

What You Should Know About Serotonin Syndrome

Serotonin is a chemical found in the body. It helps your nerves and brain work. Some drugs increase serotonin levels in the body. Prescription drugs for depression and pain are examples of these drugs. Some nonprescription drugs such as St. John's wort and the cough medicine dextromethorphan (*Robitussin DM* and others) can also increase serotonin levels.

These drugs can cause a condition called **serotonin syndrome**. This is **especially true when two or more of these drugs are used** at the same time. Serotonin syndrome is extremely rare. However, it's good to know the signs to watch for if you are taking these types of medications. Serotonin syndrome can cause death if it isn't treated. You can usually get right back to normal if it's treated early.

Serotonin syndrome **can happen** within hours to a few days after:

- You start taking a drug that increases serotonin levels
- The dose of a drug that increases serotonin levels is increased

Some **signs that you might have serotonin syndrome** are:

- Shakiness
- Twitching or stiff muscles
- Shivering
- Agitation or restlessness
- Confusion
- Hallucinations
- Racing heartbeat
- Very high or very low blood pressure
- Goosebumps
- Diarrhea, nausea, or vomiting
- Large pupils

Some signs of serotonin syndrome that are **very serious** are:

- High fever
- Heavy sweating
- Severe muscle spasms or rigid muscles
- Seizures
- Uneven heartbeat
- Passing out

Call your prescriber right away or go to the emergency room if you think you have serotonin syndrome. **Do not wait if you feel really bad or if you are getting worse.** Be sure if possible to bring **all** of the medicines you are taking, or bring a complete list of them. Include vitamins and supplements. This can help your prescriber figure out if you have serotonin syndrome.

Examples of medications/supplements that may affect serotonin include:

Antidepressants/Mood

- Amitriptyline
- Bupropion
- Citalopram
- Clomipramine
- Desvenlafaxine
- Doxepin
- Duloxetine
- Fluoxetine
- Fluvoxamine
- Imipramine
- Levomilnacipran
- Mirtazapine
- Nortriptyline
- Olanzapine
- Paroxetine
- Phenelzine

- Sertraline
- Trazodone
- Venlafaxine
- Vilazodone
- Vortioxetine

Migraine

- Almotriptan
- Eletriptan
- Ergotamines
- Frovatriptan
- Naratriptan
- Rizatriptan
- Sumatriptan
- Zolmitriptan

Nausea

- Granisetron
- Metoclopramide

Pain

- Droperidol
- Ondansetron
- Promethazine
- Buspirone
- Codeine
- Cyclobenzaprine
- Fentanyl
- Hydrocodone
- Meperidine
- Methadone
- Oxycodone
- Tapentadol
- Tramadol

Miscellaneous

- Amphetamine
- Bromocriptine

- Cabergoline
- Carbamazepine
- Dextromethorphan
- Ginseng
- 5-Hydroxytryptophan
- Linezolid
- Lithium
- Lisdexamfetamine
- Lorcaserin
- Methylphenidate
- Ondansetron
- Rasagiline
- Ritonavir
- SAMe
- Selegiline
- St. John's Wort
- Valproic Acid

[This handout may not cover all possible information. It does not replace the need for professional medical care. Always follow the instructions from your healthcare provider.]