

**Depression** Steven Balt, MD

"Depression" is one of the most common symptoms motivating people to seek psychiatric or psychological help. We frequently use the word "depressed" in a non-clinical sense to describe feelings of sadness, loss, grief, or hopelessness. Indeed, it is probably fair to say that we have all felt "depressed" at some time or another in our lives.



For some people, however, depression is more than just a temporary mood state, and it's difficult, if not impossible, to just "snap out of it," as hard as they may try. This is what we call **clinical depression**, and it is a major cause of suffering in people around the world.

In reality, there are many forms of clinical depression. The most common is called **major depressive disorder**, in which a person has a cluster of symptoms (such as hopelessness, guilt, insomnia, loss of appetite) for a defined period of time. A more "subtle" version of this is **dysthymia**, best described as a chronic, low-level depressive mood. Sometimes people with **bipolar disorder** (which will be discussed elsewhere) have bouts of depressed mood interspersed with periods of feeling well, or even "better than well."

# So am I depressed?

If your sadness progresses to the point where you are unable to function at your "normal" level (e.g., if it interferes with work, school, your relationships, or your physical well-being), you are encouraged to seek professional help. When you do so, your provider will ask you a number of questions to determine whether you have depression that might respond to medications and/or to therapy, whether it might simply resolve in time, or whether it represents an aspect of another underlying disorder.

# What exactly makes depression a disorder?

Major depressive disorder, as mentioned above, is more than just "feeling sad." In fact, some people with major depression don't feel "sad" at all, but have problems in other areas. This is because major depression is not just an emotional state, it is a biologically based illness. While we still don't know everything we would like to know about the underlying biology of depression, we do know that the following structures are involved:



• Limbic system – This is the "emotional" part of the brain, which is active in strong emotional states like excitement, anxiety, fear, and sadness. It can be overactive when depressed patients look upon the world with fear, worry, and feelings of incompetence.

• **Frontal cortex** – This part of the brain is responsible for rational thought, decision-making, and planning for the future. People with depression often have *low* activity in areas that are crucial for complex thought or motivation.

- **Hippocampus** Technically a part of the limbic system, this structure is responsible for storage and retrieval of memories; hence people with depression sometimes have difficulty concentrating or recalling facts from the past
- "Stress axis" This is a set of structures including the pituitary gland and the adrenal glands. Patients with depression seem to be in a chronically "stressed" state in which stress hormones like cortisol and adrenaline (epinephrine) are continuously elevated, resulting in further physical problems

## What causes depression?

The short answer is, we really don't know. Some people have a long family history of depression, and are therefore at greater risk of developing depression themselves. Some people become depressed after experiencing significant stressors or losses in their lives. Still others are depressed as a result of chronic substance use or a medical problem that might cause a depressed mood.

You may have heard depression referred to as a "chemical imbalance." The truth is, there are probably *lots* of chemicals, receptors, and brain structures that are affected in depression, so it's more than just an imbalance of one or two brain chemicals. In fact, recent research suggests that depression might from changes during brain development, from excessive stress early in life, or from particular thought processes that become "ingrained" and become difficult to "un-learn." Each of these will respond to treatment in a different way.

## How do you treat depression?

It should come as no surprise that one of the most effective ways to treat depression is with *antidepressant* medications. But there are many types of antidepressants, and not all people respond to these medications the same way. Some people prefer to treat their depression without the use of medications, for example in therapy or with exercise or acupuncture. There's no way to predict which approach is the right one, but your personal preference will always be taken into consideration. You and your provider will work together to determine the right approach for your particular case.



### What are the options?

As mentioned above, there are many medication options for the treatment of depression. These include **serotonin reuptake inhibitors (SSRIs)** like Prozac, Lexapro, and Zoloft; **serotonin-norepinephrine reuptake inhibitors (SNRIs)** like Effexor and Cymbalta; and **norepinephrine-dopamine reuptake inhibitors (NDRIs)** like Wellbutrin. Other agents, such as psychostimulants, lithium, Abilify, Seroquel XR, and thyroid hormone, which are commonly used for other indications, may also be used. Ask your provider about all the options available, to find the combination that's right for you.

The future holds great promise for the treatment of depression. In addition to the medications mentioned above, we hope to find new ways of predicting response to certain medications and combinations, perhaps using genetic testing techniques. Additionally, as we learn more about the contribution of stressful life events, trauma, substance abuse, and other factors to the origins of depression, we are developing new ways of using psychotherapy to help understand and treat depression in individuals. Finally, new developments like transcranial magnetic stimulation (TMS) provide effective, noninvasive means of treating depression.

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 depression, new treatment modalities, and useful tools to help you make the most of your treatment experience.