clonazePAM (kloe-na-ze-pam)

- Clonazepam, HCl/PK, Rivotril

### Classification
- Therapeutic: anticonvulsants
- Pharmacologic: benzodiazepines

### Schedule
- IV

### Pregnancy Category
- D

### Indications
- Prophylaxis of: Petit mal, Lennox-Gastaut, Akinetic, Myoclonic seizures. Panic disorder with or without agoraphobia.

### Action
- Anticonvulsant effects may be due to presynaptic inhibition. Produces sedative effects in the CNS, probably by stimulating inhibitory GABA receptors.

### Therapeutic Effects:
- Prevention of seizures. Decreased manifestations of panic disorder.

### Pharmacokinetics
- **Absorption:** Well absorbed from the GI tract.
- **Distribution:** Probably crosses the blood-brain barrier and the placenta.
- **Protein Binding:** 85%.
- **Metabolism and Excretion:** Mostly metabolized by the liver.
- **Half-life:** 18–50 hr.

### Time/Action Profile (anticonvulsant activity)

<table>
<thead>
<tr>
<th>Route</th>
<th>Onset</th>
<th>Peak</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>PO</td>
<td>20–60 min</td>
<td>1–2 hr</td>
<td>6–12 hr</td>
</tr>
</tbody>
</table>

### Contraindications/Precautions
- Contraindicated in: Hypersensitivity to clonazepam or other benzodiazepines; severe hepatic impairment.

### Adverse Reactions/Side Effects
- CNS: SUICIDAL THOUGHTS, behavioral changes, drowsiness, fatigue, slurred speech, ataxia, sedation, abnormal eye movements, diplopia, nystagmus.
- Resp: Secretions.
- CV: Palpitations.
- Derm: Rash.
- GI: Constipation, diarrhea, hepatitis, weight gain.
- GU: Dysuria, nocturia, urinary retention.
- Neuro: Ataxia, hypotonia.
- Misc: Fever, physical dependence, psychological dependence, tolerance.

### Interactions
- **Drug-Drug:** Alcohol, antidepressants, antihistamines, other benzodiazepines, clozapine, levodopa, phenytoin, valproic acid; concurrent use results in CNS depression.
- Cimetidine, hormonal contraceptives, disulfiram, fluoxetine, isoniazid, ketoconazole, metoprolol, propranolol, valproic acid may potentiate, disulfiram, fluoxetine, isoniazid, ketoconazole, metoprolol, propranolol, valproic acid may decrease effectiveness.
- Sedative effects may be potentiated by theophylline.
- Phenobarbital, phenytoin may increase serum levels.

### Route/Dosage
- **PO (Adults):** 0.5 mg 3 times daily; may be increased by 0.5–1 mg q 3 days. Total daily maintenance dose not to exceed 20 mg. Panic disorder—0.125 mg twice daily; after 3 days taper to lowest effective dose. (Some patients may require up to 4 mg/day).
- **PO (Children/H11021 10 yr or 30 kg):** Initial daily dose 0.01–0.03 mg/kg/day (not to exceed 0.05 mg/kg/day) given in 2–3 equally divided doses; q 3 days until therapeutic blood levels are reached (not to exceed 0.2 mg/kg/day).

### Nursing Implications
- **Assessment:**
  - Observe and record intensity, duration, and location of seizure activity.
  - Screen for depression and manifestations of anxiety and mental status (orientation, mood, behavior) prior to and periodically during therapy.

- **Monitoring:**
  - Serum levels.
  - Monitor for adverse effects.

- **Patient/Family Education:**
  - Risk of suicidal thoughts and behaviors.
  - Importance of regular follow-up visits.
  - Avoid alcohol and other CNS depressants.

### Use Cautiously in:
- All patients (may ↑ risk of suicidal thoughts/behaviors).
- Angle-closure glaucoma.
- Obstructive sleep apnea.
- Chronic respiratory disease.
- History of porphyria.
- Do not discontinue abruptly.
- OB: Safety not established; chronic use during pregnancy may result in withdrawal in the neonate.
- Lactation: May enter breast milk; discontinue drug or bottle feed.
- Geri: May experience excessive sedation at usual doses; ↓ dosage recommended.

### Drug Classifications
- Anticonvulsants
- Benzodiazepines

### Other Information
- Discontinued.
Assess need for continued treatment regularly.

Assess patient for drowsiness, unsteadiness, and clumsiness. These symptoms are dose-related and most severe during initial therapy; may decrease in severity or disappear with continued or long-term therapy.

Monitor closely for notable changes in behavior that could indicate the emergence or worsening of suicidal thoughts or behavior or depression.

Lab Test Considerations: Patients on prolonged therapy should have CBC and liver function test results evaluated periodically. May cause an increase in serum bilirubin, AST, and ALT.

May cause an increase in serum sodium, a reduction in serum potassium, and an increase in thyroid hormone levels. May cause a decrease in serum calcium.

Toxicity and Overdose: Therapeutic serum concentrations are 20–80 mg/mL. Flumazenil antagonizes clonazepam toxicity or overdose (may induce seizures in patients with history of seizure disorder or who are on tricyclic antidepressants).

Potential Nursing Diagnoses

Risk for injury (Indications) (Side Effects)

Implementation

Do not confuse clonazepam with clonidine, clozapine, clorazepate, or lorazepam. Do not confuse clonazepam with clonidine.

Institute seizure precautions for patients on initial therapy or undergoing dose manipulations.

PO: Administer with food to minimize gastric irritation. Tablets may be crushed if patient has difficulty swallowing. Administer largest dose on bedtime to avoid daytime sedation. Take up to 0.25 mg every 7 days to decrease signs and symptoms of withdrawal. Some patients may require longer taper periods (months).

Orally disintegrating tablets should be left in the package until use. Remove from the blister pack. Place tablet on tongue. Tablet will dissolve rapidly and be swallowed with saliva. No liquid is needed to take the orally disintegrating tablet.

Patient/Family Teaching

Instruct patient to take medication exactly as directed. Take missed doses within 1 hour or omit; do not double doses. Abrupt withdrawal may cause status epilepticus, tremors, nausea, vomiting, and abdominal and musculoskeletal cramps.

Instruct patient to read the Medication Guide before starting and with each Rx refill or change may occur.

Advise patient that clonazepam is usually prescribed for short-term use and does not cure underlying problems.

Advise patients not to share medication with others.

May cause drowsiness or dizziness. Advise patient to avoid driving or other activities requiring alertness and to consult health care professional before taking any other Rx, OTC, or herbal products. Patients should avoid taking alcohol or other CNS depressants concurrently with this medication.

Advise patients and family to notify health care professional of unusual tremor, nervousness, restlessness, unusual agitation, or sleep disturbances. Patients on anticonvulsant therapy should carry identification at all times describing disease process and medication regimen.

Emphasize the importance of follow-up exams to determine effectiveness of the medication.

Evaluation/Desired Outcomes

Decrease or cessation of seizure activity without undue sedation. Dose adjustments may be required after several months of therapy. Dose adjustments may be required after several months of therapy.

Decrease in frequency and severity of panic attacks.

Relief of leg movements during sleep.

Decrease in pain from neuralgia.

Why was this drug prescribed for your patient?