OPRAZOLE ® IV

(omeprazole)

Substance for intravenous infusion 40 mg

ACTION

Oprazole IV (omeprazole), a racemic mixture of two active enantiomers, reduces gastric acid secretion through a highly targeted mechanism of action. It is a specific inhibitor of the acid pump in the parietal cell. It is rapidly acting and provides control through reversible inhibition of gastric acid secretion with once daily dosing.

Site and mechanism of action

Omeprazole is a weak base and is concentrated and converted to the active form in the highly acidic environment of the intracellular canaliculi within the parietal cell, where it inhibits the enzyme H^+,K^+- ATPase -the acid pump. This effect on the final step of the gastric acid formation process is dose-dependent and provides for highly effective inhibition of both basal acid secretion and stimulated acid secretion, irrespective of stimulus.

All pharmacodynamic effects observed can be explained by the effect of omeprazale on acid secretion.

Effect on gastric acid secretion

Intravenous omeprazole produces a dose dependent inhibition of gastric acid secretion in humans. In order to immediately achieve a similar reduction of intragastric acidity as after repeated dosing with 20 mg orally, a first dose of 40 mg intravenously is recommended. This results in an immediate decrease in intragastric acidity and a mean decrease over 24 hours of approximately 90 % for both IV injection and IV infusion.

The inhibition of acid secretion is related to the area under the plasma concentration-time curve (AUC) of omeprazole and not to the actual plasma concentration at a given time.

No tachyphylaxis has been observed during treatment with omeprazole.

INDICATIONS

Duodenal ulcer, gastric ulcer and reflux oesophagitis. Zollinger-Ellison syndrome.

DOSAGE AND ADMINISTRATION

Duodenal ulcer, gastric ulcer and reflux oesophagitis: Patients who cannot be given oral medication can be treated parenterally with 40 mg once daily. The usual treatment period before transfer to oral treatment is 2-3 days.

In Zollinger-Ellison syndrome the dose should be adjusted individually. Higher doses and/or several doses daily may be required.

Intravenous treatment can be given as an infusion over a period of 20- 30 minutes. After reconstitution start the infusion immediately.

Impaired renal function

A dose adjustment is not necessary for patients with impaired renal function.

Impaired liver function

In patients with impaired liver function clearance is greatly reduced.

Elderly patients

A dose adjustment is not necessary in elderly patients.

Children

There is only limited experience of treatment in children.

Preparation:

1. With a syringe draw 5 ml of infusion solution from the infusion bottle or bag.
2. Add the infusion solution to the vial with the freeze-dried Oprazole IV, mix thoroughly making sure all the Oprazole IV is dissolved.
3. Draw the Oprazole IV solution back into the syringe.
4. Transfer the solution into the infusion bottle or bag.
5. Repeat 1-4 to make sure all Oprazole IV is transferred from the vial into the infusion bottle or bag.

Alternative preparation for infusions in flexible containers

1. Use a double ended transfer needle and attach to the injection membrane of the infusion bag. Connect the other needle-end to the vial with freeze dried Oprazole IV.
2. Dissolve the Oprazole IV substance by pumping the infusion solution back and forward between the infusion bag and the vial.
3. Make sure all Oprazole IV is dissolved and remove the empty vial and needle from the bag.

CONTRAINDICATIONS

Known hypersensitivity to omeprazole.

WARNINGS

Suspected ulcer disease must be verified objectively at an early stage by means of X-ray or endoscopy in order to avoid inadequate treatment.

When gastric ulcer is present or suspected or in the presence of any of the following alarm symptoms: significant unintentional weight loss, recurrent vomiting, dysphagia, haematemesis or melena, malignancy should be excluded as treatment may alleviate symptoms and delay diagnosis.

PRECAUTIONS

Pregnancy and lactation

Pregnancy

Well-conducted epidemiological studies indicate no adverse effects of omeprazole on pregnancy or on the health of the fetus/newborn child.

Omeprazole can be used during pregnancy.

Lactation

Omeprazole is excreted in breast milk. Influence, if any, on the child is unknown.

Effects on ability to drive and use machines

Oprazole is not likely to affect the ability to drive or use machines.

Drug interactions:

Effects of omeprazole on the pharmacokinetics of other drugs

The following combinations with Oprazole powder for solution for infusion should be avoided: ketoconazole and itraconazole.

Omeprazole might influence the absorption of other drugs due to its effect on the gastric pH.

The dissolution of ketoconazole tablets in the stomach is adversely affected if the pH of the gastric juice increases as a result of drug treatment (antacids, secretion-inhibiting agents, sucralfate).This leads to ineffective plasma concentrations of ketoconazole. During concomitant administration of omeprazole and itraconazole the plasma concentration and AUC of itraconazole are reduced by approximately 65%, probably as a result of poorer absorption, which is dependent on pH.

Omeprazole inhibits the enzyme CYP2C19 and therefore increased plasma levels of other drugs (diazepam, warfarin, phenytoin) metabolised via this enzyme might be expected. A dose reduction of these drugs may be necessary.

During concomitant administration of clarithromycin or erythromycin and omeprazole the plasma concentrations of omeprazole were increased. The plasma concentrations of omeprazole are not during concomitant administration with amoxicillin or metronidazole.

Effects of other drug on the pharmacokinetics of omeprazole

Drugs inhibiting the enzymes CYP2C19 or CYP3A (HIV protease inhibitors, ketoconazole, itraconazole) might increase the plasma concentrations of omeprazole.

No interactions between omeprazole and antacids, theophylline, caffeine, quinidine, lidocaine, propranolol, metoprolol or ethanol have been detected.

SIDE EFFECTS

The most common symptoms that have been reported in clinical trials with Oprazole have been gastrointestinal, such as diarrhoea, nausea and constipation, and also headache, each one in 1-3% of cases.

Common (<1/100, >1/10)	
General:	Headache
Gastrointestinal:	Diarrhoea, nausea/vomiting, constipation, abdominal pain, flatulence
Less common (<1/1000, >1/100)	
General:	Fatigue
Skin:	Rash, pruritus, urticaria
Liver:	Changes in liver function tests
Neurological:	Paraesthesia, dizziness, drowsiness
Psychiatric:	Sleep disturbance
Rare (<1/10000, >1/1000)	
General:	Increased sweating, peripheral oedema, hyponatraemia. Hypersensitivity reactions such as angioedema, fever and anapnylactic shock
Blood:	Leukopenia, thrombocytopenia, agranulocytosis, paricytopenia
Endocrine:	Gynaecomastia
Gastrointestinal:	Dry mouth, taste disturbances, stomatitis, candidiasis
Skin:	Hair loss, photosensitivity, erythema multiforme
Liver:	Encephalopathy in patients with severe hepatic disease, hepatitis with or without jaundice, liver failure
Respiratory tract:	Bronchospasm
Musculoskeletal:	Arthralgia, muscular weakness and myalgia
Psychiatric:	Reversible confusion, agitation, depression, aggression and hallucinations, especially in severely ill patients
Genitourinary:	Interstitial nephritis
Eyes:	Blurred vision

Isolated cases of Stevens-Johnson syndrome and toxic epidermal necrolysis have been reported, but a relationship with omeprazole could not be established. In severely ill patients, in isolated cases irreversible visual disturbances have been reported in connection with treatment with high doses of omeprazole given as intravenous injection.

However, no causal relationship with omeprazole could be established.

OVERDOSAGE

Intravenous doses up to 270 mg in a day and up to 650 mg over a three-day period have been studied in clinical trials without any dose- related adverse reactions. Symptoms: Dizziness, apathy, headache, tachycardia, nausea, vomiting, flatulence, diarrhoea. See also section side effects.

Special precautions for storage

Store below 30°C. Protect from light. Store vial in the outer pack. Vials that have been taken out of their outer pack can be kept in normal indoor light for up to 24 hours.

Instructions for use and handling

Solution for infusion is obtained by dissolving powder for solution for infusion in 100 ml sodium chloride 0.9% or in 100 ml glucose 5%. The stability of omeprazole is influenced by the pH of the solution for infusion, why no other solvents or quantities should be used for dilution.

Reconstituted solution for infusion must be used within 12 hours after reconstitution with sodium chloride 0.9%. Reconstituted solution for infusion must be used within 6 hours after reconstitution with glucose 5%.

PRESENTATION

Vials

OPRAZOLE IV substance for infusion 40 mg: Omeprazole sodium equivalent to omeprazole 40 mg.

Excipients: Sodium hydroxide, edetate disodium.

THIS IS A MEDICAMENT

- A medicament is a product which affects your health, and its consumption contrary to instructions is dangerous.
- Follow the doctor's prescription strictly, the method of use and the instructions of the pharmacist who sold the medicament.
- The doctor and the pharmacist are experts in medicine, its benefits and risks.
- Do not by yourself interrupt the period of treatment prescribed for you.
- Do not repeat the same prescription without consulting your doctor.

Manufactured by Hikma Italy, SpA, Italy
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Keep medicament out of the reach of children

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