

Serotonin syndrome

This information sheet will help you understand more about serotonin syndrome. It is not a substitute for talking with your doctor, nurse or pharmacist.

What is serotonin syndrome?

Serotonin syndrome occurs when there is too much serotonin in the brain. This causes symptoms that can be mild or potentially life-threatening.

The symptoms of serotonin syndrome are shown in Table 1. Not everyone with serotonin syndrome will have all of the symptoms.

Some medicines can cause serotonin syndrome – see Table 2. Serotonin syndrome is more likely if you take more than one medicine or too much of a medicine listed in Table 2.

The most important symptom that doctors use to diagnose serotonin syndrome is muscle spasms you can't control.

Symptoms of serotonin syndrome usually occur within hours to days starting the medicine or changing the dose of the medicine.

What should I do if I think I have serotonin syndrome?

Seek medical advice immediately.

Where can I find more information about my medicines?

- Talk to your doctor, nurse or pharmacist.
- Check the consumer medicine information for your medicine: medsafe.govt.nz/DbSearch/infoSearch
- Find more information on Healthify: healthify.nz/health-a-z/s/serotonin-syndrome

Table 1: Symptoms of serotonin syndrome

Brain effects

Agitation or restlessness
Confusion
Anxiety

Nerve effects

Tremors
Over-responsive reflexes (hyperreflexia)
Rigid muscles (hypertonia)
Muscle spasm/jerks you can't control (clonus)

Other effects on the body

High blood pressure
Rapid heart rate
Raised body temperature
Rapid breathing
Dilated pupils
Excessive sweating
Shivering
Vomiting
Diarrhoea
Irregular heart rate

Table 2: Medicines and supplements linked to serotonin syndrome (list not exhaustive)

Medicine type	Examples
Antidepressants	citalopram, escitalopram, fluoxetine, paroxetine, sertraline clomipramine, imipramine, amitriptyline, nortriptyline venlafaxine mirtazapine moclobemide, phenelzine, tranylcypromine
Analgesics (pain killers)	fentanyl, methadone, pethidine, tramadol
Herbal products	St John's wort
Others	methylene Blue (a dye for diagnostic procedures) linezolid (an antibiotic) dextromethorphan (a cough suppressant) dexamfetamine, lisdexamfetamine (for treatment of attention-deficit/hyperactivity disorder [ADHD]) quetiapine (for treatment of psychoses and bipolar disorder)

Note: Serotonin syndrome is more likely if you take more than one of these medicines or too much of a medicine.