



# NORTH BAY PSYCHIATRIC ASSOCIATES

## Anxiety

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Everybody is familiar with the feeling of anxiety. Certain situations provoke anxiety in just about everyone: worries about money or health, or the well-being of a loved one; fears of speaking in front of a large group of strangers; or hearing an unexpected noise in a dark room late at night. However, the ability to tolerate anxiety varies greatly from person to person. Some people can handle tremendous anxiety—or even *enjoy* feeling fearful or out-of-control!—while others become incapacitated by even minor worries.



Furthermore, different people *experience* anxiety differently. For some, physical symptoms like rapid breathing, pounding heartbeat, and sweating are most prominent, while other people have a more “mental” experience, characterized by fear, worry, and racing thoughts.

Sometimes anxiety can be overwhelming but it is only temporary, such as the kind of anxiety that accompanies a major life event like marriage, a medical procedure, or a change in job. Other times the same degree of anxiety affects a person over a much longer period of time, without any obvious precursor. Before determining the best treatment for your anxiety, it is important to ask yourself whether the anxiety you suffer is due to something that you might be able to *control* or not. Surprisingly, even in situations where we feel helpless and out of control, some measures can be helpful to control our *responses* to anxiety—such as meditation, guided imagery, or just talking to someone about our worries and fears. If these exercises prove fruitless, or if the anxiety is simply too overwhelming even to attempt to overcome it, medications may be helpful.

### What is the physical basis of anxiety?

As mentioned above, we’ve all experienced situations in which we feel a degree of uncertainty and fear about the future. “Fear” is a normal reaction to a danger that can be perceived and defined (like a growling dog about to bite); when we face a fearful situation our nervous systems go on “high alert” and we initiate a “sympathetic response” characterized by the release of epinephrine (adrenaline) and cortisol in our bloodstream. These hormones cause short-term changes like elevated heart rate, faster breathing, tremors and sweats, as well as long-term changes like a weaker immune system, difficulty thinking and concentrating, and a hyperactive “stress response.” Anxiety disorders are, for the most part, sympathetic responses in the *absence* of an obvious stressor or danger (or one that is entirely imaginary!).



The anxiety response requires a structure in the brain’s “limbic system” called the *amygdala*; its activity is usually not under conscious control. It also requires the cortex, a part of our conscious brain, to perceive or imagine the threat. (In fact, this is the part that is usually dysfunctional in anxiety disorders,



as the cortex imagines or creates a threat that is *not* really there!) Finally, the brain sends a signal to the *sympathetic nervous system*, including the adrenal glands, to go on “high alert”—sometimes called the body’s “fight or flight” response.

#### **What does treatment do?**

Many types of treatment exist for anxiety disorders.

**Psychotherapy** can be incredibly helpful in changing the conscious brain’s thought processes—in other words, to “un-learn” the worries and fears that generate a dysfunctional anxiety response. Certain types of **meditation** help to address the hyperactivity of the “unconscious” brain (i.e., the limbic system) and the rest of the body to keep it in a more relaxed and calm state. These are

valuable tools in the management of anxiety because they teach people how to *deal with* situations that generate anxiety, rather than trying to escape them.

Medication can be helpful as well, especially when the response to anxiety is too powerful, or other therapeutic techniques simply don’t work. **Benzodiazepines** are effective over brief periods; they help to slow down the firing of brain cells because they enhance the activity of GABA, a chemical in the brain that essentially tells cells to be less active (benzodiazepines are also used to treat and prevent seizures, by the same mechanism). Over longer periods of time, the most accepted treatment is an antidepressant medication like an **SSRI (selective serotonin reuptake inhibitor)**. Despite the fact that these medicines are called “antidepressants,” it has been shown that they help to decrease anxiety symptoms, probably through their ability to increase serotonin levels. Other medications called **SNRIs (serotonin-norepinephrine reuptake inhibitor)** may also be helpful, for similar reasons.

#### **What are the types of anxiety disorders?**

There are many recognized forms of anxiety disorders, each of which is discussed in greater detail in other handouts on the NBPA website:

- **Generalized anxiety disorder** – characterized by chronic “worrying,” usually about general life problems like money, health, relationships, etc. People often complain that they can’t stop worrying and that their worries freely float from one topic to another.
- **Panic disorder** – characterized by a history of a *panic attack*, which is a sudden and intense rise of anxiety symptoms that can feel frightening and even life-threatening; people with panic disorder typically express anxiety about the possibility they may have another one
- **Agoraphobia** – anxiety experienced when a patient is in an open space, a crowded place, or any other setting in which escape is difficult or impossible
- **Post-traumatic stress disorder** – characterized by a history of a *traumatic event* in which the patient felt at great danger, constant “re-experiencing” of this event, attempts to *avoid* reminders of the event.
- **Obsessive-compulsive disorder (OCD)** – in OCD, patients experience great anxiety when they are unable to engage in a *compulsive ritual* or they try not to think of a particular mental *obsession*, even though they know these compulsions and/or obsessions are meaningless and unimportant
- **Social phobia** – sometimes called “pathological shyness,” this is characterized by extreme anxiety when a patient is in a social situation or contemplates being with other people, resulting in nearly total avoidance of these situations

*Please be sure to check the NBPA website and blog regularly, as we will add up-to-date information about new discoveries in the biology of anxiety disorders, new treatment modalities, and useful tools to help you make the most of your treatment experience.*