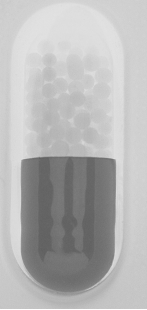


Antianxiety Medications



Benzodiazepines

Ativan (lorazepam)

Librium (chlordiazepoxide)

Klonopin (clonazepam)

Serax (oxazepam)

Tranxene (clorazepate)

Valium (diazepam)

Xanax (alprazolam)

Nonbenzodiazepines

BuSpar (buspirone)

Antianxiety medications, also commonly called minor *tranquilizers*, are used for treating anxiety disorders, which present in different forms. An individual has a specific **phobia** when the anxiety involves undue fears of certain objects or situations and a social disorder when the fear is related to social situations or interactions. **Panic attacks** are episodic and sudden, and the individual is overcome with unexplainable terror reactions, triggering rapid heart rate and breathing, sweating, and an intense state of fear and anxiety. In **generalized anxiety disorder** (GAD), the patient experiences chronic anxiety that causes distress and impairment and is often accompanied with depression. Individuals with **posttraumatic stress disorder** (PTSD) have experienced traumatic and life-threatening events that they relive in recurring dreams and flashbacks. Often the patient is seized with terror, anxiety, and guilt. People who experience reoccurring and new disturbing thoughts and who act out repetitive and compulsive behaviors to relieve these distressing thoughts have **obsessive-compulsive disorder** (OCD).

Before the introduction of benzodiazepines, the **barbiturates** were widely used for treating anxiety and sleep disorders. Phenobarbital and other similar long-acting barbiturates were commonly used to treat anxiety and to assist in bedtime sleep. With the release of Valium (diazepam) and Librium (chlordiazepoxide) in the 1960s, the benzodiazepines replaced the barbiturates for treatment of anxiety and sleep disorders. Benzodiazepines are prescribed more often than barbiturates because they have a higher margin of safety in overdose; in fact, benzodiazepines are the most frequently prescribed of all antianxiety and hypnotic agents. However, benzodiazepines are associated with abuse, dependence, and withdrawal symptoms and thus are regulated under state and federal laws as controlled substances.

BuSpar (buspirone), a nonbenzodiazepine, is another agent used for treatment of anxiety. Unlike the benzodiazepines, buspirone is not associated with dependence and withdrawal symptoms and is not regulated as a controlled substance.

Antidepressants also are effective for treating various anxiety disorders, such as panic disorder, GAD, PTSD, and OCD.

Benzodiazepines

Valium and Librium are the most familiar benzodiazepines of the anti-anxiety medications. Other benzodiazepines, such as Dalmane (flurazepam) and Halcion (triazolam), are marketed primarily for treating insomnia. The distinction of a benzodiazepine for use as an **anxiolytic** (i.e., a medication that relieves anxiety) or **hypnotic** (i.e., a medication that induces sleep) is somewhat arbitrary because any benzodiazepine can be used to treat anxiety or insomnia, depending on the dose. Benzodiazepines prescribed primarily for sleep are discussed in separate handouts in the section on **sedative-hypnotics** (see “Medications for Treatment of Insomnia”).

The benzodiazepines’ effectiveness for treating anxiety may be attributed to their pharmacological action in the brain at specific receptor sites. *Receptors* are specific sites on the nerve cell membrane that receive signals from a neurochemical called the **neurotransmitter**. Once a neurotransmitter locks in on the receptor, the neurochemical signal is changed to an electrical or another chemical signal and travels down the neuron. The receptor sites in which benzodiazepines elicit their action are found in various regions of the brain, and the specific receptors are known as **γ -aminobutyric acid (GABA)** receptors. The coupled reaction of benzodiazepines to GABA receptors is inhibitory in that region of the brain. Benzodiazepines’ action on GABA receptors appears to produce their anxiolytic, sedative, and anticonvulsant actions. Valium, for example, is an effective anxiolytic, hypnotic (e.g., anesthesia), and antiseizure medication.

Nonbenzodiazepine Agent: BuSpar (Buspirone)

BuSpar (buspirone) is the only nonbenzodiazepine anti-anxiety medication available in the United States. It is believed that BuSpar exerts its anxiolytic action through its effects on a specific serotonin receptor, much as with **selective serotonin reuptake inhibitor (SSRI)** antidepressants. It may have some effect on GABA receptors, but unlike the benzodiazepines, BuSpar does not have antiseizure activity. BuSpar’s advantage is that it does not produce dependence and withdrawal symptoms with chronic use, as occurs with benzodiazepines.

Antidepressants

SSRIs, as well as some other antidepressants such as Effexor (venlafaxine), are effective for treating anxiety disorders. For example, in addition to carrying an indication for depression, Paxil (paroxetine) has U.S. Food and Drug Administration indications for the treatment of GAD, social anxiety disorder, OCD, panic disorder, and PTSD. Effexor is approved for treating GAD and social anxiety disorder. Zoloft (sertraline), an SSRI, is indicated for treating panic disorder, OCD, and PTSD. Anafranil (clomipramine), a tricyclic antidepressant, is highly effective for treating OCD, whereas other tricyclics and SSRIs are effective in treating panic attacks.

For more information on the use of antidepressants, refer to the individual handouts on antidepressants.