tiagabine  (tye-a-ga-been)  
Gabitril

**Classification:** Anticonvulsants

**Pregnancy Category:** C

**Indications**

Adjunctive treatment of partial seizures.

**Action**

Enhances the activity of gamma-aminobutyric acid, an inhibitory neurotransmitter.

**Therapeutic Effects:** Decreased frequency of seizures.

**Pharmacokinetics**

**Absorption:** 90% absorbed following oral administration.

**Distribution:** Unknown.

**Protein Binding:** 96%.

**Metabolism and Excretion:** Mostly metabolized by the liver; 2% excreted unchanged in urine.

**Half-life:** Without enzyme-inducing antiepileptic drugs—7–9 hr; with enzyme-inducing antiepileptic drugs—4–7 hr.

**TIME/ACTION PROFILE (blood levels)**

<table>
<thead>
<tr>
<th>ROUTE</th>
<th>ONSET</th>
<th>PEAK</th>
<th>DURATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>PO</td>
<td>unknown</td>
<td>45 min</td>
<td>unknown</td>
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**Contraindications/Precautions**

**Contraindicated in:** Hypersensitivity.

**Use Cautiously in:** All patients (may increase risk of suicidal thoughts/behaviors); Hepatic impairment (dose and/or increased interval may be necessary); Patients receiving concurrent non–enzyme-inducing antiepileptic drug therapy such as valproates (may require lower doses and/or slower titration); Using tiagabine for off-label uses or other conditions leading to high blood levels (may increase risk of new onset seizures); OB, Lactation, Pedi: Pregnancy, lactation, or children <12 yr (safety not established).

**Adverse Reactions/Side Effects**

**CNS:** SUICIDAL THOUGHTS, dizziness, drowsiness, nervousness, weakness, cognitive impairment, confusion, speech or language problems, confusion, fatigue, and drowsiness. Symptoms may decrease with dose reduction or discontinuation.

**EENT:** Abnormal vision, ear pain, tinnitus.

**Resp:** Dyspnea, epistaxis.

**CV:** Chest pain, edema, hypertension, palpitations, tachycardia.

**GI:** Abdominal pain, gastritis, nausea, vomiting, diarrhea, abdominal pain, dyspepsia, dry mouth, indigestion, constipation, abdominal pain.

**GU:** Dysmenorrhea, dysuria, metrorrhagia, urinary incontinence.

**Derm:** Alopecia, dry skin, rash, sweating.

**Metab:** Weight gain, weight loss.

**MS:** Arthralgia, neck pain.

**Neuro:** Ataxia, tremors.

**Misc:** Allergic reactions, chills, lymphadenopathy.

**Interactions**

**Drug-Drug:** Carbamazepine, phenytoin, primidone, and phenobarbital induce metabolism and decrease blood levels; although concurrent therapy is usually necessary, adjustments may be required when altering regimens.

**Route/Dosage**

**PO (Adults ≥18 yr):** 4 mg once daily initially for 1 wk; may be increased by 4–8 mg/day at weekly intervals, up to 56 mg/day in 2–4 divided doses.

**PO (Children 12–18 yr):** 4 mg once daily initially for 1 wk; may be increased by 4 mg/day after 1 wk, then may be increased by 4–8 mg/day at weekly intervals, up to 32 mg/day in 2–4 divided doses.

**NURSING IMPLICATIONS**

**Assessment**

- Assess location, duration, and characteristics of seizure activity.
- Assess mental status. May cause impaired concentration, speech or language problems, confusion, fatigue, and drowsiness. Symptoms may decrease with dose reduction or discontinuation.
- Monitor closely for notable changes in behavior that could indicate the emergence or worsening of suicidal thoughts or behavior or depression.
- **Toxicity and Overdose:** Therapeutic serum levels have not been determined. However, levels may be monitored prior to and following changes in the therapeutic regimen.

**Potential Nursing Diagnoses**

Risk for injury (Side Effects)

**Implementation**

- **PO:** Administer with food.

**Patient/Family Teaching**

- Do not confuse tiagabine with tizanidine.
- PO: Administer with food.
Discontinue tiagabine gradually. Abrupt discontinuation may cause increase in seizure frequency.

Patient/Family Teaching

- Instruct patient to take medication as directed. Take missed doses as soon as possible unless almost time for next dose. Do not double doses. Do not discontinue abruptly; may cause increase in frequency of seizures. Instruct patient to read the Medications Guide before starting and with each Rx refill, changes may occur.
- Advise patient to notify health care professional immediately if frequency of seizures increases.
- May cause dizziness. Caution patient to avoid driving or activities requiring alertness until response to medication is known. Do not resume driving until physician gives clearance based on control of seizure disorder.
- Advise patient and family to notify health care professional if thoughts about suicide or dying, attempts to commit suicide; new or worse depression; new or worse anxiety; feeling very agitated or restless; panic attacks; trouble sleeping; new or worse irritability; acting aggressive; being angry or violent; acting on dangerous impulses; an extreme increase in activity and talking, other unusual changes in behavior or mood occur.
- Advise patient to notify health care professional of all Rx or OTC medications, vitamins, or herbal products being taken and to consult with health care professional before taking other medications.
- Instruct patient to carry identification describing disease process and medication regimen at all times.
- Advise patient to notify health care professional if pregnancy is planned or suspected or if breast feeding.

Evaluation/Desired Outcomes

- Decrease in the frequency or cessation of seizures.

Why was this drug prescribed for your patient?