Medications, Psychotherapy and More

Medications for Depression

A number of different drugs, logically referred to as antidepressants, are used to treat depression.

There are several different types, or classes, of antidepressants. Though there are important differences between the various classes of available drugs, they are similar in the way the work in the brain.

There are gaps (synapses) between nerve cells (neurons) in the brain. In order for neurons to effectively communicate with each other, they rely on chemical messengers, or neurotransmitters, to bridge the synapses that physically separate them. When a neurotransmitter is release from one cell, they cross the synapse and dock with receptors on a neighboring neuron. Once the neurotransmitters spark a chemical reaction in the neighboring neuron, they are released back into the synapse and taken up again—a process known as reuptake—by the original neuron.

In many people with depression, it is believed that neurotransmitters aren't making contact with neighboring neurons long enough to elicit healthy chemical messengering in the brain. Most antidepressants work by slowing the reuptake of these neurotransmitters, giving them more time to stimulate the receptors on neighboring neurotransmitters.

Though there are many neurotransmitters, most medications available today focus on inhibiting the reuptake of three neurotransmitters, known as monamines, responsible for mood: serotonin, norepinephrine and dopamine.

The medications most widely used to treat both major depression and dysthymia inhibit the reputake of serotonin: selective serotonin reuptake inhibitors (SSRIs). There are currently six SSRIs available in the United States: Celexa (citalopram), Lexapro (escitalopram), Prozac (fluoxetine), Paxil (paroxetine), Luvox (fluvoxamine) and Zoloft (sertraline).

Five serotonin-norepinephrine reuptake inhibitors (SNRIs) are also frequently prescribed for the treatment of depression. They are: Cymbalta (duloxetine), Effexor (venlafazine), Pristiq (desvenlafaxine), Remeron (mirtazapine) and nefazodone (formerly available under the brand name Serzone).

An additional drug that is widely used to treat both major depression and dysthymia is Wellbutrin (bupropion). This drug inhibits the reuptake of norepinephrine and dopamine.

For reasons that are not understood, some people respond to one drug and do not respond to another drug in the same class. Additionally, the severity of side effects of each drug varies from person to person. Therefore, if you do not get better after trying one drug or have unacceptable side effects, you are still likely to respond well to another antidepressant. Occasionally, people respond best to a combination of medications and may, in actual fact, have fewer side effects.

These antidepressants are generally the first choice for treating both dysthymia and major depression. They are as effective as the older drugs used to treat depression, and have fewer and less serious potential side effects.

How safe are these drugs medically?

Generally these drugs are very safe. The antidepressants listed above have not been used long enough to study very long-term side effects. However, they are closely related to an older class of antidepressants that have been used for about forty years with no significant long-term adverse reactions. In addition, these drugs are safer for people who may have suicidal impulses; it is very hard for a person to kill themselves with an overdose of these drugs alone.

What if these “first line” antidepressants don’t work?

A group of drugs referred to as cyclic antidepressants, which inhibit the reuptake of serotonin and norepinephrine, are also commonly used for treating major depressive episodes. They are extremely effective; their efficacy equals that of the newer antidepressants and in some situations they may be preferable. In past years they were the first line treatment for major depression, however, they have more side effects than SSRIs and now are usually used for patients who do not respond to SSRIs.

Cyclic antidepressants include: Anafranil (clomipramine), Asendin (amoxapine), Aventyl/Pamelor (nortriptyline); Elavil (amitriptyline), Ludiomil (maprotiline), Norpramin (desipramine), Sinequan/Zonalon (doxepin); Surmontil (trimipramine), Tofranil (imipramine) and Vivactil (protriptyline).

Monoamine oxidase inhibitors (MAOIs) are antidepressants generally used for patients who have not responded to other antidepressant drugs. They work by inhibiting the breakdown, or metabolism, of serotonin, norepinephrine and dopamine.

MOIs are not usually the first choice but can be very effective and seem to work well in certain patients who are considered to have atypical depressions. They are particularly useful for people who have depression combined with panic disorder, although other antidepressants work for this purpose also.

The following MAOIs have comparable effectiveness and similar side effects: Marplan (isocarboxazid), Nardil (phenelzine) and Parnate (tranylcypromine).

Atypical antipsychotics are a class of drug that are most typically used to treat schizophrenia and bipolar disorder. They work by blocking the action of dopamine and serotonin, which can help

relieve some symptoms associated with these two illnesses. More recently, however, they've been approved and prescribed as add-on therapy to be used in combination with antidepressants, notably when antidepressants alone do not adequately treat all symptoms of depression. Abilify (aripiprazole) and Seroquel (quetiapine) are the atypical antipsychotics approved as add-on therapy for depression.

Psychostimulants may sometimes be useful in patients with severe medical illness and especially for people those who are withdrawn and apathetic. Examples of common psychostimulants include Adderall (amphetamine and dextroamphetamine), Cylert (pemoline), Provigil (modafinil) and Ritalin (methylphenidate). They are occasionally used for physically healthy depressed people who do not respond to other medication. They are energizing and work more rapidly than cyclic depressants or MAOIs. None have been approved by the U.S. Food an Drug Administration for depression.

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