

hydrOXYzine (hye-drox-i-zeen)

Atarax, Hyzine-50,  Multipax, Vistaril

Classification

Therapeutic: antianxiety agents, antihistamines, sedative/hypnotics

Pregnancy Category C

Indications

Treatment of anxiety. Preoperative sedation. Antiemetic. Antipruritic. May be combined with opioid analgesics.

Action

Acts as a CNS depressant at the subcortical level of the CNS. Has anticholinergic, antihistaminic, and antiemetic properties. Blocks histamine 1 receptors. **Therapeutic Effects:** Sedation. Relief of anxiety. Decreased nausea and vomiting. Decreased allergic symptoms associated with release of histamine, including pruritus.

Pharmacokinetics

Absorption: Well absorbed following PO/IM administration.

Distribution: Unknown.

Metabolism and Excretion: Completely metabolized by the liver; eliminated in the feces via biliary excretion.

Half-life: 3 hr.

TIME/ACTION PROFILE (sedative, antiemetic, antipruritic effects)

ROUTE	ONSET	PEAK	DURATION
PO	15–30 min	2–4 hr	4–6 hr
IM	15–30 min	2–4 hr	4–6 hr

Contraindications/Precautions

Contraindicated in: Hypersensitivity; **OB:** Potential for congenital defects (oral clefts and hypoplasia of cerebral hemisphere); **Lactation:** Safety not established.

Use Cautiously in: Severe hepatic dysfunction; **OB:** Has been used safely during labor; **Pedi:** Injection contains benzyl alcohol, which can cause potentially fatal gasping syndrome in neonates; **Geri:** Appears on *Beers list*. Geriatric patients are

more susceptible to adverse reactions due to anticholinergic effects; dosage ↓ recommended.

Adverse Reactions/Side Effects

CNS: drowsiness, agitation, ataxia, dizziness, headache, weakness. **Resp:** wheezing. **GI:** dry mouth, bitter taste, constipation, nausea. **GU:** urinary retention. **Derm:** flushing. **Local:** pain at IM site, abscesses at IM sites. **Misc:** chest tightness.

Interactions

Drug-Drug: Additive CNS depression with other CNS depressants, including alcohol, antidepressants, antihistamines, opioid analgesics, and sedative/hypnotics. Additive anticholinergic effects with other drugs possessing anticholinergic properties, including antihistamines, antidepressants, atropine, haloperidol, phenothiazines, quinidine, and disopyramide. Can antagonize the vasopressor effects of epinephrine.

Drug-Natural Products: Concomitant use of kava-kava, valerian, or chamomile can ↑ CNS depression. ↑ anticholinergic effects with angel's trumpet, jimson weed, and scopolia.

Route/Dosage

PO (Adults): *Antianxiety*—25–100 mg 4 times/day, not to exceed 600 mg/day. *Preoperative sedation*—50–100 mg single dose. *Antipruritic*—25 mg 3–4 times daily.

PO (Children): — 2 mg/kg/day divided q 6–8 hr.

IM (Adults): *Preoperative sedation*—25–100 mg single dose. *Antiemetic, adjunct to opioid analgesics*—25–100 mg q 4–6 hr as needed.

IM (Children): — 0.5–1 mg/kg/dose q 4–6 hr as needed.

NURSING IMPLICATIONS

Assessment

- Assess patient for profound sedation and provide safety precautions as indicated (side rails up, bed in low position, call bell within reach, supervision of ambulation and transfer). **Geri:** Older adults are more sensitive to CNS and anticholinergic effects (delirium, acute confusion, dizziness, dry mouth, blurred vision, urinary retention, constipation, tachycardia). Monitor for drowsiness, agitation, over sedation, and other systemic side effects. Assess falls risk and implement prevention strategies.

 = Canadian drug name.

 = Genetic Implication.

CAPITALS indicate life-threatening, underlines indicate most frequent.

~~Strikethrough~~ = Discontinued.

- **Anxiety:** Assess mental status (orientation, mood, and behavior).
- **Nausea and Vomiting:** Assess degree of nausea and frequency and amount of emesis.
- **Pruritus:** Assess degree of itching and character of involved skin.
- **Lab Test Considerations:** May cause false-negative skin test results using allergen extracts. Discontinue hydroxyzine at least 72 hr before test.

Potential Nursing Diagnoses

Anxiety (Indications)

Impaired skin integrity (Indications)

Risk for injury (Side Effects)

Ineffective coping (Side Effects)

Implementation

- **Do not confuse hydroxyzine with hydralazine or Atarax (hydroxyzine) with Ativan (lorazepam).**
- **PO:** Tablets may be crushed and capsules opened and administered with food or fluids for patients having difficulty swallowing.
- **IM:** Administer *only* IM deep into well-developed muscle, preferably with Z-track technique. Injection is extremely painful. Do not use deltoid site. If must be administered to children, midlateral muscles of the thigh are preferred. Significant tissue damage, necrosis, and sloughing may result from subcut or intra-arterial injections. Hemolysis may result from IV injections. Rotate injection sites frequently.
- **Syringe Compatibility:** atropine, buprenorphine, butorphanol, chlorpromazine, diphenhydramine, doxapram, droperidol, fentanyl, fluphenazine, glycopyrrolate, hydromorphone, lidocaine, meperidine, metoclopramide, midazolam, morphine, nalbuphine, oxymorphone, pentazocine, perphenazine, procaine, prochlorperazine, promethazine, scopolamine, sufentanil.
- **Syringe Incompatibility:** dimenhydrinate, haloperidol, heparin, ketorolac, penicillin G, pentobarbital, phenobarbital, phenytoin.

Patient/Family Teaching

- Instruct patient to take medication exactly as directed. Missed doses should be taken as soon as remembered unless it is almost time for next dose; do not double doses.
- May cause drowsiness or dizziness. Caution patient to avoid driving and other activities requiring alertness until response to medication is known. **Ger:** Warn patients or caregivers that older adults are at increased risk for CNS effects and falls.

- Advise patient to avoid concurrent use of alcohol or other CNS depressants with this medication.
- Inform patient that frequent mouth rinses, good oral hygiene, and sugarless gum or candy may help decrease dry mouth. If dry mouth persists for more than 2 wk, consult dentist about saliva substitute.
- If used for anxiety, advise patient that psychotherapy is beneficial in addressing sources of anxiety and improving coping skills.
- Teach other methods to decrease anxiety, such as increased exercise, support groups, and relaxation techniques.

Evaluation/Desired Outcomes

- Decrease in anxiety.
- Relief of nausea and vomiting.
- Relief of pruritus.
- Sedation when used as a sedative/hypnotic.

Why was this drug prescribed for your patient?