Front

240 mm

129038

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

℞ Ranitidine Oral Solution IP

RANTAC® SYRUP

COMPOSITION
Each 5ml contains:
Ranitidine Hydrochloride IP
equivalent to Ranitidine……75mg
Flavoured syrup Base…….....q.s.
Colour: Quinoline Yellow WS

DOSAGE FORM/S
Syrup

INDICATIONS
Adults:
Ranitidine Syrup is indicated in adults for:
1. Short-term treatment of active duodenal ulcer. Most patients heal within 4 weeks. Studies available to date have not assessed the safety of ranitidine in uncomplicated duodenal ulcer for periods of more than 8 weeks.
2. Maintenance therapy for duodenal ulcer patients at reduced dosage after healing of acute ulcers.
3. The treatment of pathological hypersecretory conditions (e.g., Zollinger-Ellison syndrome and systemic mastocytosis).
4. Short-term treatment of active, benign gastric ulcer. Most patients heal within 6 weeks and the usefulness of further treatment has not been demonstrated.
5. Maintenance therapy for gastric ulcer patients at reduced dosage after healing of acute ulcers.
6. Treatment of GERD. Symptomatic relief commonly occurs within 24 hours after starting therapy with Ranitidine 150 mg twice daily.
7. Treatment of endoscopically diagnosed erosive esophagitis. Symptomatic relief of heartburn commonly occurs within 24 hours of therapy initiation with Ranitidine 150 mg 4 times daily.
8. Maintenance of healing of erosive esophagitis.

Paediatric
Ranitidine Syrup is indicated in paediatric age group for:
1. Treatment of Duodenal and Gastric Ulcer
2. Maintenance of Healing of Duodenal and Gastric Ulcers
3. Treatment of GERD and Erosive Esophagitis.

DOSE AND METHOD OF ADMINISTRATION
Adults:
Active Duodenal Ulcer: The current recommended adult oral dosage of Ranitidine for duodenal ulcer is 150 mg or 10 mL of syrup (2 teaspoonful of syrup equivalent to 150 mg of ranitidine) twice daily. An alternative dosage of 300 mg or 20 mL of syrup (4 teaspoonful of syrup equivalent to 300 mg of ranitidine) once daily after the evening meal or at bedtime can be used for patients in whom dosing convenience is important. The advantages of one treatment regimen compared to the other in a particular patient population have yet to be demonstrated.
Maintenance of Healing of Duodenal Ulcers: The current recommended adult oral dosage is 150 mg or 10 mL of syrup (2 teaspoonful of syrup equivalent to 150 mg of ranitidine) at bedtime.
Pathological Hypersecretory Conditions (such as Zollinger-Ellison syndrome):
The current recommended adult oral dosage is 150 mg or 10 mL of syrup (2 teaspoonful of syrup equivalent to 150 mg of ranitidine) twice daily. In some patients it may be necessary to administer Ranitidine 150-mg doses more frequently. Dosages should be adjusted to individual patient needs, and should continue as long as clinically indicated. Dosages up to 6 g/day have been employed in patients with severe disease.
Benign Gastric Ulcer:
The current recommended adult oral dosage is 150 mg or 10 mL of syrup (2 teaspoonful of syrup equivalent to 150 mg of ranitidine) twice daily.
Maintenance of Healing of Gastric Ulcers:
The current recommended adult oral dosage is 150 mg or 10 mL of syrup (2 teaspoonful of syrup equivalent to 150 mg of ranitidine) at bedtime.
GERD: The current recommended adult oral dosage is 150 mg or 10 mL of syrup (2 teaspoonful of syrup equivalent to 150 mg of ranitidine) twice daily.
Erosive Esophagitis: The current recommended adult oral dosage is 150 mg or 10 mL of syrup (2 teaspoonful of syrup equivalent to 150 mg of ranitidine) 4 times daily.
Maintenance of Healing of Erosive Esophagitis: The current recommended adult oral dosage is 150 mg or 10 mL of syrup (2 teaspoonful of syrup equivalent to 150 mg of ranitidine) twice daily.
Pediatric Use:
The safety and effectiveness of Ranitidine have been established in the age-group of 1 month to 16 years. There is insufficient information about the pharmacokinetics of Ranitidine in neonatal patients (less than 1 month of age) to make dosing recommendations.
Treatment of Duodenal and Gastric Ulcers:
The recommended oral dose for the treatment of active duodenal and gastric ulcers is 2 to 4 mg/kg twice daily to a maximum of 300 mg/day.
Maintenance of Healing of Duodenal and Gastric Ulcers: The recommended oral dose for the maintenance of healing of duodenal and gastric ulcers is 2 to 4 mg/kg once daily to a maximum of 150 mg/day.
Treatment of GERD and Erosive Esophagitis:
The recommended oral dose is 5 to 10 mg/kg/day, usually given as 2 divided doses.

USE IN SPECIAL POPULATIONS
***Teratogenic Effects*:** Pregnancy Category B.
Ranitidine syrup should be used during pregnancy only if clearly needed.
Nursing Mothers:
Ranitidine is secreted in human milk. Caution should be exercised when Ranitidine is administered to a nursing mother.
Pediatric Use:
The safety and effectiveness of Ranitidine have been established in the age-group of 1 month to 16 years for the treatment of duodenal and gastric ulcers, gastroesophageal reflux disease and erosive esophagitis, and the maintenance of healed duodenal and gastric ulcer (See section Dose And Method Of Administration).
Safety and effectiveness in neonates (less than 1 month of age) have not been established.
Dosage Adjustment for Patients with Impaired Renal Function: On the basis of experience with a group of subjects with severely impaired renal function treated with Ranitidine, the recommended dosage in patients with a creatinine clearance <50 mL/min is 150 mg or 10 mL of syrup (2 teaspoonful of syrup equivalent to 150 mg of ranitidine) every 24 hours. Should the patient's condition require, the frequency of dosing may be increased to every 12 hours or even further with caution. Hemodialysis reduces the level of circulating ranitidine. Ideally, the dosing schedule should be adjusted so that the timing of a scheduled dose coincides with the end of hemodialysis.
Elderly patients are more likely to have decreased renal function, therefore caution should be exercised in dose selection, and it may be useful to monitor renal function.

CONTRA-INDICATIONS
Ranitidine is contraindicated for patients known to have hypersensitivity to the drug or any of the ingredients

WARNINGS & PRECAUTIONS
General:
1. Symptomatic response to therapy with Ranitidine does not preclude the presence of gastric malignancy.
2. Since Ranitidine is excreted primarily by the kidney, dosage should be adjusted in patients with impaired renal function. Caution should be observed in patients with hepatic dysfunction since Ranitidine is metabolized in the liver.
3. Rare reports suggest that Ranitidine may precipitate acute porphyric attacks in patients with acute porphyria. Ranitidine should therefore be avoided in patients with a history of acute porphyria.

Laboratory Tests:
False-positive tests for urine protein may occur during therapy with Ranitidine, and therefore testing with sulfosalicylic acid is recommended.

DRUG INTERACTIONS
Ranitidine has been reported to affect the bioavailability of other drugs through several different mechanisms such as competition for renal tubular secretion, alteration of gastric pH, and inhibition of cytochrome P450 enzymes.
Procainamide: High doses of ranitidine (e.g., such as those used in the treatment of Zollinger-Ellison syndrome) have been shown to reduce the renal excretion of procainamide and N-acetylprocainamide resulting in increased plasma levels of these drugs. Although this interaction is unlikely to be clinically relevant at usual ranitidine doses, it may be prudent to monitor for procainamide toxicity when administered with oral ranitidine at a dose

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Brand Name Font and Size : Zurich XBlk BT 6 pt.

SAP Code: 129038	Country : Domestic	Mfg. Location : Hema Laboratories Pvt. Ltd.	Product Name : Rantac Syrup
Packaging Material : Printed Leaflet	Existing / Reference Art : 126219	Version No.: 1	Date : 09/04/2020
Dimension : 240 x 155 mm (Tolerance ± 1 mm)		Size After Folding : 155 x 30 mm ± 1 mm	Core Dia : NA
Reel Dia : NA	Varnish / Lamination : NA	Roll Unwind Direction : NA	Print Repeat Length : NA
Specification : White Maplitho paper, Printed in English language on both side.		Pantone : PMS 2144C	Folding pattern : 3 Horizontal folds
Grammage: 56 ± 5% gm/m²			
Thickness : NA			
Other Test :			
Reason for Change : Storage condition revised.			
File Path : X:\Artworks\Kiran\AS PER DCGI GUIDELINE\Rantac Infant V1\Open File\ 129038 Rantac Syrup Leaflet.indd			J. B. CHEMICALS & PHARMACEUTICALS LTD.

Artist : Shyam Kawle	Initiated by	Checked by	Approved by	Approved by
Sign & Date				
Designation	Executive - PDD	Sr. Manager - PDD	Regulatory Affairs	V. P. (Supply Chain)

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exceeding 300 mg per day.
Warfarin: There have been reports of altered prothrombin time among patients on concomitant warfarin and ranitidine therapy. Due to the narrow therapeutic index, close monitoring of increased or decreased prothrombin time is recommended during concurrent treatment with ranitidine.
Ranitidine may alter the absorption of drugs in which gastric pH is an important determinant of bioavailability. This can result in either an increase in absorption (e.g., triazolam, midazolam, glipizide) or a decrease in absorption (e.g., ketoconazole, atazanavir, delavirdine, gefitinib). Appropriate clinical monitoring is recommended.
Atazanavir: Atazanavir absorption may be impaired based on known interactions with other agents that increase gastric pH. Use with caution.
Delavirdine: Delavirdine absorption may be impaired based on known interactions with other agents that increase gastric pH. Chronic use of H_2-receptor antagonists with delavirdine is not recommended.
Gefitinib: Gefitinib exposure was reduced by 44% with the co-administration of ranitidine and sodium bicarbonate (dosed to maintain gastric pH above 5.0). Use with caution.
Glipizide: In diabetic patients, glipizide exposure was increased by 34% following a single 150-mg dose of oral ranitidine. Use appropriate clinical monitoring when initiating or discontinuing ranitidine.
Ketoconazole: Oral ketoconazole exposure was reduced by up to 95% when oral ranitidine was co-administered in a regimen to maintain a gastric pH of 6 or above. The degree of interaction with usual dose of ranitidine (150 mg twice daily) is unknown.
Midazolam: Oral midazolam exposure in 5 healthy volunteers was increased by up to 65% when administered with oral ranitidine at a dose of 150 mg twice daily. However, in another interaction study in 8 volunteers receiving IV midazolam, a 300 mg oral dose of ranitidine increased midazolam exposure by about 9%. Monitor patients for excessive or prolonged sedation when ranitidine is co-administered with oral midazolam.
Triazolam: Triazolam exposure in healthy volunteers was increased by approximately 30% when administered with oral ranitidine at a dose of 150 mg twice daily. Monitor patients for excessive or prolonged sedation.

UNDESIRABLE EFFECTS
Central Nervous System: Headache, sometimes severe. Rarely, malaise, dizziness, somnolence, insomnia, and vertigo. Rare cases of reversible mental confusion, agitation, depression, and hallucinations have been reported, predominantly in severely ill elderly patients. Rare cases of reversible blurred vision suggestive of a change in accommodation have been reported. Rare reports of reversible involuntary motor disturbances have been received.
Cardiovascular: As with other H_2-blockers, rare reports of arrhythmias such as tachycardia, bradycardia, atrioventricular block, and premature ventricular beats.
Gastrointestinal: Constipation, diarrhea, nausea/vomiting, abdominal discomfort/pain, and rare reports of pancreatitis.
Hepatic: There have been occasional reports of hepatocellular, cholestatic, or mixed hepatitis, with or without jaundice. In such circumstances, ranitidine should be immediately discontinued. These events are usually reversible, but in rare circumstances death has occurred. Rare cases of hepatic failure have also been reported.
Musculoskeletal:
Rare reports of arthralgias and myalgias.
Hematologic:
Blood count changes (leukopenia, granulocytopenia, and thrombocytopenia) have occurred in a few patients. These were usually reversible. Rare cases of agranulocytosis, pancytopenia, sometimes with marrow hypoplasia, and aplastic anemia and exceedingly rare cases of acquired immune hemolytic anemia have been reported.
Endocrine:
Occasional cases of impotence and loss of libido have been reported in male patients receiving Ranitidine, but the incidence did not differ from that in the general population. Rare cases of breast symptoms and conditions, including galactorrhea and gynecomastia, have been reported in both males and females.
Integumentary:
Rash, including rare cases of erythema multiforme. Rare cases of alopecia and vasculitis.
Other:
Rare cases of hypersensitivity reactions (e.g., bronchospasm, fever, rash, eosinophilia), anaphylaxis, angioneurotic edema, acute interstitial nephritis, and small increases in serum creatinine.

OVERDOSE
There has been limited experience with overdosage. Reported acute ingestions of up to 18 g orally have been associated with transient adverse effects similar to those encountered in normal clinical experience. In addition, abnormalities of gait and hypotension have been reported.
When overdosage occurs, the usual measures to remove unabsorbed material from the gastrointestinal tract, clinical monitoring, and supportive therapy should be employed.

PHARMACODYNAMIC AND PHARMACOKINETIC PROPERTIES
Pharmacodynamic properties:
Ranitidine is a competitive, reversible inhibitor of the action of histamine at the histamine H_2-receptors, including receptors on the gastric cells. Ranitidine does not lower serum Ca^{++} in hypercalcemic states. Ranitidine is not an anticholinergic agent. Serum concentrations necessary to inhibit 50% of stimulated gastric acid secretion are estimated to be 36 to 94 ng/mL. Following a single oral dose of 150 mg, serum concentrations of ranitidine are in this range up to 12 hours. However, blood levels bear no consistent relationship to dose or degree of acid inhibition.

Pharmacokinetics properties:
Absorption:
Ranitidine is 50% absorbed after oral administration, compared to an intravenous (IV) injection with mean peak levels of 440 to 545 ng/mL occurring 2 to 3 hours after a 150-mg dose. The syrup formulations are bioequivalent to the tablets. Absorption is not significantly impaired by the administration of food or antacids. Propantheline slightly delays and increases peak blood levels of ranitidine, probably by delaying gastric emptying and transit time.
Distribution:
The volume of distribution is about 1.4 L/kg. Serum protein binding averages 15%.
Metabolism:
In humans, the N-oxide is the principal metabolite in the urine; however, this amounts to <4% of the dose. Other metabolites are the S-oxide (1%) and the desmethyl ranitidine (1%). The remainder of the administered dose is found in the stool. In patients with hepatic dysfunction (compensated cirrhosis) there are minor, but clinically insignificant, alterations in ranitidine half-life, distribution, clearance, and bioavailability.
Excretion:
The principal route of excretion is the urine, with approximately 30% of the orally administered dose collected in the urine as unchanged drug in 24 hours. Renal clearance is about 410 mL/min, indicating active tubular excretion. The elimination half-life is 2.5 to 3 hours.
Geriatrics:
The plasma half-life is prolonged and total clearance is reduced in the elderly population due to a decrease in renal function. The elimination half-life is 3 to 4 hours. Peak levels average 526 ng/mL following a 150-mg twice-daily dose and occur in about 3 hours.
Pediatrics:
There are no significant differences in the pharmacokinetic parameter values for ranitidine in pediatric patients (from 1 month up to 16 years of age) and healthy adults when correction is made for body weight. The average bioavailability of ranitidine given orally to pediatric patients is 48% which is comparable to the bioavailability of ranitidine in the adult population.

INCOMPATIBILITIES
Not Known.

PACKAGING INFORMATION
Bottle of 20ml/30ml/60ml/100ml

STORAGE AND HANDLING INSTRUCTIONS
Store protected from light, at a temperature not exceeding 25°C. Do not freeze.
Shake well before use.
Exposing this product to very cold temperatures may result in crystallization of the salt or freezing of solution. If this occurs the container should be brought to room temperature by warming and shaking. Before use examine the product to ensure that all the solids are redissolved. This preparation is sensitive to light and must be protected from strong day light and direct exposure to sun. Replace cap securely after each opening.

Marketed by & ® Regd. Trade Mark of :
J. B. Chemicals & Pharmaceuticals Ltd.
Neelam Centre, B Wing, Hind Cycle Road,
Worli, Mumbai 400 030, India.

Manufactured in India by:
Hema Laboratories Pvt. Ltd.
Plot No. 29, Pharma City, Selaqui Industrial Area,
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April 2020

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