



Tenex (guanfacine)

Generic name: Guanfacine
Available strengths: 1 mg, 2 mg tablets
Available in generic: Yes
Drug class: Adrenergic agonist

General Information

Tenex (guanfacine) was originally developed for the treatment of high blood pressure (**antihypertensive**), but because of its unique action, it is effective in treating other conditions as well. The U.S. Food and Drug Administration, however, approved Tenex only for use as an antihypertensive. The use of a medication for its approved indications is called its *labeled use*. In clinical practice, however, physicians often prescribe medications for *unlabeled* (“off-label”) uses when published clinical studies, case reports, or their own clinical experiences support the efficacy and safety of those treatments. Tenex has also been found to be effective in the treatment of attention-deficit/hyperactivity disorder (ADHD), tic disorders, Tourette’s syndrome, and other disorders.

How exactly Tenex works in ADHD is unknown. In the areas of the brain that regulate attention, **neurotransmitters** such as **norepinephrine** (nerve cells that utilize norepinephrine are called **adrenergic neurons**) and **dopamine** play a crucial role in maintaining attention and focus. Neurotransmitters are the chemicals in the brain that facilitate **neurotransmission**, the propagation of a signal to different neurons. ADHD may be due to the abnormal regulation of neurotransmission in the area of the brain that regulates attention and focus, and ADHD-associated impairments may be related to diminished levels of dopamine and norepinephrine. Medications that enhance levels of norepinephrine and dopamine, such as amphetamines and methylphenidate (stimulants), are effective in diminishing symptoms of ADHD. Tenex acts on the **receptors** (sites on the surface of nerve cells where neurotransmitters bind) of adrenergic neurons. Tenex is an **adrenergic agonist** because of its action on norepinephrine neurotransmission, which may explain its role in the treatment of ADHD.

Dosing Information

In the treatment of ADHD, Tenex is usually used in combination with a stimulant, such as Ritalin, but it may also be prescribed alone. The usual starting dosage is 0.5 mg/day, with the dosage increased by 0.5 mg every 3 days until an optimal clinical response or the maximum recommended dosage of 4 mg/day is reached.

Common Side Effects

Common side effects reported with Tenex include tiredness, sluggishness, headache, dizziness, drowsiness, dry mouth, constipation, sedation, and dizziness. These side effects are generally mild and become less bothersome after about a week. Side effects usually occur when the medication is being started or during dose increases and generally diminish with continued therapy.

Adverse Reactions and Precautions

Patients should not abruptly discontinue Tenex without consulting their physician. Tenex should be gradually reduced over 2–4 days before stopping in order to avoid unpleasant symptoms associated with abrupt withdrawal. Sudden cessation may result in headaches, nervousness, agitation, tremor, and elevated blood pressure.

Use in Pregnancy and Breastfeeding: Pregnancy Category B

No well-controlled studies have been conducted in pregnant women to determine the safety of Tenex in pregnancy. In animal studies, guanfacine did not produce any evidence of harm to the fetus. However, animal studies are not always predictive of human response, and the effects of Tenex on a human fetus are unknown. Tenex should be used during pregnancy only if the physician and patient both decide it is clearly indicated.

Tenex is not known to be excreted in human breast milk. However, it is not recommended that nursing mothers take Tenex.

Possible Drug Interactions

The drug interactions that have been reported with combinations of Tenex and some medications are summarized in the table below.

Dilantin	Dilantin (phenytoin) can lower the blood levels of Tenex and decrease its effectiveness.
Phenobarbital	Phenobarbital and other barbiturates can lower the blood levels of Tenex and decrease its effectiveness.
Tricyclic antidepressants (e.g., Elavil)	Tricyclic antidepressants, such as Elavil, may interfere with the action of Tenex and decrease its effectiveness.

Tenex may increase the central nervous system depressive effects of other sedative drugs, including alcohol, barbiturates, antihistamines, and centrally acting pain medications. Combining Tenex with alcohol, for example, can increase drowsiness and sedation. Patients should exercise caution when driving or engaging in potentially hazardous activities, such as operating machinery.

Overdose

An overdose of guanfacine can be potentially fatal, especially in younger children. With acute overdose, reported symptoms include sluggishness (**lethargy**), low blood pressure (**hypotension**), slow heart rate (**bradycardia**), and sedation.

Any suspected overdose should be treated as an emergency. The person should be taken to the emergency room for observation and treatment. The prescription bottle of medication (and any other medication suspected in the overdose) should be brought as well, because the information on the prescription label can be helpful to the treating physician in determining the number of pills ingested.

Special Considerations

- If you miss a dose, take it as soon as possible, within 2–3 hours of the scheduled dose. If it is close to the next scheduled dose, skip the missed dose and continue on your regular dosing schedule. Do not take double doses.
- Tenex may be taken with or without food.
- Do not discontinue Tenex without consulting your physician. Tenex should be decreased gradually before stopping.
- Exercise caution when driving or engaging in potentially hazardous activities, such as operating machinery, because Tenex may increase the central nervous system depressive effects of other sedative drugs, including alcohol, barbiturates, antihistamines, and centrally acting pain medications, and can increase drowsiness and sedation.
- Store the medication in its originally labeled, light-resistant container, away from heat and moisture. Heat and moisture may precipitate breakdown of your medication, and the medication may lose its therapeutic effects.
- Keep your medication out of the reach of children.

If you have any questions about your medication, consult your physician or pharmacist.

Notes

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