

Medication Information for Parents and Teachers

Guanfacine—Tenex, Intuniv

General Information About Medication

Each child and adolescent is different. No one has exactly the same combination of medical and psychological problems. It is a good idea to talk with the doctor or nurse about the reasons a medicine is being used. It is very important to keep all appointments and to be in touch by telephone if you have concerns. It is important to communicate with the doctor, nurse, or therapist. An *advanced practice nurse* (APN) has additional education and training after becoming a registered nurse (RN). Your child's medication may be prescribed by a medical doctor (MD or DO) or an APN. In addition, a *physician assistant* (PA) working with a physician may prescribe certain medications. In this information sheet, "doctor" includes medical doctors as well as APNs and PAs who prescribe medication. Often a nurse (RN) will be part of the team and answer questions and give information.

It is very important that the medicine be taken exactly as the doctor instructs. However, once in a while, everyone forgets to give a medicine on time. It is a good idea to ask the doctor or nurse what to do if this happens. Do not stop or change a medicine without asking the doctor or nurse first.

If the medicine seems to stop working, it may be because it is not being taken regularly. The youth may be "cheeking" or hiding the medicine or forgetting to take it (especially at school). The doses may be too far apart or a different dose or medicine may be needed. Something at school, at home, or in the neighborhood may be upsetting the youth, or he or she may need special help for learning disabilities or tutoring. Please discuss your concerns with the doctor. **Do not just increase the dose.** It is also very important not to decrease the dose or stop the medicine without talking to the doctor first. The problem being treated may come back, or there could be uncomfortable or even dangerous results.

All medicines should be kept in a safe place, out of the reach of children, and should be supervised by an adult. If someone takes too much of a medicine, call the doctor, the poison control center, or a hospital emergency room.

Each medicine has a "generic" or chemical name. Just like laundry detergents or paper towels, some medicines are sold by more than one company under different brand names. The same medicine may be available under a generic name and several brand names. The generic medications are usually less expensive than the brand name ones. The generic medications have the same chemical formula, but they may or may not be exactly the same strength as the brand-name medications. Also, some brands of pills contain dye or other things that can cause allergic reactions. It is a good idea to talk to the doctor and the pharmacist about whether it is important to use a specific brand of medicine.

Any medicine can cause an allergic reaction. Examples are hives, itching, rashes, swelling, and trouble breathing. Even a tiny amount of a medicine can cause a reaction in patients who are allergic to that medicine. Be *sure* to talk to the doctor before restarting a medicine that has caused an allergic reaction and tell the doctor about any reactions to medicine that your child has had before.

Taking more than one medicine at the same time may cause more side effects or cause one of the medicines to not work as well. Always ask the doctor, nurse, or pharmacist before adding another

medicine, either prescription or bought without a prescription in a store or on the Internet. Be sure that each doctor knows about *all* of the medicines your child is taking. Also tell the doctor about any vitamins, herbal medicines, or supplements your child may be taking. Some of these may have side effects alone or when taken with this medication. It is a very good idea to keep a list with you of the names and doses of all medicines that your child is taking.

Everyone taking medicine should have a physical examination at least once a year.

If you think that your child may be using drugs or alcohol, please tell the doctor right away.

Pregnancy requires special care in the use of medicine. Some medicines can cause birth defects if taken by a pregnant mother. **Please tell the doctor immediately if you suspect the teenager is at risk of becoming pregnant.** The doctor may wish to discuss sexual behavior and/or birth control with your daughter.

Printed information like this applies to children and adolescents in general. If you have questions about the medicine, or if you notice changes or anything unusual, please ask the doctor or nurse. As scientific research advances, knowledge increases and advice changes. Even experts do not always agree. Many medicines have not been “approved” by the U.S. Food and Drug Administration (FDA) for use in children or use for particular problems. For this reason, use of the medicine for a problem or age group often is not listed in the *Physicians’ Desk Reference*. This does not necessarily mean that the medicine is dangerous or does not work, only that the company that makes the medicine has not received permission to advertise the medicine for use in children. Companies often do not apply for this permission because it is expensive to do the tests needed to apply for approval for use in children. Once a medication is approved by the FDA for any purpose, a doctor is allowed to prescribe it according to research and clinical experience.

Note to Teachers

It is a good idea to talk with the parent(s) about the reason(s) that a medication is being used. If the parent(s) sign consent to release information, it is often helpful for you to talk with the doctor. If the parent(s) give permission, the doctor may ask you to fill out rating forms about your experience with the student’s behavior, feelings, academic performance, and medication side effects. This information is very useful in selecting and monitoring medication treatment. If you have observations that you think are important, do not hesitate to share these with the student’s parent(s) and treating clinicians (with parental consent).

It is very important that the medicine be taken exactly as the doctor instructs. However, everyone forgets to give a medicine on time once in a while. It is a good idea to ask the parent(s) in advance what to do if this happens. Do not stop or change the time you are giving a medicine at school without parental permission. If a medication is to be taken with food, but lunchtime or snack time changes, be sure to notify the parent(s) so appropriate adjustments can be made.

All medicines should be kept in a secure place and should be supervised by an adult. If someone takes too much of a medicine, follow your school procedure for an urgent medical problem.

Taking medicine is a private matter and is best managed discreetly and confidentially. It is important to be sensitive to the student’s feelings about taking medicine.

If you suspect that the student is using drugs or alcohol, please tell the parent(s) or a school counselor right away.

Please tell the parent(s) or school nurse if you suspect medication side effects.

Modifications of the classroom environment or assignments may be useful in addition to medication. The student may need to be evaluated for additional help or a 504 plan or an Individualized Education Plan for learning problems or emotional or behavioral issues.

Any expression of suicidal thoughts or feelings or self-harm by a child or adolescent is a signal of distress and should be taken seriously. These behaviors should not be dismissed as “attention seeking.” School procedures for safety issues should be followed.

What Is Guanfacine (Tenex, Intuniv)?

Guanfacine was first used to treat high blood pressure, so it is sometimes called an *antihypertensive*. Now it is also used to treat symptoms of attention-deficit/hyperactivity disorder (ADHD), Tourette's disorder, chronic tics (fast, repeated movements), and aggression. It comes in brand name Tenex and generic tablets and Intuniv. Intuniv is an extended-release version of guanfacine that is used to treat symptoms of ADHD. It can be used by itself or with stimulant medications also used to treat symptoms of ADHD.

How Can This Medicine Help?

Guanfacine can decrease symptoms of hyperactivity, impulsivity, anxiety, irritability, temper tantrums, explosive anger, and tics. It can increase patience and frustration tolerance as well as improve self-control and cooperation with adults. Guanfacine may be used together with a stimulant medication (methylphenidate or amphetamine) for ADHD or with an atypical or pimozide (Orap) for Tourette's disorder. The positive effects usually do not start for 2 weeks after a stable dose is reached. The full benefit may not be seen for 2–4 months.

How Does This Medicine Work?

Guanfacine works by decreasing the level of excitement in parts of the brain. It is sometimes called an *alpha-adrenergic agonist*. It affects the levels of *norepinephrine*, one of the *neurotransmitters*—a chemical that the brain makes for nerve cells to communicate with each other. This effect helps people with tic disorders to stop moving or making noises when they do not want to and helps people with ADHD to slow down and think before doing something. It calms parts of the brain that are too excited in people with severe anxiety. This medicine is chemically different from sedatives or tranquilizers, even though it may make your child sleepy when he or she first starts taking it.

How Long Does This Medicine Last?

Although guanfacine lasts 24 hours in the body after a dose, when children take it for problems with emotions or behavior the short-acting form must be taken three times a day. The extended-release version, Intuniv, is taken once a day.

How Will the Doctor Monitor This Medicine?

The doctor will review your child's medical history and physical examination before starting guanfacine. The doctor may order some blood or urine tests to be sure your child does not have a hidden medical condition. Be sure to tell the doctor if your child or anyone in the family has high blood pressure, heart disease, fainting, diabetes, or kidney disease. If Intuniv is being considered, tell the doctor if your child cannot swallow pills. The doctor also may want to obtain an ECG (electrocardiogram or heart rhythm test) before starting the medicine. The doctor or nurse will measure your child's height, weight, pulse, and blood pressure before starting guanfacine.

After the medicine is started, the doctor will want to have regular appointments with you and your child to see how the medicine is working, to see if a dose change is needed, to watch for side effects, to see if guan-

facine is still needed, and to see if any other treatment is needed. The doctor or nurse will check your child's height, weight, pulse, and blood pressure.

What Side Effects Can This Medicine Have?

Any medicine can have side effects, including an allergy to the medicine. Because each patient is different, the doctor will monitor the youth closely, especially when the medicine is started. The doctor will work with you to increase the positive effects and decrease the negative effects of the medicine. Please tell the doctor if any of the listed side effects appear or if you think that the medicine is causing any other problems. Not all of the rare or unusual side effects are listed.

Side effects are most common after starting the medicine or after a dose increase. Many side effects can be avoided or lessened by starting with a very low dose and increasing it slowly—ask the doctor.

Allergic Reaction

Tell the doctor in a day or two (if possible, before the next dose of medicine):

- Hives
- Itching
- Rash

Stop the medicine and get *immediate* medical care:

- Trouble breathing or chest tightness
- Swelling of lips, tongue, or throat

Common, but Usually Mild, Side Effects

The following side effects are more common at first or as the dose is increased. If they do not go away after a week or two, ask the doctor about lowering the dose.

- Daytime sleepiness, especially when bored or not doing anything (usually worst in the first 2–4 weeks)—Do not allow your child to drive, ride a bicycle or motorcycle, or operate machinery if this happens.
- Fatigue or tiredness
- Low blood pressure (rarely a serious problem)
- Dizziness or light-headedness—This side effect is worse when the child stands up quickly, especially when getting out of bed in the morning; try having the child stand up slowly.
- Headache
- Stomachache

If one of the following side effects appears, call the doctor within a day or two:

- Slow pulse rate (heartbeat)
- Insomnia (trouble sleeping)—This may be caused by the medicine wearing off during the night.
- Ringing in the ears

Less Common Side Effects

Call the doctor within a day or two:

- Depression or increased irritability
- Confusion
- Bed-wetting
- Muscle cramps
- Itching
- Runny nose

Less Common, but Serious, Side Effects

Call the doctor *immediately*:

- Severe or increased dizziness or light-headedness
- Fainting

Very Rare, but Serious, Side Effects

Call the doctor *immediately*:

- Irregular heartbeat
- Trouble breathing
- Decreased frequency of passing urine; puffy swelling of the body (especially the legs and feet); sudden headaches with nausea and vomiting—These could be signs of kidney failure.

Side Effects Reported in Adults but Rare in Children

Tell the doctor within a week:

- Dry mouth—Have your child try using sugar-free gum or candy.
- Constipation—Encourage your child to drink more fluids and eat high-fiber foods; if necessary, the doctor may recommend a fiber medicine such as Benefiber or a stool softener such as Colace or mineral oil.
- Low blood pressure
- Weakness
- Nightmares
- Increased blood sugar (mainly in persons with diabetes)
- Sensation of cold or pain in fingers or toes
- Weight gain

Some Interactions With Other Medicines or Food

Please note that the following are only the most likely interactions with other medicines or food.

Increased sleepiness will occur in combination with medications for anxiety (sedatives or tranquilizers), sleep (hypnotics), allergy or colds (antihistamines), psychosis, or seizures (anticonvulsants).

If guanfacine is taken with valproate, the valproate levels may get too high. If taking rifampin, guanfacine levels may be decreased and your doctor may consider increasing the dose. If taking ketoconazole, guanfacine levels may be elevated and your doctor may recommend decreasing the dose of guanfacine.

What Could Happen if This Medicine Is Stopped Suddenly?

Withdrawal effects are rare, but the following could happen:

- Very high blood pressure, even if blood pressure was normal before starting the medicine (*rebound hypertension*): This occurs 2–4 days after withdrawal.
- Temporary worsening of behavioral problems or tics
- Nervousness or anxiety
- Rapid or irregular heartbeat
- Chest pain
- Headache
- Stomach cramps, nausea, vomiting
- Trouble sleeping

Because of these effects, it is important not to stop guanfacine suddenly but to decrease it slowly (taper) as directed by the doctor. It is also important not to miss a dose of guanfacine, because withdrawal symptoms such as heart or blood pressure problems may occur. **Be sure not to let the prescription run out!**

How Long Will This Medicine Be Needed?

There is no way to know how long a person will need to take guanfacine. The parent(s), the doctor, and the school will work together to determine what is right for each patient. Some people need the medicine for a few years; some people may need it longer.

What Else Should I Know About This Medicine?

If a child is sleepy from the guanfacine, something active or interesting to do will help the child to stay awake. Sleeping extra hours will not help. Sleepiness usually decreases as the child gets used to the medicine. If the youth is still sleepy in the daytime after 4 weeks on the same dose, a lower dose or a different medicine may be needed.

Intuniv must be taken whole and swallowed. It should not be chewed, crushed, or broken. Intuniv should not be taken with a high-fat meal, as this can increase blood levels of Intuniv and side effects.

If your child is taking either the short-acting or the extended-release form of guanfacine (Intuniv), your doctor will tell you how to gradually increase to the right dose. If your child stops taking the medication for several days, you should not restart right away at the same dose because your child may become very sleepy or have very low blood pressure. Talk with your doctor about the best way to restart the medication.

Tenex may be confused with Xanax. Intuniv may be confused with Invega. Be sure to check the medicine when you get it from the pharmacy.

