ALLIANCE

Package leaflet: Information for the user

Ranitidine 50mg/2ml Solution for Injection and Infusion

ranitidine hydrochloride

Read all of this leaflet carefully before you start taking this medicine because it contains important information for you.

- Keep this leaflet. You may need to read it again.
- If you have any further questions, ask your doctor or nurse.
- If you get any side effects talk to your doctor or nurse. This includes any possible side effects not listed in this leaflet. See section 4.

The name of this medicine is Ranitidine 50mg/2ml Solution for Injection and Infusion (referred to as Ranitidine Injection throughout this leaflet).

What is in this leaflet:

1. WHAT RANITIDINE INJECTION IS AND WHAT IT IS USED FOR

Ranitidine Injection is a solution for injection or infusion into a vein, or injection into a muscle. It contains ranitidine as the active substance.

Ranitidine is one of a group of medicines called H_2-antagonists that lowers the amount of acid in your stomach.

It is used in adults (including the elderly) to:

- Heal and stop ulcers of the stomach or duodenum (the stomach empties into this part of the intestine)
- Improve problems caused by acid in the food pipe (oesophagus) or too much acid in the stomach. Both of these can cause pain or discomfort sometimes known as 'indigestion', 'dyspepsia' or 'heartburn'
- Stop ulcers from bleeding
- Stop acid coming up from the stomach while under anaesthetic during an operation.

It is used in children (6 months to 18 years) to:

- Heal ulcers in the stomach, or part of the gut that it empties into (the duodenum)
- Heal and stop problems caused by acid in the food pipe (oesophagus) or too much acid in the stomach. Both of these can cause pain or discomfort sometimes known as "indigestion", "dyspepsia" or "heartburn".

2. WHAT YOU NEED TO KNOW BEFORE YOU HAVE RANITIDINE INJECTION

Do not have Ranitidine Injection:

- if you are allergic to ranitidine or to any of the other ingredients in this medicine (listed in Section 6).

If you are not sure talk to your doctor or pharmacist before having Ranitidine Injection.

Warnings and precautions

Talk to your doctor or pharmacist before having Ranitidine Injection:

- If you have stomach cancer
- If you have kidney problems. You will need to have a different amount of Ranitidine Injection.
- If you have a heart problem or a history of heart trouble
- If you have a rare condition called acute porphyria
- If you have had stomach ulcers before
- If you are over 65 years old
- If you have lung disease
- If you are diabetic
- If you have problems with your immune system

If you are not sure if any of the above applies to you, talk to your doctor or pharmacist before having this medicine.

Other medicines and Ranitidine Injection

Tell your doctor or pharmacist if you are taking, have recently taken or might take any other medicines, including medicines that you buy without a prescription and herbal medicines. This is because ranitidine can affect the way some other medicines work. Also some other medicines can affect the way ranitidine works.
In particular tell your doctor or pharmacist if you are taking any of the following medicines:
- lidocaine, a local anaesthetic
- anticoagulants (such as warfarin), used to thin the blood
- propranolol, procainamide or n-acetylprocainamide, for heart problems
- diazepam, for worry or anxiety problems
- phenytoin, for epilepsy
- theophylline, for breathing problems (asthma)
- glipizide, for lowering blood glucose
- atazanavir or delaviridine, for treating HIV infection
- gefitnib for lung cancer
- ketoconazole for fungal infections or thrush
- triazolam for insomnia.

Midazolam may also be given before an operation. Tell your doctor you are taking ranitidine before you have an operation in case he or she wants to give you midazolam.

If you are taking erlotinib, a drug used for the treatment of certain types of cancer, talk to your doctor before you take Ranitidine Injection. Ranitidine contained in Ranitidine Injection may decrease the amount of erlotinib in your blood and your doctor may need to adjust your treatment if it is used while you are receiving erlotinib.

If you are not sure if any of the above applies to you, talk to your doctor, pharmacist or nurse before having Ranitidine Injection.

Pregnancy and breast-feeding
If you are pregnant, might become pregnant or breast-feeding you should not be given this medicine unless your doctor advises it is essential.

Ask your doctor, pharmacist or nurse for advice before taking any medicine, if you are pregnant or breast-feeding.

Driving and using machines
Ranitidine Injection is unlikely to affect your ability to drive or operate machinery

Ranitidine Injection contains Sodium and Potassium
Ranitidine Injection contains less than 1 mmol sodium (23 mg) per 50 mg, i.e. essentially sodium-free.
Ranitidine Injection contains less than 1mmol potassium (39mg) per 50mg, i.e. essentially potassium-free

3. HOW TO HAVE RANITIDINE INJECTION

You will never be expected to give yourself this medicine. It will always be given to you by someone who is trained to do so.

Your doctor will decide the correct dose of Ranitidine Injection for you.
Adults (including the elderly) and adolescents (12 years and older): This can be given by the doctor or nurse in one of three ways:

- As a single injection into a muscle
- As a slow infusion into a vein. This is where the drug is slowly given to you over a few minutes
- As a continuous infusion into a vein. This is where the drug is slowly given to you over a few hours.

The recommended dose for an adult (including the elderly) and adolescents (12 years and older) is 50 mg every 6 to 8 hours, as a single injection into a muscle.

Different doses may also be given to you as a slow infusion or continuous infusion, depending on what condition you are being treated for.

Children and infants (6 months to 11 years): The dose will be given by a slow injection into a vein. The maximum dose is 50mg every 6 or 8 hours. It is usually only given if your child is unable to take ranitidine by mouth.
Kidney disease: If your kidneys are not working properly your doctor may give you a lower dose.

Your doctor or nurse will give you Ranitidine Injection so it is unlikely that you will receive too much. If you think that the effect of Ranitidine Injection is too strong or too weak or you have missed a dose, talk to your doctor or nurse. If you have any further questions on the use of this product, ask your doctor or nurse.

4. POSSIBLE SIDE EFFECTS

Like all medicines, Ranitidine Injection can cause side effects, although not everybody gets them.

Serious side effects

If any of the following happen, tell your doctor or nurse immediately as you may need urgent medical attention:

- Allergic reactions, the signs may include:
  - Severe itching of the skin, rash or hives on the skin
  - Swelling of the hands, feet, ankles, face, lips, tongue, mouth or throat, which may cause difficulties in swallowing or breathing.
  - Swelling on other parts of the body
  - Chest pain, shortness of breath, wheezing or having trouble breathing
  - Unexpected fever and feeling faint especially when standing up
- Kidney problems which can lead to back pain, fever, pain when passing urine, blood in the urine and changes in blood tests
- Severe stomach pains, this may be a sign of something called 'pancreatitis'
- An irregular heartbeat either slower or faster than normal
- Collapse

Other side effects

Tell your doctor at your next visit if you notice any of the following:

- **Uncommon: may affect up to 1 in 100 people**
- Stomach pain
- Constipation
- Feeling sick (nausea).

Rare side effects that may show up in blood tests:

- Increase of serum creatinine in blood (kidney function test)
- Changes to liver function

Check with your doctor as soon as possible if you notice any of the following:

- **Very rare: may affect up to 1 in 10,000 people**
- Depression
- Confusion, hallucinations (seeing or hearing unexplained things)
- Blood changes that may result in unusual tiredness, shortness of breath, being more likely to get infections bruising more easily
- Uncontrolled movements
- Your small blood vessels can become swollen (known as vasculitis). Signs of this can include: a rash, swollen joints or kidney problems
- Headaches (sometimes severe)
- Diarrhoea
- Feeling dizzy or having blurred vision
- Your liver can become swollen. This can lead to nausea (feeling sick) or vomiting (being sick), loss of appetite or generally feeling unwell, itching, fever, yellowing of the skin and eyes or dark coloured urine
- Red blotches or lumps on the skin that may look like targets, unexplained hair loss
- Your joints or muscles are painful and swollen
- If you are a man, sexual impotence (this is normally reversible), tenderness of the breast, breast discharge and/or breast enlargement.

Reporting of side effects

If you get any side effects talk to your doctor or nurse. This includes any possible side effects not listed in this leaflet. You can also report side effects directly via:

UK:
The Yellow Card Scheme at: www.mhra.gov.uk/yellowcard or search for MHRA Yellow Card in the Google Play or Apple App Store..

IE:
HPRA Pharmacovigilance, Earlsfort Terrace, IRL - Dublin 2;
Tel: +353 1 6764971; Fax: +353 1 6762517. Website: www.hpra.ie, E-mail: medsafety@hpra.ie.

By reporting side effects you can help provide more information on the safety of this medicine.

5. HOW TO STORE RANITIDINE INJECTION

Do not store above 25ºC.
Keep ampoules in the carton to protect them from light.
Keep this medicine out of the sight and reach of children.
Ranitidine Injection should not be used after the expiry date which is stated on the ampoule and carton. The expiry date refers to the last day of that month.
Do not throw away any medicines via wastewater or household waste. Ask your pharmacist how to throw away medicines you no longer use. These measures will help to protect the environment.

6. CONTENTS OF THE PACK AND OTHER INFORMATION

What Ranitidine Injection contains
The active substance is ranitidine. One 2ml ampoule contains 50mg of ranitidine as ranitidine hydrochloride.

Other ingredients are sodium chloride, potassium dihydrogen phosphate, disodium hydrogen phosphate dihydrate and water for injections.

What Ranitidine Injection looks like and contents of the pack
Ranitidine Injection is a clear, colourless liquid in amber glass ampoules.
Each carton of Ranitidine Injection contains 5 ampoules.

Marketing Authorisation Holder (UK)
Alliance Pharmaceuticals Limited, Avonbridge House, Bath Road, Chippenham, Wiltshire, SN15 2BB, UK.

Marketing Authorisation Holder (IE)
Alliance Pharma (Ireland) Limited, United Drug House, Magna Drive, Dublin, D24 X0CT, Ireland

Manufacturer:
Kleva S A, 189 Parnithos Avenue, 136 71 Acharnai, Athens, Greece.

This leaflet was last revised in May 2020

The following information is intended for medical or healthcare professionals only:

Ranitidine 50mg/2ml Solution for Injection and Infusion

Please read this information carefully before giving Ranitidine 50mg/2ml Solution for Injection and Infusion (referred to as Ranitidine Injection throughout this leaflet). Please refer to the Summary of Product Characteristics for further details on this product.

Presentation

Each 2ml ampoule of Ranitidine Injection contains 50mg of ranitidine as ranitidine hydrochloride. Product provided in amber glass ampoules, 5 ampoules in a carton.

Pharmaceutical Form

Solution for Injection and Infusion.
Clear, colourless solution.

Indications

Ranitidine Injection is indicated for the treatment of duodenal ulcer, benign gastric ulcer, post - operative ulcer and of Zollinger - Ellison Syndrome.

In the management of conditions where reduction of gastric secretion and acid output is desirable, such as reflux oesophagitis.

As prophylaxis against:

- gastrointestinal haemorrhage from stress ulceration in seriously ill patients
- recurrent haemorrhage in patients with bleeding peptic ulcers
- acid aspiration (Mendelson's Syndrome) before anaesthesia in patients at risk, particularly obstetric patients during labour.

Children (6 months to 18 years): Short term treatment of peptic ulcer. Treatment of gastro-oesophageal reflux, including reflux oesophagitis and symptomatic relief of gastro-oesophageal reflux disease.

Dosage and Method of Administration

See SPC section 5.2 Pharmacokinetic Properties – Special Patient Populations

Recommended rates of administration should not be exceeded as bradycardia in association with rapid administration of ranitidine has been reported rarely.

Adults (including elderly) and adolescents (12 years and older)
Ranitidine Injection may be given as:

- a slow (over two minutes) intravenous injection up to a maximum of 50 mg after dilution to a volume of 20 ml per 50mg dose, which may be repeated every 6 to 8 hours; or
- an intermittent intravenous infusion at a rate of 25 mg per hour for two hours, the infusion may be repeated at 6 to 8 hour intervals; or
- as an intramuscular injection of 50 mg (2ml) every 6 to 8 hours.

In the prophylaxis of haemorrhage from stress ulceration in seriously ill patients or the prophylaxis of recurrent haemorrhage in patients bleeding from peptic ulceration, parenteral administration may be continued until oral feeding commences. Patients considered to be still at risk may then be treated orally with Ranitidine tablets 150 mg twice daily.
In the prophylaxis of upper gastro-intestinal haemorrhage from stress ulceration in seriously ill patients a priming dose of 50 mg as a slow intravenous injection followed by a continuous intravenous infusion of 0.125 - 0.250 mg/kg/hr may be preferred.

Prophylaxis of Mendleson's syndrome:
In patients considered to be at risk of developing acid aspiration, Ranitidine Injection 50 mg may be given intramuscularly or by slow intravenous injection 45 to 60 minutes before induction of general anaesthesia.

Patients with renal impairment: Accumulation of ranitidine with resulting elevated plasma concentrations will occur in patients with severe renal impairment (creatinine clearance less than 50ml/min). Accordingly, it is recommended in such patients that Ranitidine Injection be administered in doses of 25 mg.
Children and infants (6 months to 11 years):
See SPC section 5.2 Pharmacokinetic Properties – Special Patient Populations.
Ranitidine Injection may be given as a slow (over 2 minutes) i.v. injection up to a maximum of 50mg every 6 to 8 hours.
Intravenous therapy in children with peptic ulcer disease is indicated only when oral therapy is not possible.
For acute treatment of peptic ulcer disease and gastro-oesophageal reflux in paediatric patients, Ranitidine injection may be administered at doses that have been shown to be effective for these diseases in adults and effective for acid suppression in critically ill children.

The initial dose (2.0 mg/kg or 2.5 mg/kg, maximum 50mg) may be administered as a slow intravenous infusion over 10 minutes, either with a syringe pump followed by a 3 ml flush with normal saline over 5 minutes, or following dilution with normal saline to 20ml. Maintenance of pH > 4.0 can be achieved by intermittent infusion of 1.5 mg/kg every 6 h to 8 h. Alternatively treatment can be continuous, administering a loading dose of 0.45 mg/kg followed by a continuous infusion of 0.15 mg/kg/hr.

Neonates (under 1 month) (See SPC section 5.2)

Route of administration
Intravenous or intramuscular injection

Special Patient Populations
Children/infants (6 months and above): limited pharmacokinetic data show that there were no significant differences in half-life (range for children 3 years and above: 1.7 - 2.2 h) and plasma clearance (range for children 3 years and above: 9 - 22 ml/min/kg) between children and healthy adults receiving intravenous ranitidine when correction is made for body weight. Pharmacokinetic data in infants is extremely limited but appears to be in line with that for older children.

Patients over 50 years of age:
In patients over 50 years of age, half-life is prolonged (3-4 h) and clearance is reduced, consistent with the age-related decline of renal function. However, systemic exposure and accumulation are 50% higher. This difference exceeds the

effect of declining renal function, and indicates increased bioavailability in older patients.

Neonates (under 1 month): limited pharmacokinetic data from term babies undergoing treatment with Extracorporeal Membrane Oxygenation (EMCO) suggests that plasma clearance following i.v. administration may be reduced (1.5-8.2 ml/min/kg) and the half-life increased in the new-born. Clearance of ranitidine appeared to be related to the estimated glomerular filtration rate in the neonates.

Pharmaceutical Information
Excipients: Sodium chloride, Potassium dihydrogen phosphate, Disodium hydrogen phosphate dihydrate, Water for injections.

Each ampoule contains 2.23mg (0.097mmol) of Sodium and 0.55mg (0.014mmol) of Potassium.

Incompatibilities:
This medicinal product must not be mixed with other medicinal products except with those listed below (see Instructions for Use and Handling)

Shelf-life: 2 years.
Storage Precautions: Do not store above 25ºC. Keep ampoules in the outer carton to protect from light.

Nature of Container: 2 ml solution in amber, type 1 glass ampoules.

Instructions for Use and Handling:
Ranitidine Injection has been shown to be compatible with the following intravenous infusion fluids:

- Sodium Chloride 0.9% w/v
- Dextrose 5% w/v
- Sodium Chloride 0.18% w/v and Dextrose 4% w/v
- Sodium Bicarbonate 4.2% w/v
- Hartmann's solution.

From a microbiological point of view, the product should be used immediately. If not used immediately, in-use storage times and conditions prior to use are the responsibility of the user and would normally not be longer than 24 hours at 2 to 8°C, unless preparation of solutions has taken place in controlled and validated aseptic conditions.

All solutions of Ranitidine Injection should be discarded after use.

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