Melancholy Maybe: What You Should Know about SSRIs

By Christina Johnson | October 27, 2016

epression and anxiety disorders are the most common mental health conditions in the United States, affecting about a quarter of the adult population (disproportionately women) each year, according to the National Institutes of Mental Health Z.

The most widely prescribed medications for treating depression and anxiety disorders, including post-traumatic stress disorder (PTSD) and obsessive compulsive disorders (OCD), belong to a class of drugs known as selective serotonin reuptake inhibitors (SSRIs).

SSRIs — such as Lexapro, Celexa, Zoloft, Paxil and Prozac — are believed to alleviate symptoms of depression, excessive worry and compulsivity by acting upon the brain's chemistry — specifically by blocking the breakdown and reabsorption of the neurotransmitter serotonin in the spaces between neurons. This selective reuptake inhibition causes serotonin levels to rise, promoting neuronal firing in circuits of the brain associated with mood and anxiety. A closely related class of antidepressants, called serotonin and norepinephrine reuptake inhibitors (SNRIs), block the reabsorption of both serotonin and norepinephrine, another neurotransmitter believed to be important in regulating mood and pain perception. Effexor and Cymbalta are examples of SNRIs.



Kelly Lee, PharmD, associate professor of clinical pharmacy and associate dean at UC San Diego Skaggs School of Pharmacy and Pharmaceutical Sciences, discusses these medications and how to take them to maximize their potential benefits.

Find the drug and dose that works for you

Although SSRIs all have the same mechanism of action, a drug that works for one person may not work for you. The same is true for the dose: A person's gender, body size or age is not a predictor of how much you need to take.

"The brains of people are different," Lee said. "Their ability to respond to a medication is different. We can't predict which medication will work the best and we don't know the effective dose until we see how the patient responds to the medication."

Recognize the side effects

In general, SSRIs are well tolerated, meaning they don't usually have serious lasting side effects. Initially, it is common to experience transient changes in appetite or sleep patterns, or to experience nausea or gastrointestinal discomfort. "These side effects usually go away after a couple weeks," Lee said.

Sexual dysfunction, including delayed orgasm or ejaculatory disorders, is a common chronic side effect of some antidepressants. Teeth grinding or sweating may also persist. A rare and potentially serious side effect of SSRIs is an excessive release of antidiuretic hormone (SIADH $\not c$), which often results in low sodium levels in the blood, a condition known as hyponatremia $\not c$. Long-term use of SSRIs can also reduce bone density, which is why Lee recommends periodic bone density scans for her patients, especially older adults or those who are at risk of osteoporosis. Serotonin does not exist only in the brain, Lee explained, it is found also in the gut and the bloodstream.

Adhere to your medication regimen

If an SSRI works, patients may have a tendency to stop taking it prematurely.

"We do a lot of education on medication adherence because there are many patients who don't understand how the drugs work or feel there is a stigma with a psychiatric diagnosis," Lee said. "A person with type 1 diabetes should not stop taking their insulin. It is similar with a psychiatric condition. There is evidence that if you stop treatment early, your relapse risk is greater. We struggle with this with our patients a lot."

Lee adds that a patient should take a medication at the dose that treats symptoms completely and then remain on medication for another four months or more depending upon past history. "Stopping a medication too early can set patients up for relapse."

Know about drug interactions

SSRIs inhibit the activity of liver enzymes belonging to the cytochrome p450 family z, which is involved in metabolizing many drugs. This means that your SSRI can change the effective dose and toxicity of any drug that also involves this enzyme. Pain killers in the codeine and hydrocodone family are an example. Codeine requires the activity of the cytochrome p450 2D6 enzyme to convert the drug to morphine. Certain SSRIs, such as Paxil, when taken with codeine can suppress pain relief. You should review your medication regimen with your physician or pharmacist regularly and alert them to any changes to the drugs you are taking.

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