**nizatidine** (ni-za-ti-deen)

**Axid, Axid AR**

**Classification**

Therapeutic: antiulcer agents

Pharmacologic: histamine H₂ agonists

**Pregnancy Category B**

### Indications

Duodenal ulcers and benign gastric ulcers. Maintenance therapy for duodenal ulcers after healing of active ulcer(s). Gastroesophageal reflux disease (GERD). Treatment prevention of heartburn, acid indigestion, and sour stomach (OTC use).

### Action

Inhibits the action of histamine at the H₂ receptor site located primarily in gastric parietal cells, resulting in inhibition of gastric acid secretion.

**Therapeutic Effects:**

- Healing and prevention of ulcers
- Decreased symptoms of gastroesophageal reflux
- Decreased secretion of gastric acid

### Pharmacokinetics

**Absorption:** 70–95% absorbed after oral administration.

**Distribution:** Enters breast milk and cerebrospinal fluid.

**Metabolism and Excretion:** 60% excreted unchanged by the kidneys; some hepatic metabolism; at least 1 metabolite has histamine blocking activity.

**Half-life:** 1.6 hr.

### Contraindications/Precautions

**Contraindicated in:**

- Hypersensitivity.

**Use Cautiously in:**

- Geri: More susceptible to adverse CNS reactions; dosage recommended; Renal impairment (more susceptible to adverse CNS reactions; dosage recommended if CCr ≤ 50 mL/min);
- OB, Lactation: Pregnancy or lactation.

### Adverse Reactions/Side Effects

**CNS:** confusion, dizziness, drowsiness, hallucinations, headache

**CV:** arrhythmias.

**GI:** diarrhea, drug-induced hepatitis, nausea, 

**GU:** erectile dysfunction.

**Endo:** gynecomastia, Herpetic

**Hemat:** anemia, neutropenia, thrombocytopenia

**Misc:** hypersensitivity reactions.

### Drug Interactions

**Drug-Delay:** absorption of ketoconazole, Antacids, Sucralfate.

**Route/Dosage**

**PO (Adults):**

- Short-term treatment of active ulcers—300 mg once daily at bedtime.
- Duodenal ulcer prophylaxis—150 mg once daily at bedtime.
- GERD—150 mg twice daily.
- OTC use—75 mg 30–60 min before foods/beverages expected to cause symptoms.

**Renal Impairment**

**PO (Adults):**

- Short-term treatment of active ulcers—CCr 20–50 mL/min—150 mg once daily; CCr ≤ 20 mL/min—150 mg every other day; 
- Duodenal ulcer prophylaxis—CCr 20–50 mL/min—150 mg every other day; CCr ≤ 20 mL/min—150 mg every 3 days.

### Nursing Implications

**Assessment**

- Assess patient for epigastric or abdominal pain and frank or occult blood in the stool, emesis, or gastric aspirate.
- Assess geriatric and debilitated patients routinely for confusion. Report promptly.
- Lab Test Considerations: Monitor CBC with differential periodically during therapy.
- Antagonizes effects of pentagastrin and histamine during gastric acid secretion testing. Avoid administration for 24 hr preceding the test.
- May cause false-negative results in skin tests using allergenic extracts. Histamine H₂ antagonists should be discontinued 24 hr before the test.
- May cause false-positive results in urine tests using phenolic extracts. Histamine H₂ antagonists should be discontinued 24 hr before the test.
- May also cause elevated parathyroid concentrations.
- May cause false-positive tests for urobilinogen.

### Potential Nursing Diagnoses

- Acute pain (Indications)
Implementation

- If antacids or sucralfate are used concurrently for relief of pain, avoid administration of antacids within 30 min–1 hr of nizatidine and take sucralfate 2 hr after nizatidine, may decrease the absorption of nizatidine.
- PO: Solution is clear yellow.

Patient/Family Teaching

- Instruct patient to take medication as directed for the full course of therapy, even if feeling better. Take missed doses as soon as remembered but not if almost time for next dose. Do not double doses.
- Advise patients taking OTC preparations not to take the maximum dose for more than 2 wk without consulting health care professional. Seek health care professional if difficulty swallowing or upper abdominal pain persists.
- Inform patient that smoking interferes with the action of histamine antagonists. Encourage patient to quit smoking or at least not to smoke after last dose of the day.
- In case of overdose or diarrhea, caution patient to avoid driving or other activities requiring alertness and response to the drug is known.
- Advise patient to avoid alcohol, products containing aspirin or NSAIDs, and foods that may cause an increase in GI irritation.
- Inform patient that increased fluid and fiber intake and exercise may minimize constipation.
- Advise patient to report onset of black, tarry stools, fever, sore throat, diarrhea, dysentery, rash, confusion, or hallucinations to health care professional promptly.

Evaluation/Desired Outcomes

- Decrease in abdominal pain.
- Prevention of gastric irritation and bleeding. Healing of duodenal ulcers can be seen by endoscopy. Therapy is continued for at least 6 wk in treatment of ulcers but not usually longer than 8 wk.
- Decreased symptoms of esophageal reflux.

Why was this drug prescribed for your patient?