2E1. CYP content and uridine diphosphate glucuronosyl transferase activity were not altered with administration of itopride

Excretion
Itopride hydrochloride and its metabolites are primarily excreted in the urine. The urinary excretions of itopride hydrochloride and N-oxide were 3.7% and 75.4%, respectively. In healthy subjects after single therapeutic dose, the terminal phase half-life of itopride hydrochloride was approximately six (6) hours

INDICATIONS:
Treatment of GI symptoms of functional, non-ulcer dyspepsia (chronic gastritis) i.e., feeling of abdominal pain, heartburn, nausea and vomiting

DOSAGE AND ADMINISTRATION:
Adults
The usual dose of itopride hydrochloride for adult patients is 150mg daily before meals. The dose may be reduced according to the patient's age and symptoms **(see precautions)**

Duration of treatment
In clinical studies, itopride hydrochloride has been administered up to 8 weeks

OR
As directed by the physician

OVERDOSAGE:
There have been no reported cases of overdose in humans. In case of excessive overdose the usual measures of gastric lavage and symptomatic therapy should be applied. There is no evidence of QT prolongation in clinical trials

CONTRAINDICATIONS:
Itopride hydrochloride is contraindicated in patients with known hypersensitivity to Itopride hydrochloride or of any of the excipients. Itopride hydrochloride should not be used in patients with gastrointestinal hemorrhage, mechanical obstruction or perforation

PRECAUTIONS:
General
Itopride hydrochloride enhances the action of acetylcholine and may produce cholinergic side effects

Pregnancy
There are no adequate and well-controlled studies in pregnant women. Itopride hydrochloride should not be used during pregnancy unless the benefits outweigh the potential risks. There are no known effects of itopride hydrochloride on labor or delivery

Lactation
Because itopride hydrochloride is excreted in milk and because of the potential for adverse reactions in nursing infants, 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

Paediatric use
Safety of itopride hydrochloride in children under the age of 16 has not been established

Geriatric use
In general, appropriate caution should be exercised in the administration and monitoring of itopride hydrochloride in elderly patients reflecting the greater frequency of decreased hepatic, renal-function, and of concomitant disease or other drug therapy

ADVERSE REACTIONS:
Reaction during Clinical Trials
In clinical trials (phase I - phase III) itopride hydrochloride was well tolerated and no serious adverse reactions were reported. A total of 19 adverse drug reactions in 14 patients were reported out of 572 cases with an incidence of 2.4%. The majority of these adverse reactions occuring in more than one patient consisted of diarrhea in 4 cases (0.7%, headache in 2 cases (0.3%), and abdorminal pain in 2 cases (0.3%). Abdominal laboratory findings observed in the trials include decreased WBC (leukocytopenia) in 4 cases (0.7%), increased prolactin in 2 cases (0.3%)

The following adverse reactions have been reported in patients receiving itopride hydrochloride:
Blood and lymphatic system disorders
Leukopenia and thrombocytopenia
Immune system disorders
Anaphylactoid reaction
Endocrine disorders
Increased protein prolactin level and gynecomastia
Nervous system disorders
Dizziness, headache and tremor
Gastrointestinal disorders
Diarrhea, constipation, abdominal pain, increased saliva and nausea
Hepato-biliary disorders
Jaundice
Skin and subcutaneous tissue disorders
Rash, redness and itching
Investigations
Increase AST (SGOT), increased ALT (SGPT), increased gamma-GTP, increased alkaline phosphatase and increased bilirubin

DRUG INTERACTIONS:
Metabolic interactions are not expected since itopride hydrochloride is primarily metabolized by flavine monooxygenase and not by CYP450. No changes in protein binding have been seen with coadministration of warfarin, diazepam, diclofenac sodium, ticlopidine hydrochloride, nifedipine and nicardipine hydrochloride. Since itopride hydrochloride has gastrokinetic effects it could influence the absorption of concomitantly orally administered drugs. Particular caution should be taken with drugs with a narrow therapeutic index, sustained release or enteric coated formulations. Anti-ulcer drugs like cimetidine, ranitidine, tepronone and cetraxate do not affect the prokinetic action of itopride. Anticholinergic drugs may reduce the action of itopride hydorchloride

STABILITY:
See expiry on the pack

PRESENTATION:
ITP OD 150mg tablets in a pack of 10's

INSTRUCTIONS:
To be swallowed whole with water
Keep out of reach of children
Avoid exposure to heat, light and humidity
Store between 15 to 30°C
Improper storage may deteriorate the medicine

آئی ٹی پی® او ڈی
(ایٹوپرائیڈ ہائیڈروکلورائیڈ)

۱۵۰ ملی گرام ٹیبلٹ

خوراک: ڈاکٹر کی ہدایت کے مطابق استعمال کریں
ثابت ٹیبلٹ چبائے بغیر پانی سے نگل لیں
بچوں کی پہنچ سے دور رکھیں
دوا کو دھوپ، گرمی اور نمی سے محفوظ ۱۵ سے ۳۰ ڈگری سینٹی گریڈ
کے درمیان میں رکھیں ورنہ دوا خراب ہو جائیگی

Manufactured by:
SAMI Pharmaceuticals (Pvt.) Ltd.
F-95, S.I.T.E., Karachi-Pakistan
www.samipharmapk.com

P001449/S R.N-03/HA/08/16

220 mm

71 mm

ITP® 50mg Tablets

(Itopride Hydrochloride)

DESCRIPTION:
Itopride hydrochloride is an orally active gastroprokinetic agent. Chemically it is N-[4-[2-(Dimethylamino) ethoxy] benzyl]–3, 4-dimethoxybenzamide hydrochloride
Emperical formula: $C_{20}H_{26}N_2O_4$ .HCl

COMPOSITION:
ITP® 50mg tablets
Each film coated tablet contains:
Itopride HCl MS.....50mg

PHARMACOLOGY:
Mechanism of action
ITP® activates gastrointestinal propulsive motility due to its dopamine D2 antagonizing activity and acetylcholinesterase inhibitory activity. ITP® activates acetylcholine release and inhibits its degradation

PHARMACOKINETICS:
Absorption
ITP® is rapidly and almost completely absorbed from the gastrointestinal tract. Relative bioavailability is calculated to be 60% due to liver first pass metabolism. There is no effect of food on bioavailability. Peak plasma levels (Cmax 0.28mcg/ml) are reached after 0.5 to 0.75 hours after 50mg of ITP®

Following multiple oral doses ranging from 50mg to 200mg tid, ITP® and its metabolites showed linear pharmacokinetics over a treatment period of seven days, with minimal accumulation

Distribution
Approximately 96% of ITP® is bound to plasma proteins. Albumin accounts for most of binding. Alpha-1-acid-glycoprotein accounts for less than 15% of binding

Metabolism
ITP® undergoes extensive hepatic metabolism in humans. Three metabolites have been identified of which only one exerts minor activity without pharmacological relevance (approximately 2-3% of that of itopride). The primary metabolite in humans is the N-oxide generated by oxidation of the tertiary amine N-dimethyl group. ITP® metabolized by a flavin-dependent mono-oxygenase (FMO3). The abundance and efficiency of the human FMO-isoenzymes can be subject to genetic polymorphisms, which can lead to a rare autosomal recessive condition known as trimethylaminuria (fish odor syndrome)

The half-life of ITP® may therefore be longer in trimethylaminuria patients. In vivo pharmacokinetic studies on CYP-mediated reactions revealed that ITP® showed neither inhibitory nor inductory effect on CYP2C19 and CYP2E1. CYP content and uridine diphosphate glucuronosyl transferase activity were not altered with administration of ITP®

Excretion
ITP® and its metabolites are primarily excreted in the urine. The urinary excretions of ITP® and N-oxide were 3.7% and 75.4%, respectively. In healthy subjects after oral administration of a single therapeutic dose, the terminal phase half-life of ITP® was approximately six (6) hours

INDICATIONS:
Treatment of GI symptoms of functional, non-ulcer dyspepsia (chronic gastritis) i.e., feeling of bloatedness, upper abdominal pain, heartburn, nausea and vomiting

DOSAGE AND ADMINISTRATION:
Adults
The recommended dose of ITP® for adult patients is 150mg daily [one tablet (50mg) taken orally three times a day. Should be taken on an empty stomach. Take before meals. The dose may be reduced according to the patient's age and symptoms (see precautions)

OR
As directed by the physician

OVERDOSAGE:
There have been no reported cases of overdose in humans. In case of excessive overdose the usual measures of gastric lavage and symptomatic therapy should be applied

CONTRAINDICATIONS:
ITP® is contraindicated in patients with known hypersensitivity to it or of any of the excipients
ITP® should not be used in whom an increase in gastrointestianal motility could be harmful, e.g. gastrointestinal hemorrhage, mechanical obstruction or perforation

PRECAUTIONS:
General
ITP® enhances the action of acetylcholine and may produce cholinergic side effects

Pregnancy
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Lactation
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کے درمیان میں رکھیں ورنہ دوا خراب ہو جائیگی

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